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Much ado about nothing? Perceptions of the Air Berlin bankruptcy on airline competition in Germany, Austria and Switzerland

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Abstract.

In Europe's airline industry, the market exit of one of its largest industry players, the Air Berlin Group, has led to significant changes in the level of competition within the DACH-region (Germany, Austria and Switzerland). Existing research, however, is limited to provide insights into the short- and long-term implications of such market changes on the level of competition, particularly on price and quality. In response, this paper investigates how the bankruptcy of Air Berlin influences the level of price and quality airlines are offering to its passengers. Using a qualitative approach, airline-related professional and experts have been interviewed about their perception of the levels of quality, price and competition. The findings show that the Air Berlin bankruptcy resulted in a shortage of capacity on the market leading to increasing prices and short-term competition is likely to increase as various airlines try to replace Air Berlin on the market. However, in the long term, prices for airline tickets are expected to bounce back to a similar level like before the Air Berlin bankruptcy, as more competitors will penetrate the market, which leads to a more challenging market environment. In terms of quality, it was found that other Low-Cost Carriers (LCCs) offered similar products compared to Air Berlin, thus no or only minor changes in quality are expected.

Keywords: airline competition; airline quality; airline price; Air Berlin; quality-price ratio

1. Introduction

With the low-cost concept, a new airline business model emerged which brought significant changes to the aviation market (ICAO, 2013). While airlines usually had one home base, a so-called hub, in a specific country in the past, Low Cost Carriers (LCCs) offer P2P routes and can be considered as multi-national airlines, as they usually do not have a home base like traditional Full-Service Carriers (FSCs). In 2017 Ryanair, a typical LCC, was the second largest airline within Europe, carrying about 130 million passengers, only one million less than the largest FSC in Europe, Lufthansa (dpa-AFX, 2018). The increased competition triggered flagship carriers like Lufthansa, British Airways or Air France to engage in restructuring



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programs, reducing costs and increasing efficiency in order to be able to match the low fares of the LCCs. In addition, acquisitions and bankruptcies of airlines have been common in Europe in the last few years and the ongoing trend towards consolidation in the airline market can be observed. Consolidation within the industry is an effect of the developments over the last 30 years, starting with the deregulation from 1987 to 1997 (Butcher, 2010), which caused massive changes to the European airline market and laid the foundations for the situation one can observe today. The market, which traditionally had always been very protected and fragmented, suddenly could be considered highly dynamic and fast moving (Kawagoe, 2009). FSCs took advantage of the very fragmented airline market in Europe and started to engage in mergers and acquisitions (Canelas & Ramos, 2016), leading to mergers such as the Air France-KLM merger in 2004 or the British Airways-Iberia merger in 2011 (Merkert & Morrell, 2012).

The most recent development in the industry is the bankruptcy of the Air Berlin group in 2017, the second largest airline and a major competitor to Lufthansa (LHG) in the DACH-region (Germany, Austria and Switzerland), leading to significant changes to the level of competition. Until the bankruptcy of Air Berlin, various routes from airports based in the DACH-region were offered by at least 2 competing airlines, however, after the market exit a price increase of up to 300 per cent on some routes (Orban, 2017) could be observed, which can be attributed to the dominant, rather monopolistic position of Lufthansa.

Academics and practitioners from a variety of disciplines have examined the impacts from the emergence of LCCs, the impact of new destinations and routes on competition, the implications of LCC service and product innovations on competitors, subcontractors and employees. In contrast, little research has explored the implications of LCC competition and market exit, such as the Air Berlin bankruptcy, and the associated perceptions on quality and price. In response, the aim of this paper is to answer the emerging question not only if competition is still sufficient and whether there still are enough market players available, but rather what the implications of the changing level on competition on quality and price are, leading to the following research questions:

RQ1: “How does the market exit of Air Berlin affects the levels of competition and in the airline industry within the DACH-region?”

RQ1a: “What are the impacts of the market exit of Air Berlin on the level of price airlines are offering to its passengers?”

RQ1b: “What are the impacts of the market exit of Air Berlin on the level of quality airlines are offering to its passengers?”

