



Air route suspension: The role of stakeholder engagement and aviation and non-aviation factors



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ABSTRACT

This study provides insight into how aviation and non-aviation factors affect the decision to suspend air routes. Using examples from Australian domestic routes, the paper analyses the business relationships and negotiation processes followed by airports, airlines, and destination management organizations (DMOs) to avoid air route suspensions. Data were collected through semi-structured interviews with key aviation and tourism stakeholders directly impacted by suspended routes. The outcomes of this paper demonstrate that while most of the major reasons for air route suspension in Australia are mentioned in existing literature and are linked to demand, other factors have not previously been deeply investigated, including how stakeholders can be involved to avoid air route suspension. The paper also explores and identifies strengths and weaknesses in the relationship among airlines, DMOs and airports.

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1. Introduction

Since the 1960s, aviation and tourism have developed a strong mutual dependency with both industries relying considerably on each other to sustain their development (Duval, 2013; Lohmann and Duval, 2014). This phenomenon is even more evident in the case of land mass countries with strong domestic markets (Koo and Lohmann, 2013), insular destinations (Liasidou, 2013), remote regions (Bråthen and Halpern, 2012) and international long haul-dependent economies (Becken and Lennox, 2012). A large body of the academic literature on the aviation-tourism interconnection focuses on the enabling factors to facilitate air service development, particularly in regards to (a) multi/bi-lateral air service agreements (ASA)—in broader terms, what Duval (2013) has labelled aeropolitics—; (b) liberalization (Dobruszkes and Mondou, 2013; O'Connell and Warnock-Smith, 2012); and (c) facilitation of connectivity and availability (Duval and Schiff, 2011). However, the understanding of “why” air routes fail and are suspended is somehow less examined in the academic literature, despite the evident importance of learning from unsuccessful experiences (de Wit and Zuidberg, 2016). Additionally, most of the industry

reports on the number of air route suspensions are either expensive to obtain (e.g., the Official Airline Guide, or OAG) or treat suspension on a case-by-case basis (e.g., Centre for Asia Pacific Aviation—CAPA's website), rather than providing a holistic analysis on the reasons for suspension. Nevertheless, Dobruszkes (2013) brief mentions the problem by reporting on the fact that between 1995 and 2010, up to 27% of city-pair routes previously operated by LCCs have been dropped in Europe.

Despite the importance of understanding the procedures for suspension of air transport, the academic literature provides no framework for analysing the decision-making process and the role of different factors and stakeholders in this process. Other studies examining this topic have analysed the procedures for developing air routes (Swan, 2002) or some aspect of maintaining operating air routes (Calderón, 1997). Regional airport characteristics have also been studied (Baker and Donehue, 2012), and flight frequency has been thoroughly investigated (Hsu and Wen, 2003). Importantly, in this paper, the term “route suspension” refers to routes that airlines have no plans to reinstate. We have purposely not used the term “cancellation,” which among some aviation professionals connotes a more temporary status. We also do not include cases when the entire airline is grounded and its network is impacted on multiple fronts because we only address the individual cases of route suspension. We also did not analyse cases in which airlines completely abandon one particular base (Malighetti et al., 2015).

This paper investigates the decision-making process in domestic

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air route suspensions in Australia using examples and cases between 2008 and 2013. We seek to determine what aviation and non-aviation factors influence decisions on predominantly leisure travel routes. Leisure routes tend to be more susceptible to suspension due to the seasonality of the holiday market and the fact that it is easily impacted by financial crisis and less favourable economic environments. In terms of price, leisure demand is much less elastic than that of business travellers (Dresner, 2006). The paper also examines routes potentially at risk of suspension, requiring the contribution of key stakeholders to avoid suspension. This differs from previous studies on route churn, where the focus has been on understanding the reasons and patterns for route suspension, rather than proposing solutions (de Wit and Zuidberg, 2016). In this regard, Australia, with a large mature domestic travel market and tourism comprising one of its main economic powerhouses, is a suitable case study to understand domestic air route suspension. Previous studies have focused on the European international market (de Wit and Zuidberg, 2016) or in various international routes (Hsu and Wen, 2003). In 2014, among the 34 OECD countries, in addition to six major emerging economies, Australia was considered as having the most liberalised air transport environment, one where foreign airlines are allowed to operate, hence providing the opportunity to examine the existing volatility in terms of route suspension (Department of Infrastructure and Regional Development (2015)). We identify the roles that stakeholders, including airports and destination management organizations (DMOs), can play in supporting airlines in avoiding these suspensions. These roles are particularly relevant because second- and third-tier destinations struggle to compete with main urban/wealthier destinations that are prone to invest resources to cross-subsidise marketing initiatives to support airlines in promoting their destinations. de Wit and Zuidberg (2016) report on the shift from secondary and tertiary airports to main airports, even among LCCs.

