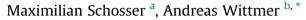
#### Journal of Air Transport Management 47 (2015) 142-153

Contents lists available at ScienceDirect

### Journal of Air Transport Management

journal homepage: www.elsevier.com/locate/jairtraman

## Cost and revenue synergies in airline mergers – Examining geographical differences



<sup>a</sup> University of St. Gallen, Dufourstrasse 40a, CH-9000 St. Gallen, Switzerland
 <sup>b</sup> Center for Aviation Competence, University of St. Gallen, Dufourstrasse 40a, CH-9000 St. Gallen, Switzerland

#### ARTICLE INFO

Article history: Received 23 October 2014 Received in revised form 17 April 2015 Accepted 20 May 2015 Available online 5 June 2015

Keywords: Airline merger Mergers & acquisitions Synergies Cost synergies Revenue synergies

Classification: Merger and alliance in air transport Airline strategy Management and operations Aviation case study

#### ABSTRACT

Deregulation, privatization and shifting demand patterns in the airline industry, combined with the emergence of low-cost airlines and rising fuel prices have increased the competitive pressure on legacy airlines. Since alliances do not deliver sufficient benefits to counterbalance these trends, many airlines have engaged in mergers to seek for additional cost and revenue synergies. An extent body of literature investigates the synergy potential in mergers and alliances, but there is no study on how synergies differ among mergers and what potential influence factors cause these differences. This paper aims at explaining differences in synergy estimates and realized synergies in recent airline mergers and places a special focus on geographical influence factors.

The research methodology uses a comparative case study comprising six large airline mergers between 2003 and 2012 from Europe, North America and Latin America. After analyzing the cases individually, the pre-merger situation of the merging airlines, the synergy estimates and the realized synergies of the cases were compared.

The results show considerable geographical differences in pre-merger cost structures, synergy estimates, and synergy realization. The European mergers present lower synergy estimates but also lower integration costs than mergers in the Americas. Whereas European airlines estimate cost synergies higher than revenue synergies, both North and Latin American airlines expect more revenue synergies than cost synergies from airline mergers. Only one merger showed superior post-merger profitability which indicates that the achieved synergies in the broad majority of the cases are insignificant.

© 2015 Elsevier Ltd. All rights reserved.

#### 1. Introduction

In the past 15 years, the global airline industry has undergone major changes. Deregulation, privatization and shifting demand patterns led to a significant change in the business environment (Sterzenbach et al., 2013). The price pressure increased due to emerging low-cost carriers and rising fuel prices. As a result, many airlines faced declining profitability and had to rethink their business models as independent full-service carriers (Iatrou and Oretti, 2007). Synergies became a major issue in order to respond to the increasing price pressure. In the beginning, most airlines strived for airline alliances to create cost and revenue synergies that led to the formation of big airline alliances, such as Star Alliance, oneworld

\* Corresponding author.

and SkyTeam. In 2010, these three alliances accounted for a total share of 68% of total revenue passenger-kilometers (RPKs) flown, with an increasing tendency (IATA, 2011).

However, alliance synergies seem to be insufficient to maintain competitiveness as the increased mergers & acquisitions (M&A) activity among airlines in the past 10 years signals. The most recent M&A wave started in 2001 with the TWA takeover by American Airlines. This transaction set off a domestic consolidation wave in the United States (US) and paved the way for subsequent further large mergers. With the most recently announced merger between American Airlines and US Airways, only three large legacy carriers dominate the market in the United States, namely American Airlines, Delta Airlines and United Airlines. In Europe, a similar consolidation wave formed three large legacy airlines: Air France-KLM, the International Airlines Group (IAG), and the Lufthansa Group. The cross-border airline merger phenomenon has even arrived in emerging markets like Latin America, producing the LATAM Group and the Avianca/TACA Group.







*E-mail addresses*: maximilian.schosser@student.unisg.ch (M. Schosser), andreas. wittmer@unisg.ch (A. Wittmer).

Most literature compares cost and revenue synergies in airline alliances to synergies emerging from M&A in order to explain the current M&A wave (e.g. Doganis, 2010; latrou and Oretti, 2007; Kleymann and Seristö, 2004). However, there are no studies on how cost and revenue synergies differ among airline mergers and what potential influence factors could explain these differences. Furthermore, the actual achievement of synergies in airline mergers has not yet been analyzed in scholarly literature.

This paper aims at explicating differences in airline merger synergy estimates and realized synergies in recent airline mergers. Special focus is placed on three influence factors, namely the geographic origin of the merging airlines, the maturity of their home market and whether the merger is a domestic merger or a cross-border merger. This aim is concisely addressed in two guiding research questions:

RQ-1: How do cost and revenue synergy estimates differ between different mergers?

RQ-2: How have the estimated synergies been realized? Which estimated synergies were realized and which synergies could not be realized?

The second Section presents the literature review followed by Section 3 explaining the research approach. Section 4 presents the case study results which are discussed and interpreted in Section 5 and the conclusions are in delimit Section 6.

#### 2. Synergies in airline mergers

Companies have a variety of strategic and legal options, with different degrees of legal and financial independence, in which they can structure cooperation. These range from lose cooperation agreements to mergers and acquisitions, the most integrated option. According to Müller-Stewens et al. (2010), mergers and acquisitions are strategically motivated and comprise a subsequent integration or resale which implies "a transfer of competences in management, control and decision-making." (p. 12).