In order to answer these questions, this paper aims to observe how the intensity and the level of competition have changed over the last ten years. Using a qualitative approach, airline-related professional and experts are interviewed about their perception of the levels of quality, price and competition. As such, the study examines how airlines developed their business, how



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the market changed due to consolidation and how competition impacts price and quality of airlines in the DACH-region in practice and whether the current competitive landscape is satisfactory to ensure reasonable prices for passengers.

The contribution of this study is twofold. First, the analysis of the interviews with the experts and the associated market situation provides insights into how market consolidation is affecting the price-quality ratio. Second, the analysis of the developments and the insight of the experts provide an outlook into future changes and trends in the airline industry.

The remainder of the paper is structured as follows. The next chapter provides a brief overview of the airline industry in Europe and discusses the theoretical impact of competition on price and quality. Chapter 3 describes the method and the applied questionnaire as well as the data analysis approach. Subsequently, chapter 4 presents and discusses the findings. Finally, chapter 5 highlights the findings and concludes with the limitations of the paper as well as recommendations for future research.

2. The impact of market developments on quality, price and competition in the airline industry

2.1 The emergence of LCCs in the literature

The emergence of LCCs over the last 40 years has been subject to various studies and can be considered as one of the most significant developments in recent commercial aviation history (Calder & Laker, 2002). Initiated by Southwest Airlines and broadly implemented in the immediate aftermath of the 1978 US Airline Deregulation Act, subsequent policies of air transport liberalisation in Europe and parts of Latin America, Africa, the Middle and Far East, Indian subcontinent and Australasia from the mid-1990s onwards (Goetz, 2002; O'Connell & Williams, 2005; Williams, 2017) has made LCCs a global phenomenon that has dramatically reconfigured the processes, patterns and flight experiences (Budd, Francis, Humphreys, & Ison, 2014). Globally, the LCC sector has expanded rapidly to the point where LCCs now account for 25 per cent of all passenger flights (DLR, 2017). Despite significant regional variation both between and within different LCC markets, some of the most dramatic growth is currently occurring in the rapidly expanding economies and recently liberalised air transport markets in Asia and the Middle East. However, in terms of regional market penetration, LCCs have arguably had the biggest impact in Europe where they currently account for over 38% of all passenger flights with 31 LCCs (DLR, 2017).

Existing research on the emergence and expansion of logistics services investigated the operation level (see Lawton, 2002, Calder, 2002, Alamdari and Fagan, 2005), the implications of business models on the competition and legacy operators (Alamdari & Fagan, 2017; Calder & Laker, 2002; Lawton, Rajwani, & Doh, 2013; Lawton, 1999; Lohmann & Koo, 2013; Pate & Beaumont, 2006, Mikl et al., 2019), the influence of digitalization (Dobrovnik et al., 2018; Kummer et al., 2020, Herold et al., 2021), and tourism (Castillo-Manzano, López-Valpuesta, & González-Laxe, 2011; Graham & Dennis, 2010, Castillo-Manzano et al., 2011, Wilde et al., 2015), sustainability (Herold & Lee, 2017, 2019, Breitbarth & Herold, 2018, Herold et al., 2018), to what extent LCCs changed the airport-airline relationship (Francis, Humphreys, & Fry, 2002, 2005; Graham & Dennis, 2010; Starkie, 2012). Other papers have studied the spatial



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evolution and distribution of networks routes (Dobruszkes, 2013) and leadership styles (Calder & Laker, 2002, Lee & Herold, 2016) and customer experiences (Fourie & Lubbe, 2006; Mason, 2000, 2001; Fuerst & Herold, 2018). However, there is limited research available that observes how market developments have influenced the price and quality of airlines in Europe, in particular in the context of the Air Berlin market exit.

