DOES PERTAINING TO A GLOBAL STRATEGIC ALLIANCE IMPROVE THE BOTTOM LINE?

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ABSTRACT

This study researched whether pertaining to a global strategic alliance brought significant benefits to the 'bottom line' of allied airlines. The study used two groups: a group of airlines which had joined one of three global alliances against a control group of airlines which had not joined any alliances. The research compared the net return of those two groups before and after airlines joined their alliances (or equivalent measure), as well as their relative net performance both in the short-term and in a longer term. Results showed a sensible deterioration in net profitability for the alliance group and a perceptible improvement in net profitability for the non-alliance group. The latter also differed from the former in having a positive relative net performance in the short-term.

Keywords: global strategic airline alliance, airline profitability, ICAOData.

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1. INTRODUCTION

Research done on airline strategic alliances can be grouped into two broad streams. One stream focuses on alliances and assesses the factors contributing to the success and/or failures of the same. These studies use measurements such as alliance stability/instability and mortality/longevity to determine alliance success (for example, Kogut, 1989; Hamel, 1991; Blodgett, 1992; and Li, 2000; Iatrou and Alamdari, 2005; Gudmundsson and Lechner, 2006). The other stream focuses on alliances' members and assesses the impact of alliances on member airlines. They employ airline performance variables such as market share, market value, revenue, profitability, and productivity, to evaluate the impact of alliances on airline performance (for example, Park and Cho, 1997; Chan, Kensinger, Keown and Martin, 1997; Das and Teng, 1998; Anand and Khanna, 2000; and Oum, Park, Kim and Yu, 2004).

A number of those studies have reported that joining global strategic alliances helps increase airlines' profitability (Iatrou and Alamdari, 2005; Oum and Zhang, 2001; Oum, Park and Zhang, 2000). Yet other studies have concluded that alliances are not necessarily profitable for their members (Morrish and Hamilton, 2002; Bilotkatch and Hüschelrath, 2011), even when allied airlines are in a better position to increase functional efficiency and to benefit from economies of scale (Amankwah-Amoah and Debrah, 2011; Flightglobal, 2006).

Recent research carried out on a decade-worth of net returns has found that airlines, at best, tend not to become more profitable or, at worst, may even lose profitability after joining an alliance. This trend has been reported both when using nominal currency (Perezgonzalez and Lin, 2010) as well as when controlling for inflation (Perezgonzalez and Lin, 2011a). The research has also found that not only alliance members had lost profitability (or had not managed to increase it, overall) but that non-allied airlines had performed much better and remained profitable over a relatively similar period of time (Perezgonzalez, 2011b).

The primary focus of this study was to consolidate above research and to ascertain whether pertaining to a global strategic alliance has brought significant benefits to the 'bottom line' of allied airlines when compared against airlines which had not joined any alliance.

2. EMPIRICAL CONTRIBUTION

2.1. Methods

The source of data for this research was the financial database compiled by the International Civil Aviation Organization, ICAOData, which is the result of an aviation data management cooperation between ICAO and Air Transport Intelligence (ATI)[2]. The database contains data for both air carriers and airports, including financial, traffic, personnel, fleet, and on-flight origin and destination data since 1973. Reporting to ICAOData is done on a voluntary basis, and data are often incomplete or missing (Perezgonzalez, 2011a).

This research focused on airlines' proficiency over a relatively long period of time. Because of missing data, however, we ended using the entire population of twenty-one airlines which had provided relevant data to ICAOData over a period of eleven consecutive years centred on the year they first joined their alliance. This population comprised fifteen airlines which had joined one of three global strategic alliances (Star Alliance, Oneworld or SkyTeam), and six airlines which were not in an alliance at about the same time. The former airlines comprised our 'research' group and the latter comprised our 'control' group.

The data of interest were net returns during eleven consecutive years centred on the year airlines joined their alliances, and around the year 2000 for the non-alliance group. Net returns covered the period ranging from five years before to five years after airlines joined an alliance (or between 1995 and 2005 for the non-alliance group). All nominal values were corrected for inflation and reported as referential US dollars, rUSD (which are constant dollars standardized to 2010 nominal values – Perezgonzalez, 2011b).

