"Previous alliance relationships and their effects on future acquisition performance: the case of the airline industry"

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Competitive paper

Scholars (Hennart and Reddy, 2000) underline how acquisitions are affected by significant costs that weaken their performance in the short-term and long-term. Acquisition costs are often held responsible for average zero or even negative returns that a significant number of acquisitions show in their life-cycle (Capron and Pistre, 2002; Sirower, 1997). For this reason, academic research shows an increasing interest in factors that can improve the overall performance of acquisitions. In particular, Zaheer et al. (2010) and Meschi et al. (2011) analyse the relative impact that previous alliance cooperation may have on acquisitions and empirically evaluate whether or not previous alliances improve the acquisition performance. Both researches find contrasting results; Zaheer et al. (2010) find no conclusive effect for acquisitions with prior alliance relationships, whereas Meschi et al. (2011) point out that previous alliance relationships have a positive effect on acquisitions if established in a specific period time after the formation of the alliance relationship. Therefore, further research on effects of alliances on acquisition performance is required. This paper focuses on the effects of previous alliances on acquisitions in the civil airline industry. The civil airline industry has been chosen because alliances over the 1990s and 2000s registered record growth in terms of both airlines and resources involved (Airline Business, 2010; Airline Business, 2007). Acquisitions are less significant; nevertheless, they are set to develop extensively in the long-term (Airline Business, 2010). In addition, technological developments are external in the civil airline industry, because they stem from the aviation manufacturing industry (Sparaco, 2010). Therefore, the impact of exogenous technology on acquisition performance can be evaluated in this study.

THEORY AND LITERATURE REVIEW

Acquisition costs

Acquisitions are in most cases associated with ex-ante and ex-post costs. Organisations incur relevant ex-ante costs in planning and settling acquisitions that can potentially offset acquisition benefits. Ex-ante costs primarily originate from valuation problems in acquisitions (Chi, 1994). Ravenscraft and Scherer (1987) underline how transactions in complementary assets are affected by "adverse selection". Acquirers are aware of the potential bias in asset value and discount bids accordingly. The organisations with the highest quality assets are consequently prevented from trading; otherwise, they have their asset value discounted

(Akerlof, 1970). Acquisition outcomes can also be affected by the "indigestibility problem" (Beamish and Banks, 1987). An organisation can look for specific assets and proceed to an acquisition, nevertheless, its required assets may be just a portion of the target organisation (Hennart, 1988). Therefore, the organisation acquires a subset of assets that do not contribute to its business process.

In addition to ex-ante costs, organisations can confront ex-post costs associated with acquisitions. Organisations often become aware of a lack of flexibility in their organisational culture when they proceed to acquisition, which is perceived as a major environmental change (Chatterjee et al., 1992) and opposed by the organisation as such. Specifically, organisations go through relevant task challenges in merging their operations. Task challenges originate from potential incompatibilities both in business systems and performance measurement procedures (Marks and Mirvis, 1992). Differences in information systems as well as accounting practices can generate operational disruptions in the initial integration period.

Labour issues can also be a potential source of costs in the integration process. Senior executives rationally evaluate economic and strategic factors behind the combination of two organisations. However, in most cases, the workforce is detached and unaware of management intentions and perceives the acquisition as a chaotic set of events that can affect their future prospects (Ashkenas and Francis, 2000). Integration is thus regarded as an emotional and hostile process and the workforce tends not to cooperate with senior management (Reus and Lamont, 2009; Buono, 2003).

In the airline industry, intangible assets and tacit knowledge are not significant, because the technology involved is exogenously developed by the aero-manufacturing industry (Baker, 2003). Nevertheless, carriers can incur significant problems in asset evaluation when they attempt to estimate the airline's brand equity and managerial expertise. Brand equity is essentially constituted by the passengers' perception of airline service quality and reliability. Reliability refers to both the airline's punctuality and safety standards. Evaluation for brand equity and managerial expertise can prompt "adverse selection" and transaction losses (Ravenscraft and Scherer, 1987). Unnecessary assets, which are embedded in organizations, are limited in airline acquisitions. Indeed, aircraft, which are the major assets for airlines, are easily disposed of through efficient second-hand markets, and can be transferred in a short period of time (Teichert et al., 2008). In addition, terminal facilities can be readily reallocated to airport organizations. Ex-post costs are critical in airline acquisitions. Size is no advantage in the airline industry, despite the scope efficiencies available (Airline Business, 2003; Flint, 1998). Airline operations entail complex procedures in scattered markets, which are accomplished according to the diverse needs of airline passengers. As underlined by Levine (1987), significant organisational diseconomies emerge as size increases, which can offset scale advantages. Therefore, merged organisations are exposed to high organisational diseconomies, because acquisitions result in the rapid expansion of the airline structure.

Airline organisations can encounter key challenges in merging their networks and operations. These challenges stem from incompatibilities in business procedures and performance measurement (Marks and Mirvis, 1992). Task challenges are concentrated in IT systems in the airline industry. Joint operations require common IT platforms, because in many cases airlines adopt dissimilar IT systems (Ku and Yi, 2009; Learmount, 2004). In the airline industry, the workforce generally hold high bargaining power, because job disruption can cause total suspension of airline services. Acquisitions are negatively perceived by staff and trade unions due to major concerns over job losses and pension schemes. Hence, working units will show no cooperation in being re-structured and acquisitions are then exposed to labour unrest and organisational problems (Aviation Week & Space Technology, 2008; Flouris and Swidler, 2004). Acquisitions can also be challenging due to fleet incompatibilities. Fleet configurations influence overall strategies and require significant

resources for modification. Fleets are generally incompatible when acquisitions are accomplished and re-configurations can generate significant ex-post costs (Paran, 1999).