The paper is then structured as follows. The next section investigates previous descriptions of the reasons for air route suspension as well as the relationships among the relevant stakeholders. The following section discusses methodological aspects of the study, after which we present the results and draw conclusions.

1.1. Air route suspension factors and stakeholders

Considering the nonexistence of an overall framework in the academic literature presenting the key factors in air route suspension, an exploratory literature review was undertaken to identify these factors and show how they relate with each other. In most instances, this literature draws from the broader understanding of the determinants of air travel demand and the factors influencing travel in general, while other specific aviation-related matters are also worth analysing. This step is performed prior to mapping out the various stakeholders and their functions associated with this topic. Discussing the relationship between factors for air route suspension and the role and engagement of various stakeholders is paramount prior to contextualising them in regards to the domestic market in Australia. This section concludes by proposing a framework to analyse the themes of this research.

1.2. Air route suspension factors

The interconnectedness of air route suspension and traveller demand is doubtless key because air route suspension impacts directly on passengers' overall travel experience—particularly for the “time-sensitive” customers who otherwise would not have travelled by other means of transport—while at the same time lack

of demand is a major factor in decisions to suspend routes. Several factors are associated with the decision to suspend a route from the perspective of demand (Hsu and Wen, 2003), and they should be examined further; Wang and Song (2010) undertook a comprehensive review of 150 journal articles on this topic. Based on the literature review undertaken for this study, a conceptual framework on the factors influencing traveller demand was developed (Fig. 1).

Pearce (2012) explains that conceptual frameworks “set out the key concepts and factors to be investigated” (p. 13) and are particularly useful “with emerging, fragmented or broad themes” (p. 28), which is the case in air transport route suspension. For this research, developing a conceptual framework is particularly useful to map out the relationships among the factors in air route suspension. The conceptual framework proposed in Fig. 1 divides air travel demand factors using Calderón's (1997) two primary groups of drivers to influence air travel demand: aviation and non-aviation related factors, the latter called “geo-economic” factors.

1.3. Aviation factors

A number of factors are directly or indirectly associated with the ability of an airline to maintain or suspend a route, the main ones being the overall airline profitability and in particular the route profitability (de Wit and Zuidberg, 2016), which are impacted by non-aviation/geo-economic factors that influence the income level of the general population. Directly associated with the airline/route profitability are the financial resources available to the airline and whether it is provided with enough cash to anticipate or delay route suspension decisions, as well as its overall business strategies, because airlines can change their business models, making some routes less appealing. Hence, correctly assessing yield and revenue analysis is paramount, particularly to reach break-even points. In Australia, this phenomenon has been particularly evident exemplified by the move made by the Qantas group to use their low-cost subsidiary, Jetstar, to replace certain routes previously operated by Qantas (Whyte and Lohmann, 2015), and also in the case of the transformation of Virgin Blue from a LCC into Virgin Australia, a full service airline.

The service provided by the airline, defined as a combination of quality and price (Calderón, 1997), can also influence the long-term sustainability of a route. Quality includes services such as frequency and time of departures; load factor and aircraft size, type or technology; and in-flight entertainment/amenities (Tretheway and Oum, 1992; Wang and Song, 2010). Yang et al. (2010) also note that airlines have limited options and resources to cope with disruptions in terms of aeroplane availability and scheduling arrangements, managing their assets to be available for more profitable routes. Hence, one can consider optimization of aircraft utilization and crew availability to play a role when airlines must prioritize which routes to maintain or suspend. Pricing entails a complex decision-making process implemented by airlines that usually not only reflects a given business model (Lohmann and Koo, 2013) but is also influenced by a combination of aviation and non-aviation factors, including level of service provided, seasonality, slot availability, costs and taxes, aviation and non-aviation competition, yield management strategies and market characteristics (Peoples, 2012), which are presented in this literature review.