2.2. Results

Table 1 provides the most telling results, although a breakdown of the same is provided in Tables 2 and 3. We will, thus, introduce the latter, before commenting on the former.

[2]ICAO is a specialized agency of the United Nations. It was created in 1944 to promote air safety and the orderly development of international civil aviation throughout the world. ATI provides a service that delivers air transport news and data.

Table 1: Percentage of Airlines that Gained/Lost Net Performance

	Medium-term (10yr)		Short-term (8yr)	
	% gained	% lost	% gained	% lost
NON-ALLIANCE GROUP	50	50	66	33
Star Alliance	14	86	14	86
Oneworld	40	60	20	80
SkyTeam	33	66	0	100
ALLIANCE GROUP	27	73	13	87

Values rounded to the nearest percentage. (Table adapted from Perezgonzalez, 2012, 2011a, and Perezgonzalez & Lin, 2011b)

Table 2 provides a breakdown of airlines' net returns for the five-year period and three-year period immediately before joining an alliance and the five-year period immediately after joining an alliance (the joining year was excluded from all computations). Net returns for the non-alliance group show results before and after the year 2000. We can observe that the overall pattern of results has been for the alliance group (and any subgroups) to improve performance the closer they got to joining an alliance but to lose profitability after doing so. In comparison, the non-alliance group evolved almost the opposite trend, having low or a deteriorating profitability in the years prior to 2000, but showing a substantive gain after that year.

In Table 3, the trend discussed above is more obvious. The table presents measures of relative performance, which are changes in profitability from one period to the next instead of overall profitability. The medium-term column thus subtracts five years' profitability after joining an alliance from five years' profitability prior to doing so. The short-term column subtracts five years' profitability after joining an alliance from three years' profitability prior to doing so. Results show that most allied airlines lost net performance after joining an alliance, this being more acute in the short term. The non-alliance group, however, showed an increase in net performance after 2000 both in the short and medium term.

Back in Table 1, we calculated the percentage of airlines which gained or lost relative performance (gain/loss ratios). Results are compelling: in the short-term, 66% of the non-allied airlines gained in net performance, although this reduces to 50% in the medium term. Even so, this group is ahead of all allied airlines: 20%-40% of Oneworld airlines gained profitability, 0%-33% of SkyTeam airlines gained profitability, and 14%-14% of Star Alliance airlines gained profitability in the short and medium term, respectively. Overall, only 13% to 27% of airlines in the alliance

group showed a gain in relative net performance after joining an alliance, while 87% and 73% of them lost net performance in the short and medium term, respectively.

Table 2: Average Net Returns per Airline, Alliance and Group

NON-ALLIANCE GROUP			
Not in alliance[§]	5 years earlier	3 years earlier	5 years later
Air India	-72,946	-44,207	17,960
Turkish Airlines	-8,141	-41,461	49,975
Air Europa	6,927	3,434	12,897
Icelandair	10,364	8,051	7,134
Malaysian Airlines	-5,175	-109,388	-57,911
Virgin Atlantic	107,916	135,258	21,378
Group's M (SD)	6,404 (65,119)	-8,052 (82,001)	8,572 (35,797)
ALLIANCE GROUP			
Star Alliance[§]	5 years earlier	3 years earlier	5 years later
Lufthansa	98,414	321,463	577,231
Thai Airways	160,367	184,690	156,270
BMI	16,411	22,907	-2,017
SAS	179,559	406,672	153,725
Air Canada	-123,536	114,567	-218,633
Singapore Airlines	843,124	812,691	500,457
United	-43,164	429,484	-782,943
Alliance's M (SD)	161,597 (319,662)	327,496 (261,606)	54,870 (460,332)
Oneworld[§]	5 years earlier	3 years earlier	5 years later
Iberia	-76,870	196,892	162,674
Cathay Pacific	375,087	296,009	477,791
Finnair	79,560	92,479	41,532
British Airways	803,854	795,527	197,681
American Airlines	794,352	1,093,144	-1,476,780
Alliance's M (SD)	395,196 (402,866)	494,810 (429,704)	-119,420 (775,423)
SkyTeam[§]	5 years earlier	3 years earlier	5 years later
Air France	61,241	360,435	259,510
Czech Airlines	14,801	25,656	8,630
Delta	1,093,796	1,464,375	-2,423,041
Alliance's M (SD)	389,946 (609,994)	616,822 (752,847)	-718,300 (1,481,670)
Group's M (SD)	285,133 (397,029)	441,133 (420,897)	-157,861 (816,512)

