

**In search of business model configurations that work: Lessons from the  
hybridization of Air Berlin and JetBlue**

**Leonardo Corbo**

Católica Porto Business School  
Universidade Católica Portuguesa

[lcorbo@porto.ucp.pt](mailto:lcorbo@porto.ucp.pt)

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## **Abstract**

This paper examines the rise of a distinct alternative to the traditional business model dichotomy between low-cost and full-service carriers (i.e. the hybrid business model) and questions its viability as an alternative for growth and profitability. Using a comparative assessment of business model innovation practices of two well-reputed carriers, Air Berlin and JetBlue, the paper highlights the importance of taking into account several components of a business model when deciding to experiment with it as these choices have important implications for an airline's performance. Our results suggest that, following the transition from a no-frills to a hybrid business model, a misalignment between the value proposition and the other elements of the business model will hinder an airline's ability to achieve a sustainable competitive advantage.

Keywords: business models; innovation; hybrid carriers

## **1. Introduction**

Mature industries are generally characterized by lower levels of innovation. Yet, new opportunities can arise in the face of disruptive events that challenge the status quo and threaten a prevailing order in a given competitive arena (Corbo et al. 2016). In the airline industry, the adoption of the low-cost carrier (LCC) business model, first by Southwest Airlines in the US and later by several carriers in other markets, represents one such disruption. This example clearly suggests that the way firms generate, deliver and capture value (i.e. their business model) affects heavily their ability to obtain a competitive advantage.

Incumbents adopting the traditional full-service carrier (FSC) business model have responded to business model innovation brought by LCCs by: 1) reducing the significant costs associated to operations without radically shaping their business model or reducing service level or 2) establishing low-cost, no-frills subsidiaries that adopt some elements of the low-cost business model (Morrell, 2005). These forms of experimentation represent also a form of business model innovation and have often implied going through trial-and-error for incumbent airlines even if many of these experiments did not succeed. Examples of such failures include the demises of Ted (United Airlines) and Song (Delta Air Lines) in the US and Go (British Airways) in Europe.

More recently, an alternative to this business model dichotomy has emerged which draws on elements of both the LCC and the FSC business models. The deviation from the archetypical business models has reached such a degree that scholars and practitioners have begun to agree that a hybrid business model can be a viable alternative for growth and profitability. For example, O'Connell and Williams (2005) underline the importance of searching for new ways to operate an airline in the market and deliver value to customers through the adoption of new business models. In a similar vein, Daft and Albers (2013) present a framework for devising airline business models to assess to what extent the business models of German carriers diverge or converge.

Based on the arguments presented above, we advance that an incumbent LCC's managerial choices – the planned behaviors a firm undertakes with respect to its business model components – have relevant implications for an airline's performance. Given the importance of business model configurations for achieving a competitive advantage over a firm's rivals, in this paper we focus on one form of business model innovation in the airline industry also known as business model hybridization. More deeply, we ask whether business model convergence of two archetypical business models (i.e. low-cost and full-service) coincides with performance convergence. The hybridizations of Air Berlin in Europe and JetBlue in the United States provide an excellent opportunity to explore this relationship. In doing so, we complement the emerging research on airline business models by offering a qualitative account, coupled by a quantitative analysis, of how business model innovation has affected the two carriers' performance. The results offer novel insights into when an incumbent LCC benefits from hybridizing its business model. Our main contribution rests in showing how managerial choices, acting as shift parameters, help or prevent a firm from realizing the expected returns from business model innovation. The paper is structured as follows. Section 2 provides an overview of previous literature on business model innovation and its application to the airline industry. Sections 3 and 4 examine the development and evolution of Air Berlin's and JetBlue's business models. Section 5 offers a discussion of the main findings and section 6 offers some conclusions.

## **2. Existing literature**

### *2.1. Business model innovation*

The business model concept is a relatively new one in the management field but has gained increasing popularity among both academics and practitioners. A surge in the use of the term business

model has begun in the late 1990s which coincided with the dot.com bubble. For instance, a search of academic articles using the term “business model” revealed 166 such articles between 1975 and 1994, and 1,563 between 1995 and 2000 (Ghaziani and Ventresca, 2005). Practitioners have also become increasingly aware of the importance of business models. A survey conducted by IBM (2006) revealed that 765 surveyed CEOs, business executives and public sector leaders on the subject of innovation deemed business model innovation vital to creating new and differentiating value for their organizations. Whereas the term innovation is often associated with newly established companies (i.e. start-ups), strategic renewal through changes in business model is possible also for incumbent firms. This is a useful distinction to make as business model innovation may refer to 1) the design of new business models for new entrants (business model design), or 2) the reconfiguration of existing business models for incumbents (business model reconfiguration) (Massa and Tucci, 2013). In this paper we focus on this latter form of business model innovation which has been regarded as a far less studied phenomenon (Kim and Min, 2015).

For incumbent firms that want to adapt their business model to changing conditions in the industry in which they compete one of the main barriers is the lack of understanding of their point of departure that is their current business model (Johnson et al., 2008). For a firm to be able to change and innovate its business model, it is useful to understand what business model innovation is. We adopt the following definition (Santos et al., 2009: 14): Business model innovation (BMI) is a reconfiguration of activities in the existing business model of a firm that is new to the product/service market in which the firm competes.

The advent of low-cost carriers in the airline industry has been one of the most important disruptions of the airline industry’s last decades. Since then, the two juxtaposing business models that emerged did not encounter any other radical changes and pioneering companies (such as Southwest or Ryanair) became themselves incumbents. More recently, however, a variety of such companies have begun to rethink or, to use the terminology used by Massa and Tucci (2013), reconfigure their business models. Thus, not all LCCs adopt exactly the same business model and some have progressively departed from the archetypical low-cost business model to adopt a hybrid approach (Fageda et al., 2015). Other carriers, instead, have moved toward the other side of the spectrum by embracing in an even stronger fashion the principles of the low-cost business model. We now examine these different business model configurations which in the airline industry have taken mainly the form of addition or

removal of activities – a process known as business model reactivation (Santos et al., 2009) – by the airlines that have hybridized their business models.

## *2.2. Business model innovation in the airline industry*

As industries move through their life cycle and enter the maturity phase, it is common that business models stabilize too and usually a few standards emerge. In the airline industry, the two traditional business models are based on the low-cost and full-service strategies. Carriers adopting a full-service strategy focus on providing a wide range of ground and on-board services to their customers. FSCs tend to conduct operations at the national, regional and international level, offer transfers between flights through a hub-and-spoke model, offer different fares according to the customer segment, use both global distribution systems and internet for ticket sales and distributions, engage into alliances and partnerships with other airlines and operate large and complex fleets. On the other hand, carriers adopting the low-cost business model focus on practices that drive down their operational costs. Such cost-saving practices include flying to secondary airports, adopting a point-to-point model, flying a single airplane type, relying on direct sales, avoiding the use of frequent flyer programs, offering a single class product and keeping labor costs low. In so doing, such carriers are generally able to reduce their unit costs by 20-40% compared with traditional full service carriers.

It has become quite clear that each of the two models works better depending on the locus of competition. At a regional level, the low-cost business model has repeatedly proven to achieve superior results. The disruptiveness of this business model has been analyzed by looking at the “spillover” effects from low-cost entry on a route. Previous research has shown that not only yields fall and passenger traffic rises on the routes that an LCC enters but also that yields fall and traffic increases on competitive routes from nearby airports and on other non-competing routes out of the airport of entry (Dresner et al., 1996). However, despite a few success stories like Spring Airlines in China, the LCC model has not yet reached its disruptive potential in emerging and regulated aviation markets (Fu et al., 2015). On the long-haul flights, instead, full-service carriers have been able to maintain and defend their positional advantages albeit a variety of attempts by low-cost carriers to start long-haul operations.