Ex-post costs following acquisitions can counterbalance acquisition benefits and cause significant problems for merged airlines. Ex-post costs largely explain the poor financial records that acquisitions have in the airline industry (Donoghue, 2005). The literature offers numerous examples of failures of acquisitions, such as Swissair/Sabena (Knorr and Arndt, 2004), American Airlines/TWA (Flouris and Swidler, 2004), Air New Zealand/Ansett (Airline Business, 2003). Nevertheless, as argued by Chang and Williams (2002), the sample in airline acquisitions is not entirely representative, because legislators are inclined to favour acquisitions that involve financially-troubled carriers.

Given potential ex-ante and ex-post costs, organisations that accomplish acquisitions are significantly exposed to failure – failure being defined as "an actual and persistent post-transaction loss in market capitalisation for the acquiring company, persistent market underperformance or both" (Pekar and Margulis, 2003, pp. 57).

Integration Process

Different studies (Todeva and Knoke, 2005; Spekman et al., 1998) outline how alliances can develop into full acquisitions and how alliance relationships can indeed favour acquisitions. Strategic alliances are effective mechanisms to gather useful information about a partner's capabilities and resources and test synergies in matching two organisations (Gulati et al., 2008; Gulati, 1998). As alliances evolve, partners gain an increasing amount of information on respective strengths and weaknesses. Hence, continuing cooperation both decreases information asymmetry on assets and prevents opportunistic valuations by target organisations (Vanhaverbeke et al., 2002). In addition, during the alliance life-cycle, organisations become familiar with mutual business systems and procedures. Staff exchanges in alliances also disseminate routines and operational standards, and the workforce becomes accustomed to collaboration (Gulati et al., 2009). Consequently, acquisition ex-ante and expost costs decline and partners are in a good position to merge their operations. According to Dalziel (2009) and Kogut (1991), alliance investments can, in some cases, be associated with the real option, which is defined as an operational investment for future opportunities that need not be exercised. For specific investments, prospecting to exploit future opportunities is a relevant part of the asset value and can increase the overall value of the organisation. Through alliances, organisations can engage in investments with significant real options and share risks and costs as they expand in profitable but uncertain fields (Oxley et al., 2009). Alliances are therefore effective mechanisms to access a broad window of opportunities and reduce development costs. In this way, partners can differentiate their portfolio of activities and explore opportunities in new technologies, new products, and new markets (Chang et al., 2008).

Nonetheless, if opportunities are proven to be valuable, alliance assumptions are no longer valid. Alliance partners no longer necessitate hedging investment risks and are required to commit further capital to achieve gains in opportunities. Hence, alliance agreement is to be renegotiated and acquisition is likely to be exercised (Dalziel, 2009). If one party places a higher value on the investment opportunity, it can decide to avoid alliance re-negotiation and secure the opportunity through acquisition, before redeploying further capital. In general, the divesting organisation is prepared to sell because it possesses no adequate resources to develop the opportunity by itself (Teece, 1987). Furthermore, partners can determine that the alliance offers no sufficient scope for capitalizing the opportunity, thus they merge their operations. Acquisitions are likely to deliver enhanced performance as only valuable opportunities that are proven in the market are pursued (Dalziel, 2009).

As organisations combine their operations in alliances, they tend to realise that there are untapped synergies to exploit if they consolidate. However, organisations are required to rationalise their operations and remove redundant resources in order to achieve available synergies. In particular, if organisations look for economies of scale, this may necessitate both the downsizing of a number of production centres and the centralisation of operations (Dyer et al., 2004). Nevertheless, organisations are restrained from investing core resources and changing radically their business structure because of the unstable nature of alliances (Garette and Dussauge, 2000). In this case, organisations can proceed to acquisition if they consider that untapped synergies exceed acquisition costs.

Hagedoorn and Sadowski (1999) demonstrate that partnerships that are established for technology purposes are less likely to end up in acquisitions. Technology alliances contribute to the organisational learning process as organisations evaluate new technological opportunities with several alliances. Nonetheless, the learning process becomes less critical when technologies mature, and organisations tend to choose acquisitions at a higher rate in mature industries (Ciborra, 1991).

Bierly and Coombs (2004) add that acquisitions are also favoured when alliances are formed at early stages of technology development, when research is more basic than applied. At these stages, alliances allow an extensive flow of knowledge and learning, and organisations commit significant resources to both learning and integrating new knowledge within an existing knowledge base. At later stages, the technology value in the market will increase and expose organisations to both changes in strategies and attempts by competitors to obtain the technology. As a consequence, integration will be chosen to hedge potential risks to technological evolution.

The above theoretical arguments support the integration process; nonetheless, empirical evidence on transition from alliances to acquisitions needs to be found. Four different studies (Wang and Zajac, 2007; Reuer and Zollo, 2005; Hagedoorn and Sadowski, 1999; Bierly and Coombs, 2004) analyse large organisational samples across different industries and show that only a limited percentage of alliances become acquisitions. Wang and Zajac (2007) show that organisations both reduce information asymmetry and develop mutual understanding of the organisational routines in cooperating with their alliance partners; however, the partner-specific knowledge leads to further cooperation in alliances rather than to acquisitions. Organisations use the increasing knowledge in their partners for identifying further areas of cooperation and do not show any tendency toward acquisitions.

RESEARCH DESIGN AND METHODOLOGY

This research is accomplished within the airline industry, which comprises both the scheduled transport of passengers over network routes and the support activities related to the air service. Airline companies set passenger traffic as a key component of their revenue function and strategically seek the right amount and combination of traffic over a specific period of time. Airline fixed costs make up, on average, more than 50 percent of total costs (Toh and Raven, 2003), hence airlines are exposed to high losses if the traffic load factor is unable to cover aircraft capacity. Indeed, airlines can achieve higher rates of profitability from specific target segments – i.e. business and long haul segments (Shaw, 2007), thus airlines look for the most profitable combination of traffic.