2.2 The impact of market developments on quality, price and competition in the airline industry

The effects of deregulation and markets developments on the level of quality, price and competition has only been subject to only a limited number of studies. Having a glance into the US airline market, where deregulation took place already in 1978 (Kole & Lehn, 1999) and mergers and acquisitions between the largest US airlines also happened some years before this trend started in Europe, research found dissimilar results of how competition influenced the market. Prince and Simon (2017) concluded that in the short-term there is only a small negative impact of airline market consolidation on the quality measured by on time performance and travel time and there is an even positive impact of airline consolidation on quality in the long run due to efficiency gains by larger airlines. Wei and Grubestic (2016) found that especially smaller airports are affected by higher prices for airline tickets due to deregulation and consolidation. Greenfield (2014) states that consolidation in the US market led to a reduced consumer surplus as service quality, measured by on-time performance, decreased when competitors faded from the market.

Morrison and Winston (2000) found that deregulation brought passengers a significant increase in service quality in form of more frequent flights, better connections and more destinations. However, the authors also cited downsides like crowded flights and longer flight times caused by congestion due to the increase in traffic volumes. In addition, Gil and Kim (2016) found that increased competition caused by LCC market entries resulted in fewer cancellations and delays and led the incumbent airline to increase the number of flights, which can also be regarded as an increase in quality.

However, the definition of quality in the airline industry is a rather difficult task because of the fact that the term quality includes numerous attributes and dimensions. The well-researched quality concept of the manufacturing sector cannot be applied since the product an airline offers to its customers is characterized by intangibility, perishability, inseparability, and heterogeneity (Chen & Chang, 2005). Many studies were dedicated to determining adequate service quality performance indicators in order to assess and compare the airlines' service levels. Most of these studies tried to determine the airlines' service levels by applying quantitative research methods like surveys and questionnaires. To give the reader an impression of the possible service quality dimensions used to determine an airline's service level, three of the numerous existing studies will be briefly discussed in the next paragraph.

Elliott and Roach (1993) defined on-time performance, baggage handling, food quality, seat comfort, check-in service, and in-flight service as proper service level indicators. Aksoy, Atilgan, and Akinci (2003) asked passengers to rank following attributes after their personal importance: food and beverage services, personnel, cabin features, internet services, in-flight activities, country of origin and promotion, punctuality, speed, and aircraft condition. Another



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study from Gilbert and Wong (2003) asked passengers to weigh following dimensions according to their personal importance: safety, punctuality, cabin crew, baggage handling, customer service, flight schedule, flight network, aircraft condition, food and beverage, in-flight entertainment, availability of lounges and frequent traveler programs, availability of travel related part-ners (e.g. hotels, car rentals), and in-flight internet services.

Interestingly, both studies found out that there are significant differences in the rankings provided by the passengers. Aksoy et al. (2003) focused on the differences between foreign and domestic airline passengers in Turkey and found that there exist significant differences among these two groups of passengers when it comes to expectations to the product and its quality level. Gilbert and Wong (2003) pursued a more general ap-proach and analyzed the differences in expec-tations by asking random passengers at the Hong Kong Airport and thus creating a bal-anced panel representing traveler from differ-ent nations and demographic characteristics with different purposes of travel. They too found significant differences in the passenger quality expectations among passengers of different demographic background as well as passengers with different purpose of travels. However, they could also identify dimension that were important to all passengers (e.g. punctuality or customer service).

In general, it is safe to assume that, due to the differing perceptions and differences in the relative importance of quality dimensions of the passengers, there is no common definition of airline service quality. Due to the found inconsistencies among travelers with different backgrounds, it can be said that it is of most importance for airlines to understand the pas-sengers' needs and expectations in order to provide an adequate and satisfying product (Aksoy et al., 2003).

However, market developments do not only influence the quality, but also price levels. Morrison and Winston (2000) found that higher competition leads to an overall drop in general fare levels in US. However, they also found that the variety of fares increased substantially. Airlines responded to the more competitive environment after the deregula-tion by developing sophisticated revenue management techniques, offering specifically priced products for certain market segments that are willing to pay a premium, like busi-ness passengers (Yeoman, 2016).

However, because consolidation in Eu-rope took place some years after consolidation in the US, very little has been written observes how LCC bankruptcies, airline mergers and acquisitions have influenced the completion, price and quality of airlines in Europe. In or-der to explore the short- and long-term implications within the DACH-market, a comprehensive study about the perceptions on competition, price and quality following the Air Berlin market exit was conducted.