Recent empirical analysis has confirmed that there is a clear product differentiation between the services offered by FSCs and the services offered by LCCs and suggested that competition between LCCs is stronger than competition between FSCs and LCCs (Fu et al., 2011). Since the above-average

financial performance of LCCs has attracted new entrants, their ability to stimulate new demand is running out and many markets seem to be at or near the saturation point. As a solution, some low-cost airlines have started to stretch their business models by offering more services. In other words, LCCs being affected by a greater competitive pressure have followed a differentiation strategy other than a simple cost-leadership strategy (Alamdari and Fagan, 2005). Such deviation from the archetypical low-cost business model by some LCCs has been defined as hybridization or hybrid approach (Klophaus et al., 2012; Fageda et al., 2015). Tables 1 and 2 below summarize some of the features of the three business models by offering a comparison among selected European and US-based carriers.

[Insert Tables 1 and 2 about here]

A variety of scholars have recently addressed this phenomenon. In their study of six European airlines, Mason and Morrison (2008) use a product and organizational architecture (POA) approach to identify the key elements of airline business models. This framework is then used to derive indices through which the authors benchmark six European airlines. Their results show that there are substantial differences among such airlines even if they are all generally classified as low-cost carriers. In order to illustrate the diversity of practices within the low-cost business model, previous research has proposed a typology of low-cost carriers by identifying five broad types, namely: 1) Southwest copycats, 2) subsidiaries, 3) cost cutters, 4) diversified charter carriers, and 5) State subsidized competing on price carriers (Francis et al., 2006). Klophaus and his associates (2012) use a sample of 20 European low-cost airlines to assess whether they follow the archetypical LCC business model. The study indicates that there is a significant degree of business model convergence and that a large number of carriers considered as LCCs have in fact evolved into hybrids. Lohmann and Koo (2013) focus on a sample of nine low-cost and full-service US-based carriers. The value of their research lies in the fact that they use their indices to situate the analyzed carriers along a business model continuum. With the aim to shed additional light on the phenomenon of business model convergence, Daft and Albers (2013) offer a conceptual framework that identifies the relevant dimensions and measures of airline business models. This framework is then used by the authors to provide a description of how the business models of five German airlines appear in two distinct years. In a quantitative study on code-sharing practices adopted by LCCs, Morandi and colleagues (2014) also use a simplified measure of hybridization whereas Fageda and colleagues (2015) use a multivariate analysis to identify the

influence of several route characteristics on the share that European pure low-cost and hybrid low-cost carriers have on the routes they operate. Finally, drawing on previous literature on business models, Pereira and Caetano (2015) identify four airline business model types based on four strategies: 1) capturing and creating value, 2) market and anticipation advantages, 3) hybrid strategy, and 4) revenue generation. We summarize below these authors' main contributions on airline business models.

[Insert Table 3 about here]

Despite such wide consensus on the need to depart from the established business model archetypes, the effects of business model reconfiguration on the performance of firms undertaking such changes are not clear. Anecdotal evidence offers contradictory results too. For instance, the German carrier Air Berlin and the US-based carrier JetBlue have long been appraised for their ability to innovate. While Air Berlin's value proposition of constantly improving its product for its passengers and offering the highest quality and above average service at attractive prices is fascinating in principle, the viability of the carrier's business model has been questioned. For example, a recent analysis of European stock market-listed airlines showed that Air Berlin was the least profitable for 2013 and 2014 (Capa, 2015a). On the other hand, JetBlue, which began operations as a low-cost carrier in 2000, could be regarded as a relatively successful example of transition into a hybrid model in such a highly competitive and crowded market as the North American one.

In order to address the question of why certain airlines are more successful than others in hybridizing their business models we first identified the main components of an airline's business model. To identify such components, we draw on the business model canvas developed by Osterwalder (2004) and then on the airline business model literature to select the components that are more suitable to describe an airline business model. This search yielded the identification of six business model components, each of them helping to understand which business model does the carrier embrace based on certain elements or criteria. The network component is characterized by two elements, point-to-point service (i.e. a carrier does not offer connecting flights including transfer of passengers and baggage) and a distinction between carriers operating only short-haul flights and those that operate both short- and long-haul flights. One of the most important components of any business model is the revenue streams component as it describes the company's plan for assuring revenue generation for the business. Fare bundling practices, which influence an airline's ability to take advantage of ancillary

revenues, as well as the use of a single-fare class cabin, a core element of the low-cost business model, are identified as two main criteria for understanding an airline's revenue streams. To describe how the airline engages in the selling and promotion of its product portfolio we employ the distribution channels component that is characterized by an assessment of the percentage of tickets sold through the lowest-cost distribution channel (i.e. the web) and the use of GDS, a typical feature of the full-service business model. One of the most relevant tangible assets for the value creation of an airline is its fleet structure which has a significant impact on an airline's operating costs. Inter-organizational cooperation as well as membership in alliance constellations reflect an airline's corporate strategic orientation (Hillman and Hitt, 1999) and, thus, are included as a business model indicator. Finally, the value proposition is included as it has been identified by several prominent scholars as one of the most important components of a business model (Osterwalder, 2004; Teece, 2010). The value proposition has been described as the overall view of the firm's bundles of products and services that together represent value for a specific customer segment. As such, it describes the way a firm differentiates itself from its competitors and is the reason why customers buy from a certain firm and not from another (Osterwalder, 2004: 50). For low-cost carriers (LCCs), the value proposition rests on a continuous focus on stimulating new demand through low fares, which we summarize as "travel for everyone". In the case of hybrid airlines, the value proposition is characterized by a value-centric appeal with a service orientation, which we label as "value to you". Finally, full-service carriers' (FSCs) proposition increasingly emphasizes and differentiates around the holistic passenger experience, which we label as "great way to fly".

[Insert Table 4 about here]

Given the paucity of studies exploring this issue, we opted for an inductive and qualitative research approach using case studies as this research method allows analyzing and understanding the phenomenon in real time and at multiple levels (Graf, 2005). Archival data from newspapers, aviation publications, annual reports and Official Airline Guide (OAG) collected over the period 2003-2014 helped generate two case studies based on content analysis or on 'situations in the making' (Yin, 1994). In order to provide a more granular explanation of our qualitative findings, we performed a quantitative analysis by developing a tool which we defined as business model alignment curve. The results of the quantitative analysis confirm our qualitative findings pointing out to the importance of minimizing

deviations from the chosen business model archetype (Alamdari and Fagan, 2005) by maintaining coherence between the airline's value proposition and the other business model components. We now turn to the examination of Air Berlin's and JetBlue's business model components before and after the transition to their new business models.

### **3. Air Berlin**

#### *3.1 Background on Air Berlin*

Air Berlin was founded in 1978 in Oregon (United States) by a former pilot of Pan Am. The main business of that company was to provide flights for tour operators from Berlin to holiday destinations. Following the reunification of Germany on October 3 1990, the airline was registered in Germany under the name Air Berlin GmbH & Co. Luftverkehrs KG in 1991. Using Tegel airport in Berlin as its starting base, the airline later established its presence in other German airports including Nuremberg, Dortmund, and Dresden. A few years later the company had carried more than one million passengers operating a fleet of eight jets with a workforce of ninety employees (International Directory of Company Histories, 2005). In these first years of operation Air Berlin was essentially a small charter carrier operating in a niche market.