This research focuses on the evolutionary process of alliances in acquisitions in the airline industry and its relative impact on acquisition performance. This research will limit the analysis of alliances to codeshare agreements between airlines. Codeshare agreements consist of an airline selling part of its flight services to another airline on certain routes (Wan et al., 2009; Hassin and Shy, 2004). Codeshares and joint marketing alliances are examined at first when airlines start cooperating and are the most common agreements in the airline industry (Saglietto, 2009; Chathoth, 2004). Conversely, acquisitions entail the full combination of the route networks (Hamlin, 2009).

For this research, qualitative methods appear to be appropriate for the research problem being investigated. Indeed, most variables are explorative and are difficult to be statistically analysed, as requested by quantitative methods. Furthermore, the relationships between acquisitions and strategic alliances have been marginally explored by the literature because acquisitions and alliances are too complex to include in the same statistical sample as they have entirely diverse characteristics (Inkpen et al., 2000). Qualitative methods can therefore offer new research viewpoints and overcome statistical incompatibilities (Bailey, 2006).

Case studies are adopted among qualitative methods because the general purpose of the research is exploratory, this research focuses on contemporary rather than historical events, and the area of control on airline alliances is non-existent (Yin, 1994).

Two specific units of analysis were selected among different airlines:

- 1) United/Continental
- 2) Air France/Alitalia

In this research, in-depth interviews, documents and archival records are chosen as sources of evidence (Bailey, 2006; Stake, 2005). The data collection for United and Continental was accomplished in two phases. In the first phase, Continental secondary data collection was accomplished in June 2007, followed by in-depth interviews in June and July 2007. In the second stage, Continental secondary data collection was accomplished between April 2010 and July 2010, and in-depth interviews were carried out in July 2010. In total, 6 in-depth interviews were carried out. The data collection for Alitalia and Air France was accomplished in two phases as well. The first phase started in February 2007 and was concluded in May 2007, whereas the second phase started in March 2010 and was concluded in June 2010. During the first stage, secondary data were collected between February and April 2007, and in-depth interviews were accomplished in May 2007. During the second stage, secondary data were collected between March 2010 and May 2010, and in-depth interviews were accomplished in June 2010. In total, 10 in-depth interviews were carried out.

CASE STUDIES

Air France/Alitalia

In 2001, Air France and Alitalia agreed a commercial partnership (Airline Industry Information, 2001). The agreement involved codesharing on most international routes as well as a profit and revenue sharing alliance on the main routes between France and Italy,

including Milan-Paris and Rome-Paris (Barber and Done, 2006). Air France and Alitalia also exchanged a 2 percent cross shareholding and since 2003 had membership of each other's board (Betts, 2007). Alitalia also joined the SkyTeam alliance constellation in 2001, led by Air France (Baker, 2007).

During the reorganisation process of Alitalia in 2008, Air France maintained its codeshare agreement with the new entity and became the exclusive foreign partner for the new Alitalia. Air France also purchased a 25 percent share in the new Alitalia (Dunn, 2009). The shares of the new Alitalia, including Air France's shares, cannot be sold until 2013, when Air France will have the right of first refusal on the shares (Flottau et al., 2009). Alitalia and Air France's relationship can be considered by many aviation experts as a virtual merger as carriers have started adjusting their capacity in their networks following the share purchase by Air France (Air Transport World, 2009). In-depth Interviews (2010) confirm that Air France Group is still motivated to fully acquire the new Alitalia and will evaluate the acquisition of the remaining shares at the end of 2013.

In-depth Interviews (2007, 2010) confirm that the most valuable advantages in the codeshare between Air France and Alitalia originated from transfer traffic into the long-destinations from the Paris Charles De Gaulle hub. By 2005, Air France Group also redirected some feeding traffic to the Amsterdam Schipol hub (Fair Disclosure Wire, 2006). In this way, Air France Group expands its overall international traffic, which is its driving force in terms of profitability (In-depth Interviews, 2007). The core part of transfer traffic originates from the Northern part of Italy, which caters for the majority of the business traffic, while Rome generates transfer traffic from its political and diplomatic activities. Such transfer traffic could not be fully exploited by Alitalia because its international destinations had insufficient scope (Brothers and Povoledo, 2009). Alitalia further emphasised its concentration on short-haul destinations in its reorganisation (Nativi, 2008).

Transfer traffic from Alitalia's route network into Air France is associated with significant traffic economies. Traffic economies originate from the possibility for Air France to employ aircraft with increased capacity on its long-haul destinations from Paris Charles de Gaulle. Consequently, Air France can reduce its operational costs per passenger because of the maintenance and ground-handling services, which remain constant with the increase of the number of passengers, can spread over a higher flow of passengers (In-depth Interviews, 2007). In addition, Air France and Alitalia have jointly established a dedicated structure in Paris Charles de Gaulle in order to optimise the connections from Alitalia's domestic market to long-haul destinations. The dedicated structure allows for the concentration of services that are offered in the transfer, particularly the ground and baggage handling for passengers, and reducing costs per passenger, given the efficiencies that a centralised structure generates. Moreover, the dedicated structure diminishes the average connecting times between flights, increasing the overall utilisation of the aircraft and improves the quality of the connecting services (In-depth Interviews, 2010).

The merger of Air France and Alitalia would centre on the model of the multi-hub structure that has been applied by Air France with KLM (Flottau et al., 2009). The multi-hub structure implies that the merged carriers maintain their primary hubs in which each carrier operates one hub that connects the domestic spoke routes into the long-haul network (Flottau et al., 2009). The multi-hub strategy also entails the specialisation of the single hubs in specific international geographical areas in order to maximise efficiencies in the route network and concentrate marketing efforts. After the merger, the hubs of the group experience growth in

connections which enable them to direct the transfer traffic to specific international geographical areas (Del Canho and Engelfriet, 2008).