3. Methodology

In order to gain insights into the perceptions on quality on price for airline passengers through the Air Berlin bankruptcy, 21 semi-structured interviews were carried out with aviation experts. The participants included experts from airlines (executives and employ-ees), regulator-experts (from national governments and from the EU), experts from indus-try associations as well as from ground services and airports. As the paper's focus on the DACH-region, the pool of experts was also limited to persons living in Germany, Austria or Switzerland or to experts



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that have been dealing with the airline industry in these countries. Out of these interviewees, eleven persons are working in the airline industry, with two professionals in a top management position (e.g. CEO), five in an executive position (e.g. head of a department) and four airline employees. In addition to these professionals of the industry, one top manager of an airport, two experts of a national authority, one expert of the EU commission, two journalists and three customers have been interviewed.

An initial contact within Austrian Airlines was the starting point for a snowball sampling approach, in which each respondent was asked to provide new potential contacts for interviewees from within the aviation industry who would have a relevant point of view on the implications of the Air Berlin market exit. These were contacted on a rolling basis, and a date/time for a telephone interview was agreed upon with those willing to be interviewed. As the list of participants shows, the distribution of interviewees between airline experts and aviation participants is furthermore uneven, and their roles within the industry vary, but all are have a relevant understanding and a professional opinion with regard to the Air Berlin market exit.

Interviews were carried out in the period from January 2017 – April 2018, and lasted between 20 and 40 min. All interviews followed the same interview programme. After an introduction of the researchers and their respective universities, the topic of the re-search was introduced in a general way. A standardized questionnaire which consisted of four questions and was used for the inter-views. The aim of the research question is to identify how the market exit of Air Berlin im-pacts the quality, price and competition, the first question of the interview observes the interviewees' individual perception of quality of airlines today compared to the quality level 10 years ago. The second interview question aims to assess the experts' perception of ticket prices and how they changed over the past 10 years, while the third question assesses the level of competition on the DACH-regions airports where experts should provide their point of view regarding competition on the largest airports in the region. The first three questions focus on the first research question, while the fourth question specifically target the perceptions stemming from the Air Berlin market exit.

All interviews were digitally recorded and a blinded thematic analysis approach in manually interpreting the empirical material was used (Patton, 1987; Yin, 2010), which involved reducing the empirical material into categories guided by the participants' narratives and the identification of emergent themes (Mayring, 2015; Miles, Huberman, & Saldana, 2013). The most critical aspects in this paper - competition, price and quality - can be as-sessed by asking interviewees about their per-sonal perceptions. Therefore, 'analyst triangu-lation' (Patton, 2005) was applied to ensure trustworthiness by checking for congruity of interpretations, blind spots and multiple ways of interpreting the empirical material (Lincoln & Guba, 1985). For example, one interviewee may perceive prices within the DACH-market as too high while another person could state that he or she perceives prices as fair and con-venient. Furthermore, because experts from different sectors and companies are inter-viewed, answers may depend upon their envi-ronment, i.e. by asking interviewees about their personal perceptions of quality, the differences in expectations can be outlined and considered during execution of the qualitative content analysis. As a consequence, the data analysis process involved an examination of the material on an individual basis, with sub-sequent comparison and exchange



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of interpretations by the research team members. Through this process congruent interpretations were agreed upon and contrasting interpretations identified to enrich the analyses.

4. Discussion of Findings

The following section discusses the findings from the interviews how the Air Berlin bankruptcy will impact the industry in the future. Future developments with regards to price after the Air Berlin bankruptcy have been divided in short-term to long-term effects. This is followed the participants perception how the level of quality after the Air Berlin market exit may have changed.

4.1 Impacts on airline prices in the short-term

Viewing the immediate developments after Air Berlin went bankrupt, eight participants pointed out that prices rose significantly, especially on routes within the DACH-region. This was complemented by two participants who claimed that the shortage of capacity after Air Berlin ceased operations caused the prices to rise significantly as demand remained stable at the same time. This development is not unusual, as a market exit of a competitor leads to higher prices of existing market participants to increase profitability (Tabacco, 2016). Berry (1990) argued that if an airline's market power is high enough to effectively prevent other airlines from entering the market it enables the dominant airline to exploit the market power by restricting output and increasing prices.