Competitive power and market penetration from low-cost carriers (LCCs), as well as competition with other modes of transport, have significantly impacted on air route suspension. LCCs take advantage of their focus on cost to choose secondary airports and also target destinations that offer concession incentives or aviation fee reductions to favour the operation of the most cost-efficient routes (Barbot, 2006; Smyth et al., 2012). With LCCs targeting a

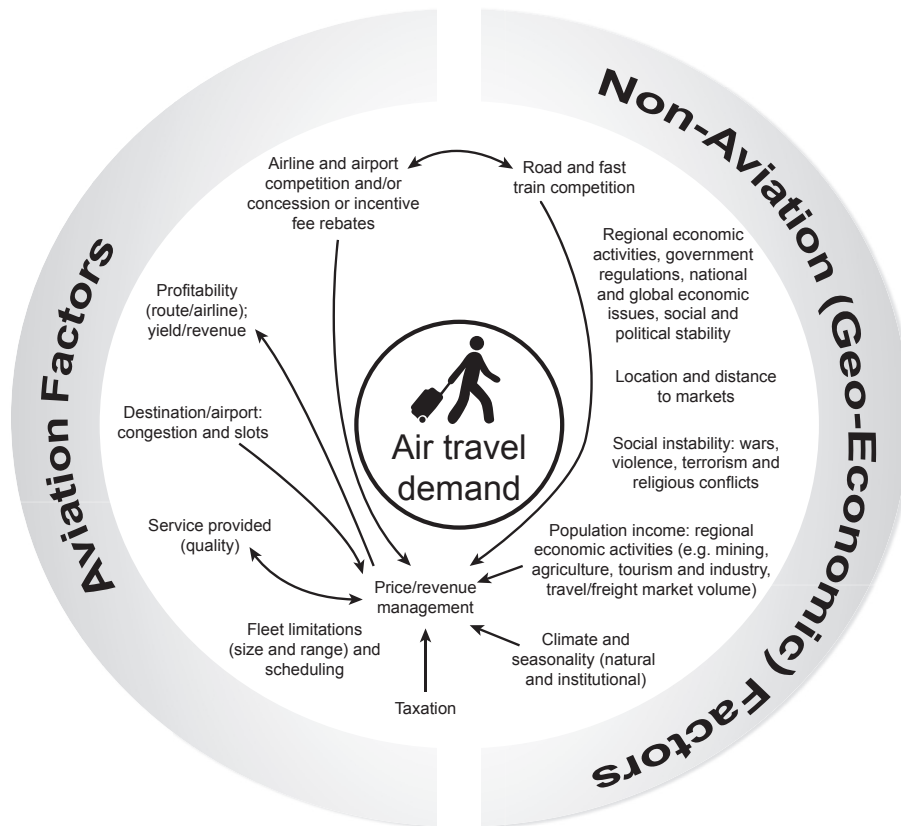


Fig. 1. Aviation and non-aviation factors influencing air travel demand.

number of leisure destination markets and with these destinations interested in supporting transport accessibility for the benefit of the tourism industry and competing against each other, LCCs are more prone to move their mobile assets to threaten to or actually change routes in pursuit of the most favourable opportunities (de Wit and Zuidberg, 2016; Olischer and Dörrenbächer, 2013). Outside air transport, the introduction of high-speed rail services in several countries and regions of the world has led to a reduction of aviation demand, as testified by the extensive literature on the topic, particularly in the context of Europe and Asia (e.g., Behrens and Pels, 2012; Fu et al., 2012; Givoni and Dobruszkes, 2013). In the case of Australia and other large continental countries, such as Brazil, Russia, India, Canada and the USA, the implementation of high-speed rail projects has been minimal or non-existent, leaving air transport with a predominant competitive advantage, particularly in terms of faster travel time and higher frequency compared with other modes of transport.

From the airlines' point of view, the selection of a particular destination should take into consideration the airport's location and infrastructure; the cost of operation, including slots and congestion; and eventually the competition with other airports (Graham, 2013). Typically, larger airports closer to city centres are busier, not only because of the volume of passengers arriving and departing but also because of the number of passengers on connecting flights. Most airlines use larger metropolis-based airports as a hub and charge a premium, particularly during peak hours. Another factor that an airline might consider is the airspace around a specific airport. Air-traffic flow management (ATFM) has recently been developed to analyse and improve air traffic networks and can aid airports and airlines in enhancing the number of services and decreasing delays (Geng and Cheng, 2007). However, airlines can

suspend a service that is less profitable if the airspace is unable to absorb services. Airlines can also divert traffic to other airports, particularly when multiple airports exist within a region (Wang and Song, 2010). In rare exceptions, this is not very evident in Australia where airports have fewer local competition and enjoy a much stronger market power, particularly in regards to domestic services.