Acquisitions describe an asset or share purchase of a company by another company in which the acquired company loses its legal and economic independence. It is important to stress that strategic alliances can also include an equity participation but they are different from acquisitions because both involved companies maintain their legal and economic independence (Fritz, 2005). A merger can be either the integration of two formerly independent companies in the legal structure of one of the existing companies or it can be the foundation of a completely new legal entity. Both mergers and acquisitions are characterized by hierarchy-based decision making (Fritz, 2005), in contrast to cooperative decisionmaking processes in strategic alliances or loose co-operation.

The airline sector has changed significantly with the evolution of global alliances since the early 1990s. Since this paper places the focus on airline mergers, it is important to delimit airline alliances from mergers. Gulati (1998) defines alliances as "voluntary arrangements between firms involving exchange, sharing, or co-development of products, technologies, or services" (p. 293). Morrish and Hamilton (2002) extend this definition by the "declared intention of improving competitiveness and thereby enhancing overall performance" (p. 401). Balz (2003) defines four characteristics of strategic alliances: they have a strategic focus, they are limited to specific fields of cooperation, they have often an inter-regional orientation, and the alliance partners maintain always their legal and economic independence. The last point is probably the sharpest distinction to mergers and acquisitions as in M&A transactions at least one of the involved partners loses its

legal and economic independence.

Ansoff (1965) explains the synergy concept by the simple equation 2 + 2 = 5, pointing out that the combination of two individual parts creates more value than the separate individual parts. Synergies are value enhancements that can derive either from less input factors needed to produce the same output or from a higher output with constant input factors. In both cases, one notes an efficiency enhancement that leads to value creation. A large proportion of literature on synergies focuses on the value creation mechanisms (e.g., Chatterjee, 1986; Seth, 1990) and postulates two generic ways of increasing the profitability of a company and thus generating (economic) value. Assuming that profitability is a function of revenues and costs, economic value can be created by either lowering the costs or by increasing revenues while holding the other variable constant (Seth, 1990). Teece (1982) develops the concept of sub-additive synergies where the individual parts can save costs by reducing redundant functions or processes if they combine their business operations. On the revenue side, superadditive synergies can create value by combining unique firm resources (Davis and Thomas, 1993). Tanriverdi and Venkatraman (2005) explain the emergence of revenue synergies with the "resource relatedness" concept which states that firms can increase the output by sharing related resources present within the different parts of the firm. The improved resource employment leads then to higher outputs of the combined entities.

For the course of this paper, the term "synergies" is differentiated between "cost synergies" which derive from the sub-additive value creation concept and "revenue synergies" which originate in the super-additive value concept. Götsch and Albers (2005) acknowledge the applicability of this synergy classification in the airline industry.

The existence of cost synergies in airline cooperation has been widely acknowledged in the literature (Evripidou, 2012; Götsch and Albers, 2005; Hansson et al., 2001; Merkert and Morrell, 2012; Rajasekar and Fouts, 2009). However, the classification of potential cost synergies varies widely between scholars. Table 1 summarizes the main cost synergy sources and the respective levers.

Most cost synergies arise because of redundancies of processes, resources or assets as a consequence of the cooperation. Eliminating these redundancies is a major driver for efficiency enhancements in both mergers and acquisitions. A second common lever is joint procurement of fuel, materials and IT systems. Thanks to a greater bargaining power, companies can benefit from lower fees, sales commissions and financing costs (e.g., for aircraft leases). Furthermore, fleet standardization can positively affect maintenance and training costs, and network and flight schedule optimization can result in better aircraft utilization, creating economies of density and lowering the variable operating costs.

Similar to cost synergies, revenue synergies are also widely accepted as profitability drivers in airline cooperation (Fritz, 2005; Götsch and Albers, 2005; Hansson et al., 2001; Merkert and Morrell, 2012; Rajasekar and Fouts, 2009). The nature of revenue synergies lies in creating super-additive value with an unchanged set of production factors. However, the combination of production factors allows for an increase in price or passenger volume Table 2.

Synergies can be achieved in all forms of cooperation between airlines. However, the amount of synergies as well as the type of achievable synergies seems to be related to the level of integration. In other words, airlines can realize a different amount of synergies in alliances than in mergers. This fact is confirmed by various scholars (e.g. Gudmundsson and Lechner, 2006; latrou and Alamdari, 2005; latrou and Oretti, 2007; Merkert and Morrell, 2012). Nevertheless, the precise differences remain unclear.

Most scholars assume that airline mergers allow for more overall synergies than airline alliances (Appendix 1). Flores (1998)

# دريافت فورى 🛶 متن كامل مقاله

- امکان دانلود نسخه تمام متن مقالات انگلیسی
  امکان دانلود نسخه ترجمه شده مقالات
  پذیرش سفارش ترجمه تخصصی
  امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  امکان دانلود رایگان ۲ صفحه اول هر مقاله
  امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
  دانلود فوری مقاله پس از پرداخت آنلاین
  پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات
- ISIArticles مرجع مقالات تخصصی ایران