In the Air France and KLM merger in October 2003, KLM kept its hub in Amsterdam Schipol, which gradually specialised in the US North-West and North-East and Asia, while Paris Charles de Gaulle focused on Africa, Latin America, and the US South-East and South-West in cooperation with other SkyTeam members (In-depth Interviews, 2007). Before Alitalia's reorganisation in 2008, Air France Group intended to shape the acquisition of Alitalia around a similar model of multi-hub structure that had been applied with KLM. Alitalia would be gradually included in the Air France Group and would keep the same brand and logo (In-depth Interviews, 2010; Nativi and Wall, 2008). Alitalia had, nonetheless, to abandon its double hub structure in Malpensa and Fiumicino because two hubs in addition to the hubs of the Air France Group were too complex to manage and created too much duplication of resources (In-depth Interviews, 2010). Air France's original plan was to focus on the hub of Rome Fiumicino for Alitalia's international network, which would become the Southern hub in the Air France Group and would concentrate on Southern European, Northern African, and Middle-Eastern destinations (In-depth Interviews, 2007; Flottau et al., 2009). Fiumicino Airport, indeed, was included in all the Bilateral Agreements between Italy and other nations (Ezard, 2008). Conversely, the presence of Alitalia in Malpensa would be reduced and would retain only three intercontinental routes because Malpensawould compete with Air France's regional airport in Lyon and with the two main hubs in Paris and Amsterdam (In-depth Interviews, 2007; Nativi, 2008). In addition, through an acquisition, Air France Group had the opportunity to reconfigure Alitalia's network and rationalise it into their route configuration (In-depth Interviews, 2007). Air France could cut duplication in international routes with Alitalia because Air France had already enough scope in the longhaul market (Aviation Week & Space Technology, 2006). In this way, Air France could take advantage of a more efficient use of aircraft and related flight-services in the network. Air France could also evaluate the potential in terms of traffic expansion for unprofitable domestic routes and proceed to cut routes that were unlikely to grow in the long-term (Indepth Interviews, 2007).

The codeshare agreement between Air France and Alitalia confirm that economic benefits were significant and were supported by the positive financial results for the existing agreement between the two carriers. The transfer traffic from the Italian market towards Air France's international network and its related traffic economies mainly defined the advantages of the codesharing that would be retained for the acquisition. The codeshare agreement contributed to dentifying which domestic routes had neither potential to grow in the long-term nor offered advantages in terms of feeding traffic into the international networks of Alitalia and Air France. The domestic routes could be eliminated following the merger, achieving significant cost reductions. In conclusion, the codeshare agreement provided the opportunity to realise which international destinations in Alitalia's network were redundant because they overlapped with the Air France Group's international destinations.

The plan to acquire the new Alitalia by Air France in 2013 is supported by the advantages that a previous codeshare agreement entails. Indeed, the changes and cuts that Air France envisaged in Alitalia during the integration process correspond in most part to the new structure of Alitalia after 2008 (In-depth Interviews, 2010). Some of the unprofitable domestic routes still need to be eliminated compared to the initial plan of Air France, nonetheless, the single hub in Fiumicino and the concentration on short- and middle- haul routes with a reduced workforce that was applied in 2008 within Alitalia, matches the model of regional

feeder that Air France considered for Alitalia (In-depth Interviews, 2010; Wall, 2008; Nativi, 2008).

Continental/United

Between 2004 and 2010, Continental established negotiations for acquisitions with United Airlines. United and Continental went through two phases of negotiations. In the first phase in 2007, United and Continental interrupted the negotiations and chose to maintain their strategic independence (Tita and Meyer, 2006). In 2009, Continental set up a broad codeshare agreement with United Airlines and abandoned Skyteam for the Star Alliance, which United belonged to (Casey and Chon, 2010). At the beginning of 2010, United commenced the exploration of a possible merger with US Airways (Flint, 2010), which was later abandoned when Continental contacted United for a possible merger (Airline Business, 2010). The second phase of negotiations was concluded in May 2010 subject to the approval of the US authorities (Mitchell and Carey, 2010). The two carriers set out to close the transaction by the end of 2010 and achieve a single operating certificate from the US Federal Aviation Authority by 2012 (Ranson, 2010).

The codeshare between Continental and United Airlines could benefit from limited route overlap between the two route networks (Shannon and Schofield, 2010). Limited overlap implies that the two carriers can effectively build new route connections between their networks and offer new destinations through codesharing. The overlap in codesharing can be analysed in connection airport pairs and non-stop city (GAO Reports, 2010). Connection city pairs take into account the combined presence of the two airlines in one destination through one or more stopovers, even if the carriers do not have a direct link into the destination. Conversely, non-stop city pairs consider the overlap in one destination through a direct link (GAO Reports, 2010). In general, overlaps in non-stop pairs are more relevant than in connection pairs because airline passengers save time and possible inconvenience through a direct flight (In-depth Interviews, 2010). In the United and Continental codeshare, the overlap in connection city pairs comprised almost 8 percent of the examined routes (1,135 out of 13,515), whereas the overlap in non-stop city pairs included approximately 2 percent of all routes (12 out of 553) (GAO Reports, 2010). Such overlaps are the smallest between two route systems among the US network carriers and very limited, compared to extensive codeshares among European carriers (GAO Reports, 2010; Shannon and Schofield, 2010).

International markets were also entirely complementary. Continental and United had no overlaps in any city-to-city route in international destinations (GAO Reports, 2010). Nevertheless, international destinations need to be examined differently from domestic routes on account of the hub-and-spoke structure that both Continental and United employ (In-depth Interviews, 2010). International passengers transfer from different domestic locations onto international hubs and may consider alternative hubs to an international destination as substitutable because of the long flying times that international destinations from the US usually entail. In this way, airports that are 2 or 3 flight hours distant can present overlapping markets (In-depth Interviews, 2010). GAO independent research (GAO Reports, 2010) pointed out that United and Continental displayed 38 percent substitutable European destinations.