Following continuous and sustained expansion in its traffic and changes in the package tour market, Air Berlin began operating as a low-cost carrier in the late '90s. In line with its low-cost business model, the carrier kept using point-to-point flights from a number of secondary airports located near city centers to appeal also to business travelers which could by then benefit of a frequent flyer program. The period between 2006 and 2010 was marked by growth through an IPO in 2006 and mergers and acquisitions (e.g. Niki, LTU, Belair, TUIfly city network and dba). Through these operations, the carrier was able to increase its traffic by 45% reaching 35 million passengers in 2010. At the same time, the acquisition of Niki allowed Air Berlin to establish a strong foothold in the German speaking DACH region comprising Austria, Germany and Switzerland. The last and fourth phase of Air Berlin's growth and development has been characterized mainly by the creation of strategic partnerships. In January 2012 Etihad Airways acquired a 29.3% equity stake in Air Berlin while in March of the same year it joined the alliance constellation oneworld. Table 5 below indicates how Air Berlin has clearly departed from being a low-cost carrier. The carrier's evolution suggests

important developments in its strategic positioning as it had to reengineer its business model several times. The performance implications of these changes will be now further analyzed.

[Insert Table 5 about here]

### *3.2 Business model innovation at Air Berlin*

The European aviation market is characterized by low concentration and high competition. In such a competitive landscape, European LCCs have expanded at a fast pace reaching almost 40% of the total share of seats within Europe (Capa, 2015b) by being more cost efficient than their full service rivals while delivering progressively better customer service. At the same time the traditional low-cost business model pioneered by Southwest has progressively changed and LCC carriers have moved on both sides of the spectrum. On one hand, some carriers have adopted a strict no-frills posture giving rise to the ultra-low-cost business model (ULCCs) where the carrier charges for all aspects of travel beyond the ticket. Examples of ULCCs include Ryanair and Wizz Air in Europe and Spirit and Allegiant in the United States. On the other hand, some carriers started offering services traditionally provided by FSCs therefore hybridizing their business models. Being a form of business model innovation, hybridization should be positively correlated with performance according to previous theoretical contributions on the relationship between business model innovation and firm performance (e.g. Teece, 2010). Figure 1, which shows the financial performance of European stock market-listed carriers in the years 2013-2014, indicates that the top performing airlines are LCCs proving that on the short- and medium-haul point-to-point market the most profitable model is the one that allows to keep very low unit costs through high standardization in all categories while also raising unit revenues through fare unbundling and ancillary revenues. However, it should be noted that the successful LCCs are the ones that have multi-base and multi-country presence generating increased buying power with airports and more brand awareness. In this scenario, Air Berlin, which moved from a low-cost to a hybrid business model presents the worst operating margin. This tension provides a unique opportunity to provide a more nuanced answer to the question of why business model innovation does not always benefit the actors that undertake it. We address this puzzle by disaggregating Air Berlin's business model into six components and highlight the main advantages and disadvantages of the changes in each of them as the carrier transitioned from the LCC to the hybrid model.

[Insert Figure 1 about here]

### *3.2.1 Network configuration*

In 2014 Air Berlin carried almost 32 million passengers and had a fleet of 149 aircrafts (Air Berlin, 2014). The carrier's current network is configured according to the markets served. On the short- and medium-haul routes the network model is point-to-point traffic with a particular focus on the DACH region as well as Italy and Palma de Mallorca while providing connections to major European cities and major tourism destinations in Southern Europe. For its long-haul flights, Air Berlin has adopted a hub-and-spoke network model choosing Berlin and Dusseldorf as its hubs. This network configuration differs quite substantially from how the company's network was configured in 2003. In an analysis of five German carriers including Air Berlin, Daft and Albers (2013) showed that in 2003 the carrier was point-to-point oriented, a typical feature of an LCC business model.

### *3.2.2 Revenue streams*

In line with the evolution of its network configuration, Air Berlin has also progressively changed its fare structure to meet its differentiated customer segments. This means that the carrier now offers both bundled and unbundled fares. For instance, its "JustFly" one-way fare has been recently launched to attract more price-sensitive passengers while the "FlyFlex+" (which includes several benefits such as access to lounges, priority seating as well as free cancellation and rebooking) targets its business travelers (Air Berlin, 2014). However, yields as well as total revenues per ASK declined in 2014 compared to 2013, by 0.8% to EUR 120.1 and by 2.7% to 7.05 eurocents respectively. Also, total revenues per RPK declined by 1.1% (Air Berlin, 2014). Since the beginning of its hybridization process in 2006 where the airline had identified itself as a "low-cost with frills", Air Berlin has registered almost continuous operating losses and a net loss in six out of the ten years as shown in figure 2. For example, in 2005 its biggest cost was represented by airport charges accounting for 27% of all costs, a logical consequence of its decision to expand its route network to major airports in or close to major cities (Aviation Strategy, 2006a). Differently from many of its LCC competitors, the carrier has over the last decade adopted a revenue strategy aimed at attracting business travelers which justifies the addition of a variety of frills. Therefore, one of the major problems Air Berlin has faced is the

continuous necessity to attract new demand to cover the extra costs of the added frills while being unable to generate significant savings. As an example, it has been estimated that Ryanair's ancillary revenues account for 16% of total revenues compared to Air Berlin's 2.8% (Aviation Strategy, 2006).

[Insert Figure 2 about here]

### *3.2.3 Distribution channels*

Air Berlin sells its flights through a mix of direct and indirect channels resonating very closely the selling strategy of a full-service carrier. In particular, the carrier's customers can book their tickets through travel agencies, holiday operators, ticket counters, the company's call center and website or through a mobile device. Previously, the company would sell its tickets prevalently through tour operators (accounting for 44% of the total revenues in 2006) and travel agencies (accounting for 25% of the revenues in 2006) (Air Berlin, 2006). According to company data, the carrier has sold in 2010 approximately 66% of its tickets through individual ticket sales and the remaining 34% through charter companies and tour organizers indicating the company's effort to reduce its dependence on tour operators (Air Berlin, 2010). Increasing the amount of direct sales through its website would allow the carrier to improve its cost structure.

### *3.2.4 Partnerships and alliances*

In the current business model pursued by Air Berlin, partnerships represent a key node for its development. Starting from 2012, Etihad Airways became a strategic partner by acquiring a 29.3% stake in the company giving it access to a wider route network. Since then, the two companies have actively pursued revenue and cost synergies (e.g. saving on fuel prices). For instance, besides having code-sharing agreements on 87 routes, they have joint procurement and maintenance activities as well as mutual training programs. In 2012, the carrier joined the global constellation oneworld expanding its long-haul presence by establishing more than 200 joint code-share agreements with partners such as American Airlines and British Airways. Air Berlin has been the first hybridized LCC to join a global alliance which is another element of departure from the archetypical LCC model.

### *3.2.5 Fleet structure*

One of the key variables of an airline's business model is its fleet size and composition as it significantly affect operating costs. Operators of large fleets might benefit from economies of scale. As suggested by Klophaus et al. (2012), the homogeneity of a fleet can be measured on different levels reaching from aircraft manufacturers such as Airbus and Boeing via aircraft families – A320 family or B737 family – to aircraft types and versions within one family. Our analysis of Air Berlin's fleet composition over the period 2007-2015 indicates that the carrier has progressively moved to a more mixed fleet structure largely as a result of the acquisition of other carriers such as dba and LTU. One of the peculiarities of low-cost carriers is that they typically utilize one aircraft family such as in the case of Ryanair that operates only B737-800. Our fleet homogeneity index (FHI) is calculated as the number of aircrafts of the family with largest fleet share divided by fleet size (Klophaus et al. 2012). Values of the FHI above 0.75 are sufficient for a LCC business model whereas values between 0.75 and 0.25 shall indicate a hybrid business model and values equal or below 0.25 are typical of FSCs. Our results indicate that in 2007 Air Berlin's HFI was 0.34 while in 2015 the index is equal to 0.55, a clear indication of the company's hybrid business model. The carriers' operations have changed quite significantly after its acquisitions of LTU, Belair, and dba as it more than doubled its fleet between 2005 and 2007.