* Mean returns. All values in thousands of referential USD (rUSD). (Table adapted from Perezgonzalez, 2012, 2011a, and Perezgonzalez & Lin, 2011b)

Table 3: Relative Performance per Airline, Alliance and Group

NON-ALLIANCE GROUP		
Not in alliance[§]	Medium-term	Short-term
Air India	90,905	62,167
Turkish Airlines	58,116	91,435
Air Europa	5,971	9,464
Icelandair	-3,230	-917
Malaysian Airlines	-52,736	51,477
Virgin Atlantic	-86,538	-113,880
Group's M (SD)	1,303 (74,015)	16,624 (72,493)
ALLIANCE GROUP		
Star Alliance[§]	Medium-term	Short-term
Lufthansa	478,817	255,768
Thai Airways	-4,097	-28,421
BMI	-18,429	-24,924
SAS	-25,835	-252,947
Air Canada	-95,097	-333,200
Singapore Airlines	-342,667	-312,234
United	-739,779	-1,212,427
Alliance's M (SD)	-106,727 (370,651)	-272,626 (463,509)
Oneworld[§]	Medium-term	Short-term
Iberia	239,544	-34,218
Cathay Pacific	102,704	181,782
Finnair	-38,028	-50,947
British Airways	-606,172	-597,845
American Airlines	-2,271,132	-2,569,924
Alliance's M (SD)	-514,617 (1,033,280)	-614,231 (1,130,520)
SkyTeam[§]	Medium-term	Short-term
Air France	198,270	-100,924
Czech Airlines	-6,170	-17,026
Delta	-3,516,837	-3,887,416
Alliance's M (SD)	-1,108,200 (2,088,400)	-1,335,100 (2,210,750)
Group's M (SD)	-442,994 (1,067,800)	-598,994 (1,151,040)

* Mean returns. All values in thousands of referential USD (rUSD). § Oneworld airlines joined in 1999, most Star Alliance airlines joined in 1997 and some in 2000, while most SkyTeam airlines joined in 2000 and one in 2001; the year 2000 is used for non-alliance airlines. (Table adapted from Perezgonzalez, 2012, 2011a, and Perezgonzalez & Lin, 2011b)

3. SUMMARY AND CONCLUSIONS

The results obtained in this research are eminently descriptive. They are also limited to a particular measure of financial performance only, which may be but a small

token in the universe of reasons why airlines join an alliance. Even so, these results appear to be coherent with conclusions in the scholarly literature such as that strategic alliances have no significant overall impact on airlines' profitability (Oum, Park, Kim and Yu, 2004) and that airlines may have been better off by not joining an alliance at all (Perezgonzalez, 2011a). Indeed, this study found that only 27% of airlines in an alliance increased their net performance during the ten-year period before and after joining their alliance, while 50% of non-allied airlines did so, a sensible difference. This study further suggests that alliances may not even help individual airlines preserve, at least, their margins, which some airlines may expect when joining the alliance (Morrish and Hamilton, 2002; Bilotkatch and Hüschelrath, 2011). Therefore, the evidence here described supports the conclusion that pertaining to a global strategic alliance has not helped airlines improved their bottom line, at least not at the time of alliance formation. This conclusion will hardly affect airlines' strategies at present, but it may serve as a benchmark for future research, research focused on ascertaining the longitudinal profitability of airlines and airline alliances in the competitive world of international aviation.

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