Continental and United could gain significant traffic economies of scope by codesharing. The strong presence in metropolitan areas with a high proportion of business passengers could provide feeding traffic to the international hubs of both carriers and improve overall positioning in international markets (Shannon and Schofield, 2010).

The Continental and United merger profited from the lack of overlapping routes similar to codesharing, where Continental and United could add new route connections and destinations to their networks (Shannon and Schofield, 2010). Through the merger, United and Continental could simplify their route system and substitute spoke routes with direct connections when one of the two spoke routes had low average passenger numbers. For example, the Chicago hub in United could be connected with Newark hub by using two spoke routes departing from Cleveland. Cleveland-Chicago has low average passenger numbers because customers in many cases prefer to use the car rather than the air connection. For this reason, the route between Cleveland and Chicago could be eliminated and substituted with a direct connection between Chicago and New York (In-depth Interviews, 2010). Consequently, the capacity in the two networks could be employed more effectively with improved connections between the hubs (In-depth Interviews, 2010). United and Continental could reduce their overall capacity by approximately 10 percent in domestic markets with a merger (Ranson, 2010) and bring their operational costs down by 5 percent (Chon et al., 2010).

In international markets, United and Continental could reorganise their destinations and achieve further cost cuts in overseas routes. United and Continental had sought to cut their operational costs with respect to their European competitors, however, they required further opportunities. Continental, in particular, experienced problems restraining its operational costs (Air Transport World, 2010), whereas United Airlines had taken advantage of Chapter 11 bankruptcy procedures between 2004 and 2007 (Airline Business, 2007). Continental and United could at first streamline the destinations that could be considered as substitutable for passengers, as underlined for codesharing. Substitutable destinations were primarily located in Washington Dulles and New York Newark hubs towards European destinations.

The international network of the two carriers could also be completely restructured by dividing the international destinations into primary and secondary destinations according to both the average passenger numbers and the potential growth of the routes (In-depth Interviews, 2010). Primary destinations should be developed mainly towards Asia from United's Tokyo Narita and Los Angeles hubs and from Continental's Houston hubs (Flint, 2010). In primary destinations, Continental and United could employ the new long-haul capable Boeing B787's Dreamliner that could provide direct connections to Asian destinations from the US (Hinton, 2010). In this manner, Continental and United could open new markets in Asia and reduce the operational costs thanks to both the fuel efficiency of B787's Dreamliner (Hinton, 2010) and the cutbacks in connecting flights. Primary destinations could also be selected for feeding destinations in Europe and Latin America. As for secondary destinations, United and Continental could follow Continental's model of targeting underserved direct destinations in Europe and Latin America and employing narrow body aircraft in order to have moderate unit costs and provide yearly scheduling (Airfinance Journal, 2009).

Moreover, the two carriers could allocate their international capacity in hubs that offered growth opportunities. For example, Continental's Houston hub could be further developed, whereas both San Francisco and Chicago had constraints in terms of capacity expansion (Shannon and Schofield, 2010). In conclusion, United and Continental could redesign their

domestic routes in order to maximise feeding traffic towards their international hubs, creating significant economies of scope in the route networks (Schlangenstein et al., 2010). Frequencies between direct connections could be increased and coordinated in order to facilitate the links between international hubs, particularly for transfer passengers originating from the Pacific coast towards Europe and from the Atlantic coast towards Asia (In-depth Interviews, 2010).

The codeshare between United and Continental contributed to identifying which routes the carriers had to invest more resources in and which routes could be eliminated or reduced in terms of frequency and capacity during the integration process. Specifically, the two carriers had the opportunity to evaluate the potential of international routes when combining the operations in codesharing. Both carriers surveyed how clients of one carrier reacted to the new routes of the other carrier and evaluated which routes could become primary international destinations (In-depth interviews, 2010). In addition, domestic routes experienced a major change in traffic when the two carriers started codesharing, in particular domestic routes, which fed international destinations, they encountered a significant growth in traffic, whereas secondary routes underwent a stable or declining traffic. Codesharing helped to realise which routes had to be reinforced in terms of capacity and frequency to support the primary international destinations and which routes could be eliminated with minor problems for feeding traffic (In-depth interviews, 2010).

In addition, in the second negotiation in 2010, Continental and United paid more attention to organisational issues than in the first negotiation in 2007. Continental and United had the opportunity to work together in codesharing and realised that organisational issues were more significant than expected (In-depth Interviews, 2010). Codesharing included only the international flights, therefore, Continental and United's management expected the organisational problems to escalate when operations in both domestic and international flights had to be fully integrated in the merger (In-depth Interviews, 2010). For this reason, in 2010, Continental and United set up a Steering Committee with top-management representatives from both airlines that oversaw the Integration Management Office, which represented the main functions of the airlines to be integrated (Carey, 2010). The first task of the Integration Management Office was to focus on the lessons to be learnt from the cooperation incodesharing (In-depth Interviews, 2010).

CONCLUSIONS

In the airline industry, alliances contribute to identifying further synergies to capitalise upon if organisations proceed to a full acquisition. Airlines gain significant cost reductions if they reduce capacity in parallel and redundant routes, notwithstanding, airline organisations are hesitant to permanently cut capacity because capacity is difficult to restore in the airline industry. Alliances will favour subsequent acquisitions if opportunities for rationalisation are recognised because airlines can proceed to acquisitions and apply permanent changes to their network.

In addition, Gulati et al. (2009) and Vanhaverbeke et al. (2002) argue that alliances allow the gathering of information about partners, thus the acquisition ex-ante costs for information asymmetry on assets and valuation problems reduce as a consequence of the alliance relationship. Acquisition ex-post costs can also decrease because the organisations gain

knowledge on the partner's routines and operational standards. Therefore, acquisition costs are diminished by alliance cooperation, hence acquisitions between alliance partners can be fostered. The research findings support an evolutionary process in alliances, i.e. the predictable evolution of alliances into full mergers. Codesharing appears to emphasise both the opportunities in terms of feeding traffic and similarities in business strategy and working style, hence, potential organisational diseconomies in the integration process become less relevant. Additionally, cooperation in codesharing lowers the perceptual differences in both operational costs and service performances among carriers (Alitalia case; Continental case). For these reasons, cooperation in alliances can reinforce arguments in favour of acquisitions among the airline decision makers.