Garrow (2012) highlights the role of regulations, both domestically and internationally, as a factor influencing air transport, particularly in terms of fuel costs, airport growth in urban areas and the ability to foster market competitiveness.

1.4. Non-aviation factors

Geo-economic factors are not within the airlines' control but rather are influenced by the economic activity and physical geography characteristics of the locations they serve. Examples of geo-economic factors include regional economic activities, government regulations, national and global economic issues, social and political stability, climate and location.

Socio-political-economic issues directly impact air transport demand. In particular, population income relates to financial ability to travel, especially on leisure routes where business-sponsored trips are not preponderant. Economic and financial trends also influence airfare prices, which ultimately directly impact on affordability and likelihood of air travel. Population income is also directly linked to regional economic activities, such as mining, agriculture, tourism and industry, as well as to the corporate travel/freight market volume. If the regional economy of the outbound market is not prosperous or the country is undergoing an economic or political crisis, willingness to travel and corporate travel budgets will

be affected, influencing domestic and international demand in both the leisure and business markets (Chin and Tay, 2001). Additionally, experience has shown that attempts to increase transport taxation are resisted by transport providers (Li et al., 2012) because in most cases an increase in the overall price of tickets impact on demand for all means of transport (Mak, 2008), particularly in the leisure segment. Social issues that are not purely linked with the economy—such as wars, violence, terrorism and religious conflicts—can also interrupt/disrupt air services (Mason, 2005; Santos and Haines, 2004).

Physical geography characteristics, which may affect demand in a negative or positive way, are central to the air route suspension decision-making process. Two main physical geography factors in particular affect demand—location and climate (Calderón, 1997). Location affects demand in that the distance of the destination from the traveller's place of origin and the time spent in travelling both influence demand between competitor destinations. Climate is another factor that has a direct effect on tourism because climate and weather support tourist and recreational activities and also define central tourism locations (Martín, 2005). Climate can be the reason for a vacation or can be a support, resource, locational factor, or attraction. Climate and severe weather change can also affect tourism seasonality, which has a minor impact on the decision to suspend routes, although if these changes are consistent and repetitive in the long term, they can impact the brand of a destination and reduce its appeal to tourists.

Seasonality affects not only aviation but also the entire tourism industry. Seasonality includes two major factors—natural (physical) and institutional (social and cultural)—which involve both the place of origin and the tourism destination (Pegg et al., 2012). Natural seasonality refers to variations in natural factors, such as climate, weather, seasons, and levels of rainfall, snowfall, or sunlight. Institutional seasonality is related to living/cultural behaviour, such as school holidays, public holidays, the length of time available, the necessary travel gear, and motivation for travelling, such as events and festivals. To evaluate the dimensions of demand and support to overcome seasonality, airlines use revenue management, which allows them to adjust fares to balance supply and demand (Cleophas et al., 2009). In the context of aviation, airlines have cancelled routes at specific times during the year owing to low demand that does not cover airline operation costs. A case study in the Australian literature (Pegg et al., 2012) includes the Alpine area of New South Wales, which is a popular ski destination, although global warming and infrastructure issues have raised doubts about ski operations in this region.

1.5. Stakeholder engagement

Airlines, airports, and DMOs have major commercial interests in avoiding air route suspensions. Each party's role in the process and primary interests are discussed in more depth below.

Airlines are the main stakeholder in the decision to suspend a route, and they pay particular attention to the route's cost structure and overall profitability. Airport infrastructure and its costs are also important factors in the airline decision-making process. Typically, airlines have a budget for delays, and if the airport delay volume is excessive owing to airport operation performance failures, then the airline may decrease service frequency or suspend services at a specific airport (Zou and Hansen, 2012). Another cost factor is the groundside operations cost (including labour costs). Certain processes, such as check-in, baggage handling, catering, load-planning control, and aircraft pushback from the passenger bridge, tend to be slower during peak times or in busier airports, making these operations more expensive (Kempainen et al., 2007). Another method of demand management is to introduce larger or smaller

aircraft (Swan, 2002).