[Insert Figure 3 about here]

### *3.2.6 Value proposition*

Air Berlin's value proposition has changed quite substantially as the company's original no-frills business model focused on leisure travelers diverges quite radically from its hybrid business model which the company plans to transform into a full-service one (Air Berlin, 2014). The company now positions itself as the "airline for everyone" with the aim to be an equally attractive partner for business travelers, private individuals and tour operators. The goal of Air Berlin is to accompany customers as the "air travel partner" in all life situations. Moreover, it presents itself as a value-for-money carrier in the effort to provide its customers good service at the best possible prices and on-time performance. Again, such positioning differs quite substantially from its initial low-cost phase where the carrier's focus was on scheduled traffic specializing on holiday destinations, and additional services and business class where absent.

## **4. JetBlue**

### *4.1 Background on JetBlue*

JetBlue started its operations in 1999 in the United States by connecting large, typically northeastern US cities such as New York with warmer cities in the southeast such as Ft. Lauderdale in Florida. The original fleet was made of 10 Airbus A320 aircrafts in 2000 and by 2004 the company had exceeded 1 billion US\$ in annual revenue. In 2005, JetBlue became the ninth largest carrier in the United States while in 2007 it had a fleet of 134 aircrafts (JetBlue, 2007). The original business model was very similar to Southwest's model as JetBlue's cabins would have only one class of seats and it would operate with only one type of aircraft. By using the A320 as its sole aircraft type, JetBlue was able to standardize its training and servicing processes around the aircraft and had also gained flexibility in scheduling and capacity management. Yet, the carrier differentiated itself from Southwest by offering snacks and drinks onboard, assigned seating as well as in-flight entertainment with live satellite television. In the beginning of its history, JetBlue chose the John F. Kennedy international airport as its main airport base while in 2001 it established a second base at the Long Beach Airport in California. In that same year, with a load factor of 79.9%, the airline had reached the highest percentage than any other US carrier (International Directory of Company Histories, 2005). JetBlue started deviating from its Southwest-type business model in 2005 with its decision to add a new aircraft to its fleet structure, the E190. The years that followed until the recent times have been marked by an evolution of the company's strategy and business model to embrace the new market opportunities and changes of the domestic competitive landscape. We analyze these developments into more detail in the next section.

### *4.2 Business model innovation at JetBlue*

The North American aviation market is characterized by high concentration with the first three players controlling almost 60% of the market in terms of capacity. JetBlue is positioned as a niche player given its 3.3% share in the domestic market measured by seat deployment compared to Southwest's 20% share with a strong focus on leisure markets. JetBlue occupies an interesting position between the two LCC and FSC archetypical business models. We explore the performance implications of JetBlue's business model innovation by disaggregating its business model into the six main business model components identified previously.

#### *4.2.1 Network configuration*

JetBlue is the largest carrier by domestic capacity at New York's JFK airport with a 31% market share. In its second major airport base, Boston Logan, JetBlue is also the market leader by capacity (JetBlue, 2013). Other airports in which the carrier enjoys a strong position are Orlando (where it operates 15% of the airport's flights), Long Beach airport (where it operates 68% of the airport's flights) and Fort Lauderdale-Hollywood airport with 20% of passengers. JetBlue's strong position in its two main airport bases has provided it with increased network dominance on the routes from the North-East to Florida, allowed expansion into the lucrative Caribbean and upper Latin American leisure markets, and the introduction of transcontinental flights to more business destinations. The carrier's point-to-point network model has secured it better aircraft utilization rates, resulting in lower operating costs compared to its hub-and-spoke competitors. The main advantages of maintaining this network structure are related to shorter trip distances that allow a higher number of trips. Moreover, since JetBlue is not tied to feeding a specific hub it enjoys shorter turn-times.

#### *4.2.2 Revenue streams*

Before adopting a hybrid business model, the company's fare structure was very similar to the traditional LCCs being mainly characterized by same fares for all types of passengers. As the carrier pursued growth, its level of indebtedness increased as a result of its fleet expansion with the addition of the E190. JetBlue's operating margin declined from 17% in 2003 to 8.8% in 2004 and 2.8% in 2005. Given its low-cost business model at that time, JetBlue found itself in a relatively difficult position as it could not enjoy the same flexibility as its FSC rivals in adjusting its fares. In particular, the carrier had to face two challenges. First, raising fares would have been against its low-fare image and second LCCs are limited in their pricing options given their simple pricing models (Aviation Strategy, 2006b).

[Insert Figure 4 about here]

As competition evolved, JetBlue progressively departed from the traditional LCC model offering a more differentiated product (e.g. free live satellite television, complimentary snacks and drinks) and achieving wide consensus among its customers. Yet, the airline found itself somewhere in between the three major network carriers – which themselves started adopting some hybrid

characteristics – and the ultra-low-costs (ULCCs). Accordingly, JetBlue’s fare structure evolved reflecting the opportunity to attract new revenue. The carrier has recently launched its new premium product called “Mint” on its transcontinental flights. By offering a lower price point than the traditional business class seats offered by network carriers, the new fare completes the three pre-existing fares and is designed to attract higher end leisure travelers and small business entrepreneurs.

For most airlines, ancillary revenues are a unique opportunity to grow their revenues over the medium and long term. As margins from the sale of seats will inevitably keep shrinking, new revenue opportunities both related and unrelated to the passenger’s travel experience will drive revenue growth. JetBlue appears to have fully embraced this opportunity. In 2013, for example, JetBlue recorded ancillary revenues of 670 million US\$ of which 170 million US\$ were derived from its “Even More” product that offers extra legroom, priority boarding and expedited security clearance. Yet, by looking at the cost structure of the major US carriers including JetBlue, we observe the difficulty of hybrids and FSCs in competing with their ultra-low-cost rivals given their different cost structure as shown in figure 5 below. The chart indicates the existence of three strategic groupings based on the carriers’ unit costs that correspond to the three business models we have identified, with low-cost carriers being in the lower end of the figure (Allegiant, Frontier, and Spirit) and full-service carriers being positioned in the upper part (American, Delta, US Airways and United) while hybrids (Hawaiian, Virgin America, Alaska, and JetBlue) being positioned in the middle between LCCs and FSCs. An interesting exception is represented by Southwest which appears to have largely departed from the archetypical LCC business model. A low unit cost is a competitive advantage as it allows airlines to be profitable at low fares. Yet, unit costs vary according to each carrier’s average aircraft daily utilization. Hybrid carriers JetBlue, Alaska and Virgin America have similar unit costs although Alaska’s are slightly lower (7.58, 7.60, and 7.46 respectively). JetBlue, however, has a higher average utilization of its aircrafts. Hawaiian, instead, presents the highest unit costs among the hybrids but its average daily utilization per aircraft is the lowest. All in all, it is possible to conclude that JetBlue is a relatively efficient cost operator although it is not comparable to the efficiency of LCCs.

[Insert Figure 5 about here]

#### 4.2.3 *Distribution channels*

JetBlue has adopted a mixed strategy with respect to its distribution channels since it started its hybridization process. In the first years of its existence, the carrier was relying heavily on direct sale through its website or touch-tone phone. Just after a couple of months from its launch, the carrier had achieved the second largest number of bookings through internet in its domestic market (International Directory of Company Histories, 2005). More recently, the carrier's primary distribution strategy is still to sell its tickets directly to its customers. For instance, in 2007 the percentage of total sales through the company's website was equal to 76% of total sales while the second largest distribution channel was represented by agents accounting for 16% of total sales (JetBlue, 2007). Moreover, the company is present in all four major GDSs (Sabre, Galileo, Worldspan and Amadeus) and four major OTAs (Expedia, Travelocity, Orbitz and Priceline). According to company sources, this mixed distribution strategy is aimed at creating significant cost savings while enabling the airline to build loyalty through increased customer interaction.