This study, nevertheless, challenges the assumption that alliances are employed as phased investments with a future exercise date in concentrated industries (Oxley et al., 2009; Kogut, 1991). Organisations in concentrated industries have their limited potential acquisition targets, hence they establish alliances in order to pre-empt their competitors from acquiring their potential targets. Acquisitions will be accomplished when the acquisition costs will be delineated and financial resources will become available. Nonetheless, airline organisations appear not to establish alliances as phased divestitures for acquisitions. Airline organisations set alliances for competitive reasons, however, they seek to prevent their competitors from achieving the alliance benefits rather than to lock potential acquisition targets.

Airline strategies confirm that alliances tend to evolve in acquisitions only in limited cases, and alliances and acquisitions are independent and mutually exclusive choices in the airline industry, as argued by Wang and Zajac (2007), Reuer and Zollo (2005), Bierly and Coombs (2004), and Hagedoorn and Sadowsky (1999).

REFERENCES

Air Transport World (2009), "News Briefs: Financial results, new deals, and reports from every corner of the globe", *Air Transport World*, Feb., Vol. 46, Issue 2, pp. 9-21.

Air Transport World (2010), "World Airline Financial Results", *Air Transport World*, Jan., Vol. 47, Issue 1, pp. 37-40.

Airfinance Journal (2009), "Continental reports \$136 million loss", *Airfinance Journal*, Apr. 20, p57.

Airline Business (2003), "Carriers on road to consolidation", *Airline Business*, Jun., Vol. 19, Issue 6, p14.

Airline Business (2007), "The Southwest effect", Airline Business, May, Vol. 23, Issue 5, p7.

Airline Business (2010), "Airline Alliance Survey", Sep., Vol. 26, Issue 9, pp. 32-44.

Airline Industry Information (2001), "Alitalia in talks with several carriers", *Airline Industry Information*, Feb. 21, p10.

Akerlof, G.A. (1970), "The market for 'lemons': qualitative uncertainty and the market mechanism", *Quarterly Journal of Economics*, Aug., Vol. 84, Issue 3, pp. 488-500.

Ashkenas, R.N. and Francis, S.C. (2000), "Integration managers: Special leaders for special times", *Harvard Business Review*, Nov.-Dec., Vol. 78, Issue 6, pp. 108-116.

Aviation Week & Space Technology (2006), "Another Italian Government rescue", *Aviation Week & Space Technology*, Oct. 16, Vol. 165, Issue 15, p23.

Aviation Week & Space Technology (2008), "Airline Merger: Take It Slow", *Aviation Week & Space Technology*, Apr. 7, Vol. 168, Issue 14, p66.

Bailey, C.A. (2006), *A Guide to Qualitative Field Research*, 2nd Ed., Pine Forge Series in Research Methods and Statistics, Pine Forge Press, Sage Publications, Inc., Thousand Oaks, California, USA.

Baker, C. (2003), "Decision time", Airline Business, Aug., Vol. 19, Issue 8, pp. 31-34.

Baker, C. (2007), "Italy in a rush to sell Alitalia stake", *Airline Business*, Jan., Vol. 23, Issue 1, p20.

Barber, T. and Done, K. (2006), "Air France-KLM in talks with Alitalia", *The Financial Times, London, UK*, Section: Companies Europe, Nov. 24, p24.

Beamish, P.W. and Banks, J.C. (1987), "Equity joint ventures and the theory of the multinational enterprise", *Journal of International Business Studies*, Summer, Vol. 18, Issue 2, pp. 1-16.

Betts, P. (2007), "Spinetta's flight", *The Financial Times, London, UK*, Section: Companies Europe, Jan. 18, p24.

Bierly, P.E. and Coombs, J.E. (2004), "Equity alliances, stages of product development, and alliance instability", *Journal of Engineering and Technology Management*, Sep., Vol. 21, Issue 3, pp. 191-214.

Brothers, C. and Povoledo, E. (2009), "Alitalia Sells a Stake as It Makes Its Return", *New York Times*, Jan. 13, p1.

Buono, A.F. (2003), "SEAM-less post-merger integration strategies: a cause for concern", *Journal of Organizational Change Management*, Vol. 16, Issue 1, pp. 90-98.

Capron, L. and Pistre, N. (2002), "When do acquirers earn abnormal returns?", Strategic Management Journal, Vol. 23, Issue 9, pp. 781-794.

Carey, S. (2010), "Merger Won't End Obstacles Facing Carriers", Wall Street Journal - Eastern Edition, Jun. 11, Vol. 255, Issue 135, pB4.

Casey, S. and Chon, G. (2010), "UAL, Continental Talks Continue but Hit Snag", Wall Street Journal - Eastern Edition, Apr. 26, Vol. 255, Issue 96, pp. B1-B2.

Chang, S.C., Chen, S.S and Lai, J.H. (2008), "The effect of alliance experience and intellectual capital on the value creation of international strategic alliances", *Omega*, Special Issue on Knowledge Management and Organizational Learning, Apr., Vol. 36, Issue 2, pp. 298-316.

Chang, Y.C. and Williams, G. (2002), "European major airline' strategic reactions to the Third Package", *Transport Policy*, Apr., Vol. 9, Issue 2, pp. 129-142.

Chatterjee, S., Lubatkin, M.H., Schweiger, D.M. and Weber, Y. (1992), "Cultural differences and shareholder value in related mergers: Linking equity and human capital", *Strategic Management Journal*, Jun., Vol. 13, Issue 5, pp. 319-334.