At busy airports, a barrier to air route extension and a factor in air route suspension can be slot availability. Strategies to increase flight schedules or to introduce new routes are only as effective as the available airport capacity allows. Thus, this capacity is an important barrier to market entry (Babic and Kalic 2012; Merkert and O'Fee, 2016). However, an additional circumstance that may lead to suspension of an unprofitable air route is competition with a more profitable route in relation to allocation of aircraft and slot availability. In this respect, professional network management is paramount for profitable airlines (Niehaus et al., 2009). This process controls route implementation through three steps: planning, operation, and revenue management. In addition to these factors, risk management and performance measurement are the key aspects related to safety and security that an airline will consider before establishing a new air route in a specific airport (Aghahowa and Allen, 2007).

The relationship between airports and airlines is crucial in avoiding air route suspensions. Airports can relate to an airline through various forms of agreements, with airport–airline interaction including (1) having a signatory airline for an airport; (2) airline ownership or control of airport facilities; (3) long-term use contracts; (4) airport revenue-bond issuance to airlines; and (5) revenue-sharing between airports and airlines (Barrett, 2004). Thus, numerous factors can influence the relationship between different businesses and directly affect air route suspension. For airports, long-term contracts with airlines are advantageous because airlines manage the key airport facilities, infrastructure, and airport revenues. Airlines also support airports by creating facilities and infrastructure specific to their customers (Fu et al., 2011), such as lounges near gates and smoother connection procedures.

Certain airports offer lower fees to attract more flights or put forward incentives to maintain specific routes. Allroggen et al. (2013) undertook a study on the factors influencing the presence of incentives for route development among European airports. In their results, they concluded that incentives increase on business routes because airports are more likely to lower fees and charges if their standard charges are high and are less likely to offer incentives if competition from other airports is low. Because “sharing investment costs can reduce financial risk” (Albers et al., 2005, p. 53), some airports have formed exclusive contracts with certain airlines (Fu et al., 2011), as airlines prefer to have their own hubs rather than sharing them with other airlines. These agreements make the relationships between a specific airport and airlines even more competitive.

DMOs are another key stakeholder in the context of this study. Many local/regional/state/national governments establish a specific body responsible for developing tourism in a particular destination or area. In recent years, many destinations have created DMOs, improving the tourism structure and operations and making the destination more attractive. DMOs also often develop a marketing strategy for the tourism destination (Bornhorst et al., 2010) and in some cases articulate joint initiatives to co-invest in route promotion with major airlines.

Cooperative strategies. A strategic way to expand market share and increase seat capacity is through code-share agreements (Du et al., 2008). Other agreements have also been used, including connecting airport gate proximity and frequent-flyer program cooperation (Brueckner, 2001). However, this cooperation can create certain conflicts, and the strategic objectives should be clear before the alliance network is implemented (Hsu and Wen, 2003). Several empirical studies have investigated the effects of these alliances (Goh and Yong, 2006; Du et al., 2008; Iatrou and Alamdari, 2005; Goetz and Shapiro, 2012), and most investigations show that

airfares decrease under these agreements with a subsequent growth in market share. This strategy allows carriers to extend their networks effectively without the costs associated with operating their own equipment (Brueckner, 2001), thus avoiding interruptions in service.

2. Method

In this research, we used secondary and primary data collection to fulfil the research objectives. Secondary sources, particularly newspapers, were used to identify examples of air route suspensions in Australia between 2008 and 2013, including their causes and circumstances (Table 1), which provided some background information for the interviews. The objective of mapping these examples was to engage the interviewees and to further investigate their knowledge surrounding the research aims. One common feature of the routes presented in Table 1 is that they are usually between a state/territory capital city (e.g., Adelaide, Brisbane, Darwin, Melbourne, Perth and Sydney) and a leisure or regional destination (e.g., Cooma, Gold Coast, Griffith, Kalgoorlie and Mackay). The airlines identified have diverse business models, such as low-cost carriers (Tiger Airways and Jetstar), regional carriers (Rex Airways and Skywest) and full service network carriers (Qantas). During the interviews, other cases emerged. The specific suspended routes analysed in this paper, as well as other points of interest in Australia, are presented in Fig. 2.