#### *4.2.4 Partnerships and alliances*

Compared to its rival Southwest, JetBlue that was initially operating as a stand-alone LCC, it started recognizing the importance of establishing partnerships and code-sharing agreements with foreign carriers which need additional traffic behind their initial gateway. In 2008, Lufthansa bought a 19% stake into the company and Aer Lingus became a strategic partner. Meanwhile the carrier started connecting US cities with foreign leisure destinations mainly in the Caribbean and Latina America. Today, JetBlue has established code-sharing agreements with a variety of airlines including Emirates, El Al, Hawaiian, and South African Airways among others. Such relationships not only provide substantial opportunities for increased traffic flows, but have also allowed JetBlue to focus on developing its Northeast-Florida and transcontinental services. This strategy has also the advantage of allowing the carrier to save on the higher fuel prices typically affecting long-haul operations while providing additional revenues from network extension via its agreements.

#### *4.2.5 Fleet structure*

In the early stage of its life, JetBlue was operating only one type of aircraft, the A320. As it expanded its network and added new routes to its network, the carrier opted for adding a new aircraft, the E190. The increased complexity of managing two aircraft families coupled with an expansion of its route network have increased the airline's cost structure in the period following the addition of the

E190 to its fleet. Yet, in 2007 the company had a fleet homogeneity index of 0.77 placing the carrier into the LCC category. In the following years, the FHI coefficient dropped slightly to reach for example a value of 0.70 in 2014, enough to indicate a progressive move toward a more mixed fleet which is typical of hybrid carriers. Yet, we highlight the difference in terms of complexity between managing two aircraft families versus Air Berlin's diverse fleet structure.

#### *4.2.6 Value proposition*

JetBlue's original mission of "bringing humanity back to air travel" has characterized the airline's positioning over its relatively short history. By exploiting the weaknesses of the traditional network carriers and by differentiating its offer from well-established LCCs in the US domestic market JetBlue has been able to offer its customers additional services at an affordable price. Yet, its business model has evolved as the company has added differentiated products to enhance the quality of passengers' experience. The transition from a low-cost mindset to a hybrid carrier can be detected by comparing the company's positioning statements in 2007 and 2012 where JetBlue moved from defining itself as "an innovative high quality, low-cost passenger airline that provides competitive fares for our customers" (JetBlue, 2007) to a positioning that can be summarized as follows: "we believe our business model is unique in the domestic airline industry. We are neither a low-cost airline nor a traditional network airline. Our profitable growth strategy enables us to compete effectively with both types of carriers" (JetBlue, 2012).

## **5. Discussion**

The aim of this paper was to examine the evolving landscape of airline business models with a focus on the emerging phenomenon of airline business model hybridization. For this purpose, we examined two cases of carriers that have progressively abandoned their original business models by adding features that provided them with new business opportunities but also widened their competition. Air Berlin, with the lowest margin among the listed European airlines, has registered almost continuous operating losses and a net loss in six out of ten years. These results clearly indicate a mismatch between the carrier's transition to a hybrid business model, that implied improving its overall service quality, and its financial performance which has been prevalently negative in the last years. Air Berlin is dealing with its multiple identities and business models (value carrier and independent touristic

provider on the short and medium-haul, and full-service provider on the long-haul) which make it difficult to deliver a clear value proposition to the customer. Coupled with a relatively weak position in its domestic market stemming also from increasing competition from LCCs like Ryanair (Air Berlin detains slightly more than 10% of total seats in Germany), the delayed opening of the new Berlin Brandenburg airport and unit costs higher than LCC competitors, the carrier has found itself in a difficult financial condition over the past five years. On its short-haul point-to-point routes it faces severe competition from LCCs that are typically better performers in low-yield markets. At the same time, Air Berlin's long-haul network is not developed enough to compete with well-established full-service incumbents. More lately, supported by Etihad's investment in the company and its code-sharing agreements with members of the oneworld constellation, Air Berlin has been able to extend its route network. Yet, cost and revenue synergies will need time to be fully exploited.

Consolidation in the US markets has been considered complete by many and three distinct business models have emerged. In the future, it may be possible that some of the existing players may cease their operations or challenger carriers may enter the field. Yet, our analysis indicates that JetBlue's business model development has been coupled by a satisfactory performance through its medium-frills model. By merging virtuous aspects of both models at the extremes of the business model spectrum, the carrier has been able to include features such as interline traffic and operate a more mixed fleet while targeting a "mixed wallet" passenger base with progressive fare unbundling.

We summarize the outcomes of our study by developing a tool, which we define as business model alignment curve, to depict the coherence of Air Berlin's and JetBlue's business model components with their changed value propositions in two distinct phases of their business model lifecycle. For each of the five business model components, we assigned weights on a scale from 1 (being the lowest value) to 5 (being the highest value) to the elements previously identified. For network configuration, we calculated whether the carrier adopts a point-to-point, hub-and-spoke or hybrid model as well as the amount of short-haul flights on its total flights. To identify the revenue streams we looked at whether the carrier offers the same fares for all customers and at its fare bundling practices. For distribution channels, we looked at the percentage of direct sales via the company's website and if it made use of GDS. For alliances and partnerships, we looked at whether the carrier was making use of code-sharing and interlining and if it was a member of any of the alliance constellations. Finally, we looked at the fleet homogeneity index as a proxy for fleet structure. On the left-side column of our graph we put the three business model archetypes (low-cost, hybrid and full-service) while on

the right-side column we include the three value propositions corresponding to the three business models. The weighted values for a business model component falling in the 0-1.5, 1.5-3.5, and 3.5-5 intervals would indicate that the carrier is assuming a low-cost, hybrid or full-service posture respectively with reference to that component. Finally, an overall weighted average of the five components would indicate if the airline is aligned or not to its value proposition before and after the hybridization.

[Insert Figures 6 and 7 about here]

Our quantitative analysis confirms the qualitative findings. In the case of Air Berlin, the overall weighted average score before hybridization equals to 1.49 moving to 3.67 in the post-hybridization phase. In other words, before hybridizing the carrier's managerial choices on the business model components were consistent with a "travel for everyone" value proposition which is typical of LCCs. Yet, Air Berlin showed also airline business model characteristics in its operations and distribution channels that are less typical of the traditional low-cost carrier model. Accordingly, after averaging the individual scores for each of the business model components on the *x*-axis, we obtained a value of 1.49 suggesting that Air Berlin could be still considered a LCC although it was very close to exceeding the threshold value after which it would qualify as a hybrid. Following its hybridization, our results indicate that the airline has failed to align its business model components with the "value to you" proposition. Its average score of 3.67 suggests that the company places itself on the market as a full-service rather than a hybrid airline. All in all, the Air Berlin case demonstrates the threats and perils of excessive business model experimentation which have led the carrier to being stuck in the middle (Porter, 1980) between the hybrid and the FSC models by lacking a clear strategic focus. In the case of JetBlue, the values before and after the hybridization are 0.8 and 1.87 respectively which indicate a stricter adherence to the two value propositions reflecting the transition from a low-cost to a hybrid business model. Quite opposite to Air Berlin, which has experimented with its business model several times, JetBlue's more prudent approach characterized by an opportunistic alteration of a set of activities that constituted its previous business model, has allowed the carrier to deliver a distinct value proposition proving the viability of its hybrid business model. These findings point out to the importance of minimizing deviations from the chosen business model archetype (Alamdari and Fagan, 2005) but also highlight the importance of maintaining internal coherence in the set of managerial

choices with respect to the individual components of an airline's business model. When this condition is not respected, the airline may find itself positioned in 'grey areas' between two business models with negative repercussions on its performance.