Chi, T. (1994), "Trading in strategic resources: Necessary conditions, transaction cost problems, and choice of exchange structure", *Strategic Management Journal*, May, Vol. 15, Issue 4, pp. 271-290.

Chon, G., Carey, S. and Catan, T. (2010), "United, Continental to Combine", Wall Street Journal - Eastern Edition, May 3, Vol. 255, Issue 102, pp. B1-B4.

Ciborra, C. (1991), "Alliances as learning experiments: Cooperation, competition, and change in high-tech industries",in Mytelka, L.K. (Eds.), *Strategic partnerships and the world economy*, Pinter, London, UK, pp. 51-77.

Dalziel, M. (2009), "Forgoing the Flexibility of Real Options: When and Why Firms Commit to Investment Decisions", *British Journal of Management*, Sep., Vol. 20, Issue 3, pp. 401-412.

Del Canho, D. and Engelfriet, J. (2008), "Flying higher - together", *Business Strategy Review*, Spring, Vol. 19, Issue 1, pp. 34-37.

Donoghue, J. (2005), "A new kind of normal", Air Transport World, Jan., Vol. 42, Issue 1, pp. 34-39.

Dyer, J.H., Kale, P. and Singh, H. (2004), "When to ally and when to acquire", *Harvard Business Review*, Jul.-Aug., Vol. 82, Issue 7-8, pp. 108-115.

Dunn, G. (2009a.), "Relaunched Alitalia flies into battle", Airline Business, Jan., Vol. 25, Issue 1, p16.

Ezard, K. (2008), "Wringing Out the Costs", Airline Business, Nov., Vol. 24, Issue 11, pp. 66-70.

Fair Disclosure Wire (2006), "Interim 2006/2007: Air France-KLM Earnings Conference Call Final", *Fair Disclosure Wire, Quarterly Earnings Reports*, Nov. 23, pp. 1-18.

Flint, P. (1998), "Is bigger better?", Air Transport World, Mar., Vol. 35, Issue 3, pp. 31-32.

Flint, P. (2010), "Merger of Equals", Air Transport World, Jun., Vol. 47, Issue 6, pp. 47-49.

Flottau, J., Nativi, A. and Wall, R. (2009), "Open Questions", *Aviation Week & Space Technology*, Jan. 19, Vol. 170, Issue 3, p40.

Flouris, T. and Swidler, S. (2004), "American Airlines' Takeover of TWA: An ex-post analysis of financial market information", *Journal of Air Transport Management*, May, Vol. 10, Issue 3, pp. 173-180.

GAO Reports (2010), "Issues raised by the Proposed Merger of United and Continental Airlines", *GAO Reports*, May 27, pp. 1-26.

Garette, B. and Dussauge, P. (2000), "Alliances Versus Acquisitions: Choosing the Right Option", *European Management Journal*, Feb., Vol. 18, Issue 1, pp. 63-69.

Gulati, R. (1998), "Alliances and Networks", in Reuer, J.J. (2004) (Eds.), *Strategic Alliances: Theory and Evidence*, Oxford University Press, Oxford, UK, pp. 378-416.

Gulati, R.S., Sytch, M. and Mehrotra, P. (2009), "Breaking Up is Never Easy: Planning for Exit in A Strategic Alliance", *California Management Review*, Summer, Vol. 50, Issue 4, pp. 147-163.

Hagedoorn, J. and Sadowski, B. (1999), "The transition from strategic technology alliances to mergers and acquisitions: An exploratory study", *Journal of Management Studies*, Jan., Vol. 36, Issue 1, pp. 87-107.

Hamlin, G.W. (2009), "Capacity Cuts and Consolidation hold key to healthy U.S. airline industry", *Aviation Week & Space Technology*, Jul. 13, Vol. 171, Issue 2, p50.

Hassin, O. and Shy, O. (2004), "Code-Sharing Agreements and Interconnections in Markets for International Flights", *Review of International Economics*, Aug., Vol. 12, Issue 3, pp. 337-352.

Hennart, J.F. (1988), "A Transaction Costs Theory of Equity Joint Ventures", *StrategicManagement Journal*, Jul.-Aug., Vol. 9, Issue 4, pp. 361-374.

Hennart, J.F. and Reddy, S. (2000), "Digestibility and asymmetric information in the choice between acquisitions and joint ventures: Where's the beef?", *StrategicManagement Journal*, Feb., Vol. 21, Issue 2, pp. 191-193.

Hinton, C. (2010), "Airbus Sales in Limbo If a Merger Happens", Wall Street Journal - Eastern Edition, Apr. 28, Vol. 255, Issue 98, pB3.

Inkpen, A.C., Sundaram, A.K. and Rockwood, K. (2000), "Cross-border acquisitions of US technology assets", *California Management Review*, Spring, Vol. 42, Issue 3, pp. 50-71.

Knorr, A. and Arndt, A. (2004), "Alliance Strategy and the Fall of Swissair: A Comment", *Journal of Air Transport Management*, Mar., Vol. 10, Issue 2, pp. 119-123.

Kogut, B. (1991), "Joint Ventures and the option to expand and acquire", *Management Science*, Jan., Vol. 37, Issue 1, pp. 19-33.

Ku, E.C.S. and Yi, W.F. (2009), "Knowledge sharing and customer relationship management in the travel service alliances", *Total Quality Management & Business Excellence*, Dec., Vol. 20, Issue 12, pp. 1407-1421.

Learmount, D. (2004), "IATA forecasts growth, but adds profit warning", *Flight International*, Section: News, Air Transport, Dec. 21, p14.

Levine, M.E. (1987), "Airline competition in deregulated markets: Theory, firm strategy and public policy", *Yale Journal of Regulation*, Spring, Vol. 4, Issue 2, pp. 393-494.

Marks, M.L. and Mirvis, P.H. (1992), "Rebuilding after the Merger: Dealing with survivor sickness", *Organizational Dynamics*, Autumn, Vol. 21, Issue 2, pp. 18-32.