Primary data were collected through interviews with key stakeholders in the aviation sector, who have information on the decision-making process for suspending air transport routes. Semi-structured interviews were effective because they provided deep insight into the current market and background for air route suspension. The proposed set of initial interview questions is provided in Appendix A. Due to the difficulties in obtaining access to traditional airline data sources, such as booking and ticketing databases (e.g., airlines' computer reservation systems), as well as flight and schedule (e.g., OAG) and operational databases (Garrow, 2012) that could inform air route suspensions, we mapped out information from the media to better understand real air route suspension cases in Australia and also asked interviewees to elaborate further on these particular cases.

Participants in the interviews included managers and directors from Australian airports that experienced route suspension (as per Table 1), domestic airlines, and DMOs affected by suspended routes, most of them approached via email. Stakeholders' contacts were taken from their organizations' websites or via LinkedIn. Of the 20 emails sent, four recipients gave no response at all and three were not available to participate in the research. In total, we conducted 13 interviews: one from a low-cost domestic airline, seven from airports (Adelaide, Brisbane, Canberra, Darwin, Gold Coast, Mackay and Perth), and five from four different DMOs (Gold Coast, Tasmania, South Australia and Western Australia). These four DMOs in many aspects have a large role in promoting their particular destinations and possess similar opportunities to invest in promotional activities. They are not the top three in the country (i.e., New South Wales, Victoria and Queensland) but are large enough to have funds available to support domestic routes. Airlines in particular were the most hesitant to agree to participate in this research, and in many aspects this hesitance reflects the competitive nature of their business, where providing information about the reasons for route suspension can be perceived as a sign of underperformance and failure.

Pseudonyms were used to preserve the privacy of the respondents and their organizations, although in some cases we had permission to state the organization to which the interviewee

belonged. The interviews were recorded, and after considering the specific cases of route suspension gathered from newspapers or noted by the interviewees, we sought further contacts to investigate other professionals involved in the case who could contribute to the research. All the interviews were transcribed to permit further analysis. As much as possible, we rely on respondents' own words to give voice to these stakeholders. In many cases this practice is neglected in the air transport management academic literature, although common in other disciplines.

Transcriptions of the interviews were analysed with the software NVivo (by QSR International), which helps cluster the main themes and topics mentioned during the interviews. The data were then coded according to themes identified in the literature or that recurred during the interviews, and the themes were analysed according to the research objectives. An initial draft of the current paper was then emailed to all the interviewees so that they could provide any comments about the accuracy of the paper and the quotes used.

2.1. Background of domestic airlines in Australia

Domestic aviation was deregulated in Australia in 1990, ending government control over capacity, fares, industry entry and aircraft importation. Between the years 1990 and 2000, deregulation changed the domestic air transport sector in Australia as:

1. New domestic operators could enter the market and compete over fares, service quality and schedules. In 1992, changes were announced to the aviation policy, allowing Qantas Airways to operate certain domestic routes to connect the domestic and international markets more effectively (until then, Qantas had operated exclusively internationally) (Grimm and Milloy, 1993);
2. Five years after deregulation, the domestic air passenger volume doubled compared with that in the 1980s. This increase was due to population growth, tourism development and passengers who flew for the first time immediately after deregulation and were willing to pay more for air travel. Certain service quality changes further impacted the growth of demand, such as greater flight frequency, loyalty bonuses and airport lounges (Quiggin, 2002).

The 2000s were characterized by a number of new initiatives that have, in one way or the other, influenced the overall background related to some of the airlines mentioned in this study. One example is the start of Virgin Blue, on 31 August 2000, which began operation with a two-aircraft fleet, expanding in the following year to 14 new domestic routes. In 2004, Skywest, a regional airline, became part of the Virgin Group. In September 2001, Ansett, in operation for over 65 years, collapsed, and many regional centres dependent on air transport were affected (Wilson, 2002). In 2002, a consortium of businessmen, which comprised a group of Singaporean investors and Australian private investors, eventually reached an agreement with the two sets of administrators, the government, the unions and the staff to purchase the Hazelton and Kendall passenger airline businesses. This arrangement produced Regional Express, more colloquially known as Rex (Regional Express, 2015). Currently, Rex is one of the most important regional airlines in Australia.