## **6. Conclusions**

As consolidation took place in both regions, Europe and North America, that are the object of our study, a new business model has emerged besides the well-known dichotomy between full-service and low-cost: the hybrid business model. For airline managers searching for viable business models in their respective markets, our study offers insights on six main elements (i.e. network configuration, revenue streams, distribution channels, partnerships, fleet structure, and value proposition) to take into consideration while realigning business models to cope with the evolving industry structure. Moreover, we argue that airlines that are not able to innovate risk to fall into the commoditization trap because successful products are rapidly copied by an ever more global competition. Of course innovation is no guarantee for success, but previous research has shown that superior market performers are essentially companies that are able to innovate and constantly transform their value proposition (Kim and Mauborgne, 1997). The two cases we analyzed complement this research by showing that not only it is important to transform the value proposition but such transformation needs to be coherent with the other components of the chosen business model.

Our study has a number of limitations that also point the way towards further research. First, although the study of the performance implications of LCC hybridization is an important area of investigation, future research could explore the performance implications of the decision to pursue a hybrid business model by full-service carriers. Second, our results could be used as a starting point to perform a quantitative study using a wider sample of companies to explore additional contingencies affecting the relationship between business model innovation and firm performance beyond the ones identified in this paper. Finally, in this article we have focused on one form of business model innovation which takes the form of addition or removal of activities to an existing business model. However, another form of business model innovation is constituted by an incumbent's addition of a new business model already invented by other firms (Markides and Charitou, 2004). This form of business model experimentation – also known as airlines-within-airlines strategy (Homsombat et al., 2014) – deserves further attention and future research could explore the performance implications of

dealing with both forms of BMI. One exemplary case is represented by the IAG group that operates various business models simultaneously and has recently incorporated the hybrid carrier Aer Lingus. As the hybrid business model will continue to attract other carriers now sitting at the two sides of the spectrum it will be important for scholars to shed additional light on the conditions leading to successful business model innovation. We hope our initial findings offer valuable insights to scholars interested in business model research on incumbent players.

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## APPENDIX

**Table 1.** Comparison between selected FSCs, LCCs, and hybrids in the European market

	Aer Lingus	airberlin	Ryanair	Wizzair	Lufthansa	British Airways
Short-haul and long-haul	YES	YES	NO	NO	YES	YES
Aircraft families short-haul	1	3	1	1	3	3
Aircraft families long-haul	1	1	0	0	2	2
Average seats narrowbody jets (business; economy classes)	0; 177	0; 125	0; 189	0; 205	17; 82	41; 112
Average seats widebody jets (business; economy classes)	25; 270	19; 304	-	-	66; 271	69; 227
On-board amenities short-haul	NO	Overhead TV	NO	NO	Portable device	Portable device (business) or overhead TV or On-demand TV (economy on selected Airbus A320-family), AC power (only A318 business, A321 Int'l), WIFI (only A318 business)
On-board amenities long-haul	On-demand TV, AC power, WIFI	On-demand TV, AC power	-	-	On-demand TV, AC power, WiFi	On-demand TV, AC power
Connecting flights short-haul	YES	YES	NO	NO	YES	YES
Connecting flights long-haul	YES	YES	-	-	YES	YES
Passenger yield	9.29 (€ cent/RPK)	7.74 (€ cent/RPK)	3.76 (€ cent/RPK)	4.84 (€ cent/RPK)	10.3 (€ cent/RPK)	7.24 (£ pence/RPK)
Short/medium-haul fare revenue (%)	62%	75%	100%	100%	54%	46%*
Long-haul flights (%)	14%	12%	0%	0%	34%	37%

\* Estimated on IAG data

**Table 2.** Comparison between selected FSCs, LCCs, and hybrids in the US market

	Alaska	JetBlue	Frontier	Southwest	Delta	United
Short-haul and long-haul	YES	YES	NO	YES	YES	YES
Aircraft families short-haul	3*	2	1	1	5	5
Aircraft families long-haul	1	1	0	1	2	1
Average seats narrowbody jets (business; economy classes)	14; 105	16; 145	0; 127	0; 144	17; 123**	15; 100**
Average seats widebody jets (business; economy classes)	-	-	-	-	35; 223	48; 220
On-board amenities short-haul	Portable device, AC power (only Boeing 737-800, 737-900), WIFI; AC power (only Boeing 737-800, 737-900), WIFI	On-demand TV, AC power, WIFI	On-demand TV (only on selected Airbus A319s)	WIFI	Satellite TV (selected Airbus A319), On-demand TV (Airbus A321, Boeing 737 series, selected Boeing 757 series), Overhead TV (selected Boeing 737 and 757 series), AC power (selected Airbus and Boeing aircrafts), WIFI (excluding selected Boeing 757 series, Bombardier CRJ family and Embraer regional jets and turboprops)	Satellite TV (selected Boeing 737-800 series), On-demand TV (Boeing aircrafts), WIFI (excluding Bombardier and Embraer regional jets and turboprops)
On-board amenities long-haul	Portable device, AC power (only Boeing 737-800, 737-900), WIFI; AC power (only Boeing 737-800, 737-900), WIFI	On-demand TV, AC power, WIFI	-	WIFI	On-demand TV, AC power, WIFI (only on Airbus A330-200, selected Boeing 767-300 series)	On-demand TV, AC power, WIFI
Connecting flights short-haul	YES	YES	YES	YES	YES	YES
Connecting flights long-haul	YES	YES	NO	YES	YES	YES
Passenger yield	13.62 (\$ cent/RPM)	14.12 (\$ cent/RPM)	11.34 (\$ cent/RPM)	16.33 (\$ cent/RPM)	15.43 (\$ cent/RPM)	14.87 (\$ cent/RPM)
Domestic passenger revenue (%)	94%	80%	96%	98%	60%	49.0%
Long-haul flights (%)	13%	5%	0%	2%	44%	37%

\* Includes Horizon Air

\*\* Values include regional partners

**Table 3.** Synthesis of recent contributions on airline business models

<b>Author</b>	<b>Approach</b>	<b>Key contribution</b>
Francis et al. (2006)	Conceptual	Development of a typology of LCCs and identification of the factors that act as enablers/impediments to the spread of LCCs
Mason and Morrison (2008)	Quantitative	Development of a product and organizational architecture (POA) approach to identify key elements of airline business models; definition of indices used to benchmark six European LCCs showing differences in their business models
Klophaus et al. (2012)	Quantitative	Definition of useful criteria to define the LCC business model; development of a consolidated LCC index that shows the degrees of hybridization of the twenty European LCCs
Lohmann and Koo (2013)	Quantitative	Definition of an airline business model spectrum; development of six indices used to position a sample of nine US carriers within the identified spectrum
Daft and Albers (2013)	Conceptual	Development of a conceptual framework to assess the convergence of airline business models over time using a sample of five German airlines
Homsombat et al. (2014)	Quantitative	Analysis of the dual-brand strategy of Qantas Group by revealing its competition effects in terms of pricing and route entry
Morandi et al. (2014)	Quantitative	Analysis of the characteristics of codesharing practices of LCCs and their implications for business models using a sample of ninety-three LCCs
Fageda et al. (2015)	Quantitative	Analysis of the network implications of fare bundling and connecting flights in different airline business models using a sample of fifteen European LCCs
Fu et al. (2015)	Quantitative	Examination of the competition effects brought by the LCC Spring Airlines into the emerging but regulated Chinese aviation market
Pereira and Caetano (2015)	Conceptual	Development of a conceptual framework to define business models for airlines