Several participants stated that new players will soon enter the market because prices rose significantly after the Air Berlin bankruptcy, however, four participants saw the entering of new market players as an overcompensation of Air Berlin's capacity. As too many airlines are trying to fill the gap Air Berlin left in the market, it was argued that the overcompensation will lead to fierce competition resulting in airlines leaving the market again after some time, not realizing the benefits of economics of scale, scope and density (Cento, 2009; Hendricks, Piccione, & Tan, 1995; Strobach, 2007).

Furthermore, one participant stated that one result of the bankruptcy has been several new monopoly routes operated by LHG airlines but outlined in case of too high prices for airline tickets, passengers will switch to other modes of transports. This is supported by Martínez-García, Ferrer-Rosell, and Coenders (2012), who found that air fares are one of the most important criteria when choosing to fly. Moreover, one participant argued that while intra-hub routes will be avoided by LCCs and other airlines because of the dominant position of LHG and its subsidiaries, airlines may start operations on routes from airports that are close to LHG hubs and such routes can be an alternative for passengers.

Interestingly, one participant mentioned the role of the European Union (EU) and their actions to protect customers of increasing prices. The participant outlined that the EU has never been acting against the aims of an airline to take over a former competitor, however, the EU wants to ensure a fair competition and thus it "...needs to act against the negative impact that would result from the acquisition...", namely of Air Berlin by Lufthansa. In other words, the EU aims to ensure that new players are not blocked to enter the market because of an even more dominant player in the market.



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4.2 Impacts on airline prices in the long-term

Viewing long-term developments of price levels due to the bankruptcy, most participants expected a change towards more competition, but also expected the market to stabilize again at a similar price level like before Air Berlin ceased operations. Two participants argued that Air Berlin went bankrupt because of too low-ticket prices stemming from the immense cost pressure within the airline industry (Cento, 2009; Drennen, 2011) and thus prices will not further decrease compared to the price level before Air Berlin left the market.

Several participants argued that the over-all level of competition will increase due to a higher number of carriers operating on the same market, although the competition by more airlines on less different routes will not be the same threat to the dominant position of LHG like it was with Air Berlin. One participant outlined that LHG may not be able to provide enough capacity to serve the entire demand on the market so that further carriers will enter in order to satisfy demand on the market. On the other hand, it was stated that "...the competitive landscape depends on the potential in the markets", because new carriers will only enter into competition if they see a potential for generating profit. Often, market leaders keep price levels low as soon as a new airline entered into competition, in order to force new entrants to leave the market again because profitable operation is not possible (Levine, 1986). As such, it was suggested that it will be very hard for other airlines to enter the market because of the powerful market position of LHG in that region and because price levels are still low, even though LHG holds a monopoly on some routes.

However a low price is still an crucial factor (Ferrer-Rosell & Coenders, 2017; Martínez-García et al., 2012; O'Connell & Williams, 2005), which was supported by an interviewee claiming that unless there is not a significant reason to choose a specific carrier, e.g. through loyalty programs (de Boer, 2018), the ticket price is the only decision criteria for passengers to choose an airline for short-haul routes. Overall the participants saw rather increasing prices as an immediate effect of the Air Berlin bankruptcy and an increasing competition on the short-term because several airlines try to replace Air Berlin in the market, however it was a common opinion that price levels will return to 'normal' again in the long-term.

4.3 The impact on quality

Assessing the changes in quality for passengers after the Air Berlin exit led to mixed messages. Eight participants stated that the level of quality will not change at all due to the bankruptcy of Air Berlin, but one interviewee argued that a decrease of quality will only occur for short haul-routes, but that the quality on long haul flights will remain the same as before Air Berlin ceased operations. One participant added that quality will not change because Air Berlin transformed from "...a leisure carrier with a good product to a basic LCC due to the financial problems the airline was facing" and thus the airline already had a similar quality to other LCCs that will replace Air Berlin on the market, like Ryanair or EasyJet, thus the presence of other LCCs will help to provide the same level of quality (Gil & Kim, 2016).