Meschi, P.X., Metais, E. and Shimizu. K. (2011), "Do prior alliances with the target affect acquisition performance? The dangers of a honeymoon before marriage", Academy of Management Annual Meeting Proceedings, 2011, pp. 1-6.

Mitchell, J. and Carey, S. (2010), "Airlines State Case for Deal", Wall Street Journal - Eastern Edition, May 28, Vol. 255, Issue 124, pB2.

Nativi, A. (2008), "Take It or Leave It", *Aviation Week & Space Technology*, Mar. 24, Vol. 168, Issue 12, p39.

Nativi, A. and Wall, R. (2008), "Takeover Talks", *Aviation Week & Space Technology*, Jan. 7, Vol. 168, Issue 1, pp. 37-38.

Oxley, J.E., Sampson, R.C. and Silverman, B.S. (2009), "Arms Race or Détente? How Interfirm Alliance Announcements Change the Stock Market Valuation of Rivals", *Management Science*, Aug., Vol. 55, Issue 8, pp. 1321-1337.

Paran, G.D. (1999), *Marketing in Airlines*, Melbourne University Publications, Melbourne, Australia.

Pekar, P. and Margulis, M.S. (2003), "Equity Alliances take Centre Stage", *BusinessStrategy Review*, Jun., Vol. 14, Issue 2, pp. 50-62.

Ranson, L. (2010), "United forces the Merger Pace", *Airline Business*, Jun., Vol. 26, Issue 6, pp. 10-11.

Ravenscraft, D.J. and Scherer, F.M. (1987), *Mergers, Sell-Offs, and Economic Efficiency*, Brooking Institutions, Washington, DC, USA.

Reuer, J.J. and Zollo, M. (2005), "Termination Outcomes of Research Alliances", *ResearchPolicy*, Feb., Vol. 34, Issue 1, pp. 101-115.

Reus, T.H. and Lamont, B.T. (2009), "The double-edged Sword of Cultural Distance in International Acquisitions", *Journal of International Business Studies*, Oct.-Nov., Vol. 40, Issue 8, pp. 1298-1316.

Saglietto, L. (2009), "Airline alliances", *Competitiveness Review*, Vol. 19, Issue 4, pp. 304-322.

Schlangenstein, M., Credeur, M.J., Hughes, J. and Bliss, J. (2010), "United and Continental Reach for the Sky", *Bloomberg Businessweek*, May 10, Issue 4178, pp. 19-20.

Shannon, D. and Schofield, A. (2010), "Fit To Be Tied?", Aviation Week & Space Technology, May 10, Vol. 172, Issue 18, p20.

Shaw, S. (2007), Airline Marketing and Management, 6th Ed., Ashgate Publications, Aldershot, UK.

Sirower, M. (1997), *The Synergy Trap: How Companies Lose the Acquisition Game*, Free Press, New York.

Sparaco, P. (2010), "In the Beginning...", Aviation Week & Space Technology, Jun. 28, Vol. 172, Issue 24, p69.

Spekman, R., Forbes, T.M., Isabella, L.A. and Macavoy, T.C. (1998), "Alliance Management: A view from the past and a look to the future", *Journal of Management Studies*, Nov., Vol. 35, Issue 6, pp. 747-772.

Stake, R.E. (1995), *The Art of Case Study Research*, Sage Publications, Inc., Thousand Oaks, California, USA.

Teece, J.T. (1987), "Profiting from technological innovation: Implications for integration, collaboration and public policy", in Teece, J.T. (1987) (Eds.), *The Competitive Challenge*, Ballinger, Cambridge, Massachusetts, USA, pp. 1-27.

Teichert, T., Shehu, E. and von Wartburg, I. (2008), "Customer Segmentation Revisited: The case of the airline industry", *Transportation Research Part A: Policy and Practice*, Jan., Vol. 42, Issue 1, pp. 227-242.

Tita, B. and Meyer, G. (2006), "Desperate UAL seeks a Partner", *Crain's Chicago Business*, Dec. 18, Vol. 29, Issue 51, pp. 1-8.

Todeva, E. and Knoke, D. (2005), "Strategic Alliances and Models of Collaboration", *Management Decision*, Vol. 43, Issue 1, pp. 123-148.

Toh, R.S. and Raven, P. (2003), "Perishable Asset Revenue Management: Integrated Internet Marketing Strategies for the Airlines", *Transportation Journal*, Summer, Vol. 42, Issue 4, pp. 30-43.

Vanhaverbeke, W., Duysters, G. and Noorderhaven, N. (2002), "External Technology Sourcing Through Alliances or Acquisitions: An Analysis of the Application-Specific Integrated Circuits Industry", *Organization Science*, Nov.-Dec., Vol. 13, Issue 6, pp. 714-733.

Wall, R. (2008), "EC on Alitalia", Aviation Week & Space Technology, Nov. 17, Vol. 169, Issue 19, p44.

Wan, X., Zou, L. and Dresner, M. (2009), "Assessing the Price Effects of airline alliances on parallel routes", *Transportation Research Part E: Logistics and Transportation Review*, Jul., Vol. 45, Issue 4, pp. 627-641.

Wang, L. and Zajac, E.J. (2007), "Alliance or acquisition? A dyadic perspective on interfirm resource combinations", *Strategic Management Journal*, Dec., Vol. 28, Issue 13, pp. 1291-1317.

Yin, R.K. (1994), *Case Study Research: Design and Methods*, 2nd Ed., Applied Social Research Methods Series, Sage Publications, Inc., Thousand Oaks, California, USA.

Zaheer, A., Hernandez, E. and Banerjee, S. (2010), "Prior Alliances with Targets and Acquisition Performance in Knowledge-Intensive Industries", *Organization Science*, Sep.-Oct. 2010, Vol. 21, Issue 5, pp. 1072-1091.