**Table 4.** Airline business model framework

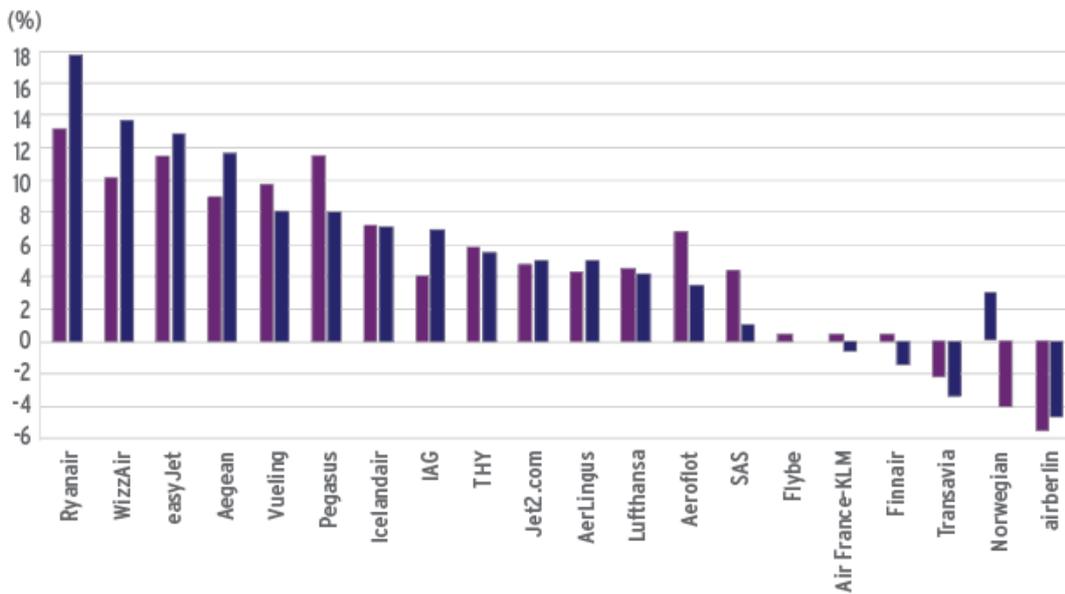
<b>Business model component</b>	<b>Elements of the components</b>	<b>Description</b>	<b>Sources</b>
Network	Point-to-point only	The carrier performs only direct flights	Klophaus et al. (2012)
	Short-haul only	The carrier performs only short-haul flights	Fageda et al. (2015)
Revenue streams	Fare logic	The carrier applies a static load factor-oriented fare logic (one fare at a given time for a seat) or a dynamic yield-oriented fare logic (various fares for one seat based on distinct ticket restrictions)	Daft and Albers (2013)
	Single class cabin	The carrier offers only one class service	Morandi et al. (2015); Fageda et al. (2015)
Distribution channels	Internet distribution	% of tickets bought through internet	Mason and Morrison (2008)
	Global Distribution Systems	The carrier makes use of GDS	Daft and Albers (2013)
Alliances and Partnerships	Code-sharing	The carrier maintains code-sharing agreements	Fageda et al. (2015)
	Global alliances	The carrier is a member of a global alliance	-
Fleet structure	Fleet homogeneity	The share of airline fleet composed by the same aircraft	Morandi et al. (2015)
Value proposition	Focus on experience, focus on price or mix	The carrier's bundles of products and services that represent value for a specific customer segment	-

**Table 5.** Air Berlin’s product features vis-à-vis main European LCCs

	Ryanair	Wizz Air	easyJet	Norwegian	Air Berlin	Vueling
Use of secondary airports	✓	✓				
Mixed fleet					✓	
Corporate accounts			✓	✓	✓	✓
Distribution through GDS/travel agents			✓	✓	✓	✓
Transfer traffic				✓	✓	✓
FFP			✓	✓	✓	✓
Code-sharing					✓	✓
Global constellation membership					✓	
Two-class cabin					✓	✓
Pay for allocated seat	✓	✓	✓	✓	✓	✓
Booking fee (additional to card charge)	✓	✓	✓		✓	
Long-haul flights				✓	✓	

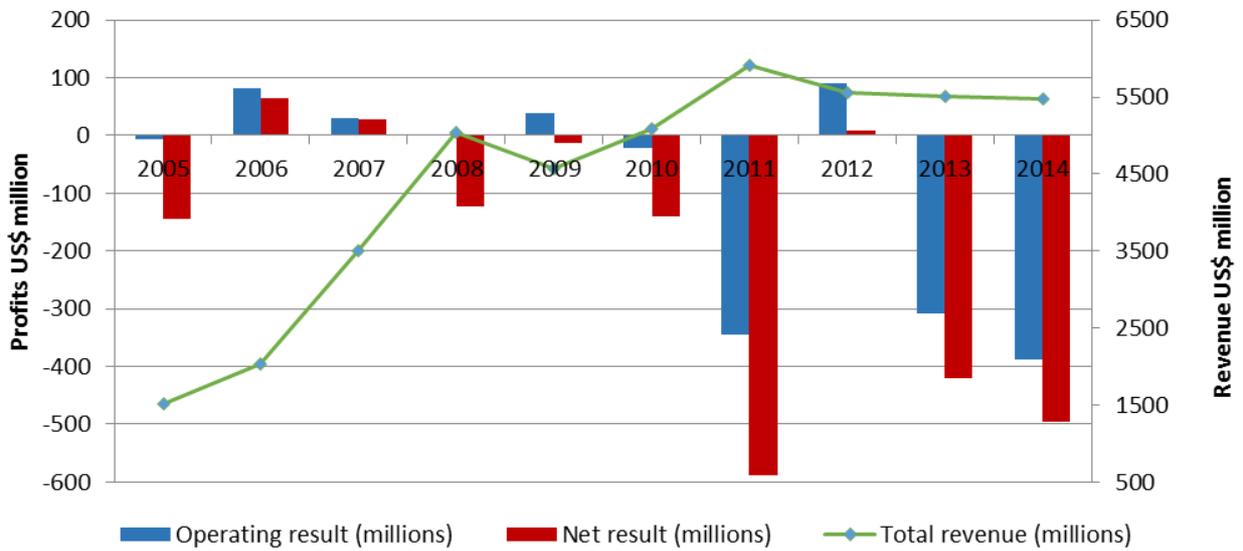
Source: Companies annual reports (compiled by the authors)

**Fig. 1.** Operating margins for listed European airlines (% of revenue)



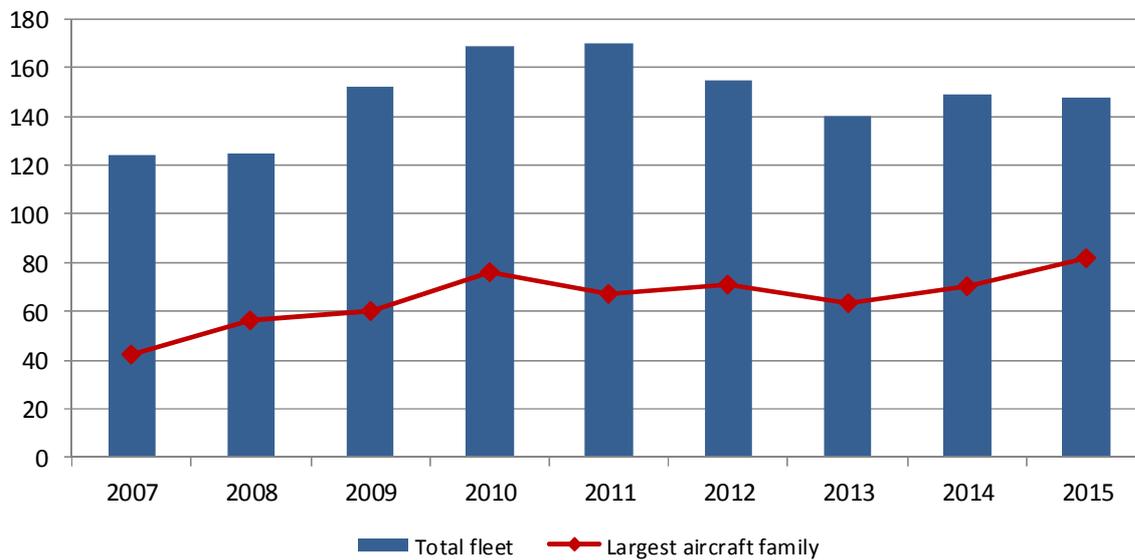
Source: Capa (2015a)