However, one participant questioned the practice of LCCs to constantly hire new flight attendants and views the issues as a danger for a decrease in quality in the industry with re-



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gards to safety, as poor working conditions and low salaries leads to high fluctuation of cabin personnel. It was claimed that the safety ‘gap’ can be attributed to the low experience and qualification of newly trained employees, compared to flight attendants that have been working for several years in the industry at FSCs. For him, the reasons for high fluctuation of cabin personnel. In contrast, one participant sees high safety requirements set by regulators rather as a driver for improved quality.

One reason for a potential decrease in quality was the perception that the quality of Air Berlin was better than the quality offered by EasyJet, Ryanair or similar LCCs, thus future quality will eventually decrease. It was suggested that the service level offered by the airlines will be lower but products will be more customizable (e.g. airlines are offering basic fares that can be individualized through purchasing certain ancillary services). This is supported by findings of Aksoy et al. (2003) and Chen and Chang (2005) to adapt airline products to fulfill customer expectations and developing a service quality offering relative to its competitors as well as the assessment of Boin, Coleman, Delfassy, and Palombo (2017) that a bundling-pricing concept with ancillary services has become more important. Lastly, two participants see a trend towards lower quality level by replacing FSCs’ products through LCCs’ products and argued that the shift from Lufthansa to Eurowings can also be seen as a decrease in quality.

5. Conclusion

The aim of the paper was to identify how competition impacts price and quality in the DACH-market’s airline industry. The fading of Air Berlin left a serious gap in the market, resulting in a dominant position of the LHG. While most airline professionals considered the current level of competition within the DACH-region as sufficient, participants also argued that there is room for further airlines on the market although Air Berlin seem to have faded from the market because of too fierce competition and the market dominance of LHG that led to low prices for customers, specifically for routes within the DACH-region. The market power of Lufthansa seems to prevent airlines to enter the market as massive investments need to be expected in order to overcome market entry barriers. Routes that are mostly affected by such market entry barriers were identified to be intra-hub routes of LHG. For routes where airlines are facing competition, price levels were identified to be lower compared to monopoly routes that are only offered by one airline. Overall, the findings show that the Air Berlin bankruptcy resulted in a shortage of capacity on the market leading to increasing prices and short-term competition is likely to increase as various airlines try to replace Air Berlin on the market. However, in the long term, prices for airline tickets are expected to bounce back to a similar level like before the Air Berlin bankruptcy, as more competitors will penetrate the market, which leads to a more challenging market environment. In terms of quality, it was found that other LCCs offered similar products compared to Air Berlin, thus no or only minor changes in quality are expected.

Even though this thesis brings valuable insights into the airline industry in the DACH-region, some limitations of the obtained results have to be pointed out. First, the qualitative method



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used for this thesis does not provide statistical robustness of the results. Even though the provided answers show a trend, a statement about significance of the results is not possible. Furthermore, because only 21 experts were interviewed in order to answer the research questions one must be aware that, with another pool of experts, the results for this thesis may have differed. Another challenge for the authors was to align with the fast development of the industry. As already stated in the introduction of this thesis, the bankruptcy of Air Berlin led to various new market entries by competitors and has been changing the market a lot, so the opinion stated in this paper might change due to the pace of the industry. These limitations of this thesis could be targeted by future studies. First, the qualitative results of this thesis should be further validated by quantitative techniques. A statistical analysis based on quantitative data could provide a robust proof for the conclusions made in this thesis. Future research could be based on quantitative questionnaires for different groups of experts. For example, several experts outlined short-term and long-term developments even though the authors never explicitly asked for such a differentiation. Next, tackling the fast-paced changes in the industry, a long-term study may provide further insights into how competition affects the price-quality ratio. Lastly, as this paper investigated the perceptions shortly after the Air Berlin bankruptcy, a similar set up of research in a more settled market situation may show how perceptions differentiate when there are fewer changes in the market.

Disclosure Statement

The authors do not have any competing financial, professional, or personal interests from other parties.

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