**Fig. 2.** Air Berlin revenues, operating result and net result



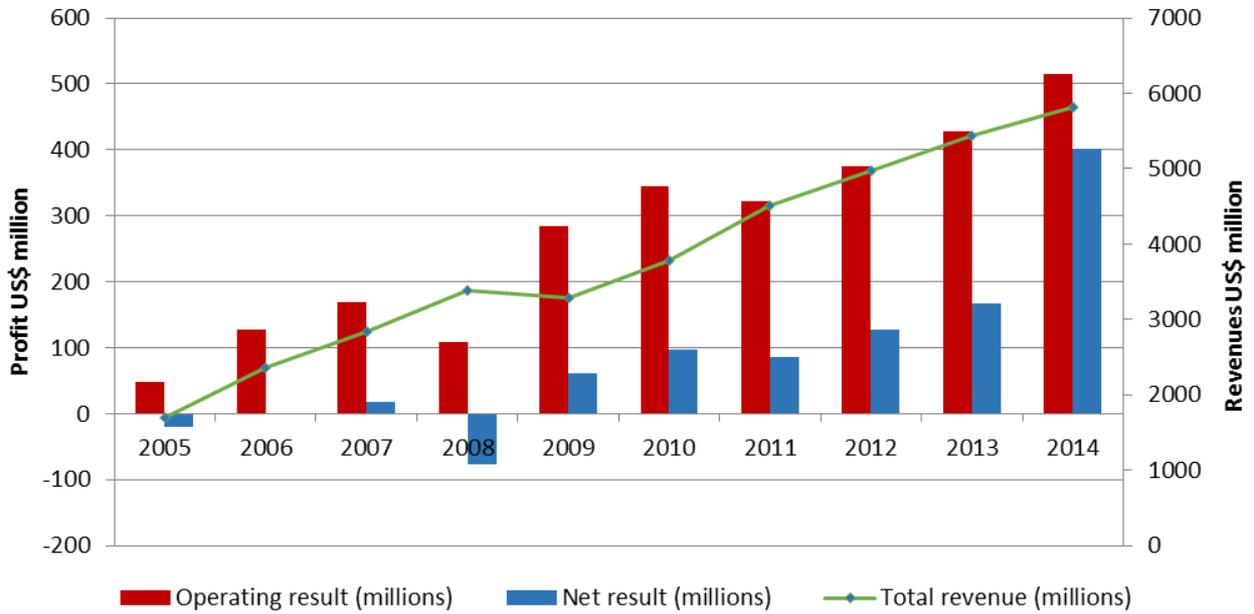
Source: OAG data (compiled by the authors)

**Fig. 3.** Air Berlin fleet size and largest aircraft family



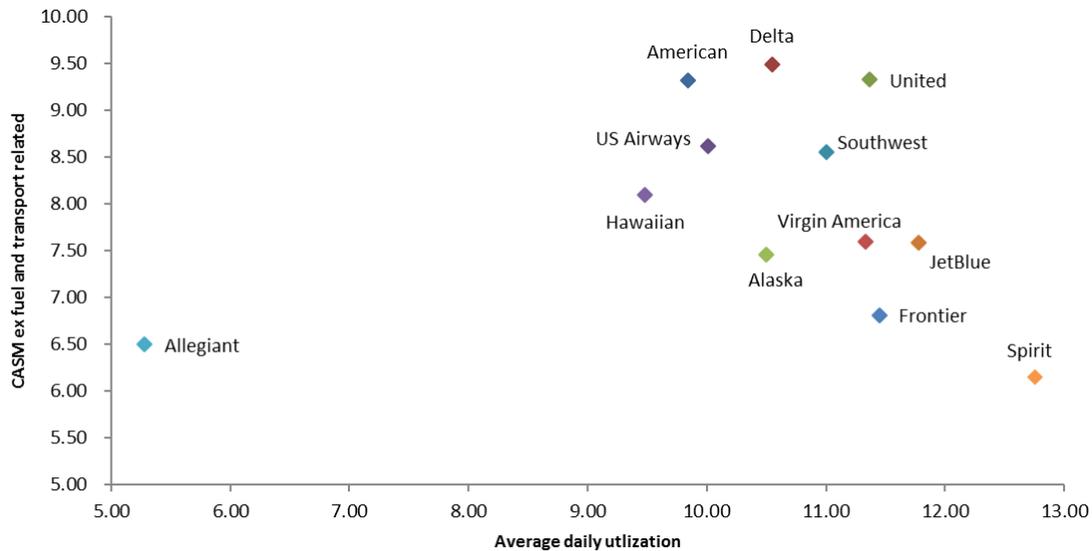
Source: Air Berlin annual reports (compiled by the authors)

**Fig. 4.** JetBlue revenues, operating result and net result



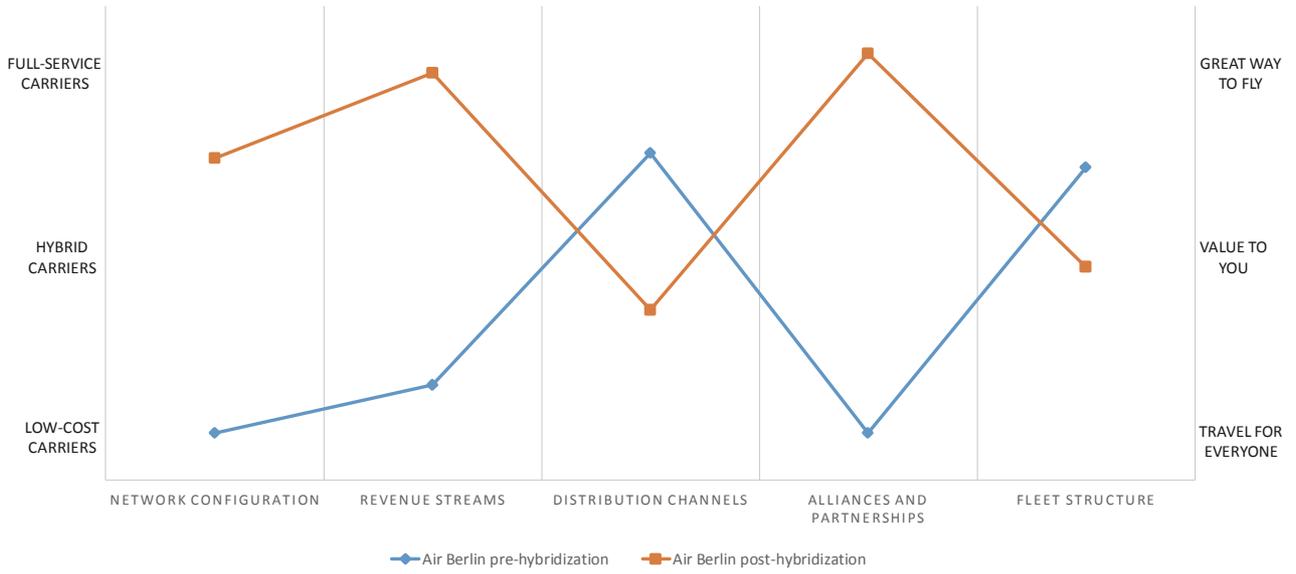
Source: OAG data (compiled by the authors)

**Fig. 5.** Cost per available seat versus average daily utilization (hours) for selected LCCs, FSCs and hybrids in the US market



Source: US Bureau of Transport Statistics (compiled by the authors)

**Fig. 6.** Air Berlin's business model alignment curve



**Fig. 7.** JetBlue's business model alignment curve