In mid-2004, Qantas withdrew certain regional routes and segmented the leisure market with Jetstar operations only. Jetstar is a wholly-owned subsidiary of Qantas; it began Australian domestic operations in May 2004 (Whyte and Lohmann, 2015). In 2013, Jetstar was the third-largest domestic Australian airline (by market share). Jetstar is the Australia's largest LCC, operating approximately 850 domestic return services per week to 19 Australian

Table 1
Examples of route suspension in Australia between 2008 and 2013.

Airline	Routes (Date) and main alleged reason for suspension	Background information
Tiger Airways	Adelaide–Gold Coast and Adelaide–Brisbane (24 August 2010) <i>Underperformance/unprofitability</i>	The airline director stated that the decision was part of a continuous review of route profitability, which ensured that each flight afforded the best results to the company. According to Mr Rix, the commercial reality was that the company would target operations to the most profitable routes. Through these changes, the company adapted its network to existing demand and focussed on cost reduction to maintain low fares for customers (<i>The Australian</i> , 24/08/2010).
	Darwin–Melbourne (8 August 2008) <i>High costs</i>	The airline's chief operating officer, Steve Burns, indicated that combined airport and fuel costs for Darwin were greater than for the remaining 27 airports that the airline served across Australia and Asia, and that operation of a true low-fare airline was incompatible with a high-cost destination (<i>Northern Territory News/Sunday Territorian</i> , 8 August 2008).
Rex Airways	Sydney–Cooma (May 2008) <i>Pilot shortage</i>	The airline attributed the service suspension to a pilot shortage, high attrition rates, and aggressive recruiting by major airlines.
	Griffith–Melbourne (11 May 2012) <i>Unprofitability</i>	The relationship between Griffith City Council and Rex was turbulent. According to <i>The Area News</i> , Rex suspended flights from Griffith to Melbourne on 11 May 2012 owing to unprofitability. The city's Business Chamber spokesman, Paul Pierotti, declared that the route was unprofitable because of poor administration by Rex, leading to high prices and unsatisfactory scheduling. The city government attempted without success to reach a consensus with the airline, although the runway had been lengthened to accommodate larger aircraft. Other airlines, such as Qantas Link and Virgin, were approached but were not interested in investing in this specific route (<i>The Area News</i> , 11 May 2012).
Qantas	Mackay–Brisbane (26 February 2008) <i>Pilot turnover</i> All operation from Gold Coast airport was ceased (July 2008)	Qantas announced on 26 February 2008 that it would suspend the Mackay to Brisbane route owing to an abnormally high pilot attrition rate. Additional actions included an upgrade to larger aircraft in certain services to maintain capacity (ABC News, 27 February 2008). In July 2008, Qantas Airways decided to leave leisure routes to the Gold Coast airport to its low-cost carrier Jetstar. According to ABC News, the decision was criticised by customers and industry professionals. Consumers complained about interruption of benefits that they had had with Qantas that they would not have with Jetstar. Benefits included frequent flyer points, transfer of checked baggage, and complimentary terminal transfer bus transportation in Sydney (ABC News, 05 August 2008). Qantas resumed flights from the Gold Coast to Sydney in October 2012, stating that demand had increased, especially in the corporate market. Qantas is still studying the option of flying from the Gold Coast to Melbourne (ABC News, 14 August 2012).
Skywest	Kalgoorlie–Melbourne (31 July 2008) <i>Fuel costs and economic crises</i>	The airline informed city leaders that this route was operated at an average 50 per cent load factor, which was not viable. The city mayor indicated that the city council was willing to offer incentives to the airline to avoid limiting air travel to the eastern states for the Kalgoorlie region. The focus would be on promoting Kalgoorlie as a tourist destination in major cities, such as Melbourne, Sydney, and Adelaide. However, Skywest did not reverse its decision, although it did reinstate service on the weekends in January 2010 (<i>The West Australian Newspapers</i> , 31 July 2008).
Jetstar	Gold Coast–Perth (October 2013) <i>Insufficient demand and unprofitability</i>	In July 2013, Jetstar announced the suspension of the Gold Coast to Perth route. The reason was insufficient demand and unprofitability, which led the airline to decide to use the aircraft for another route (Crikey, 12 August 2013). Although Jetstar also announced the suspension of the Gold Coast to Hobart route owing to unprofitability, there was no extended coverage by the media.

Sources: various newspapers.

destinations (Jetstar, 2015).

Tiger Air Australia (formerly Tiger Airways and a subsidiary of the Singapore-based Tiger Air) entered the market in 2004. Tiger Air Australia, a LCC focussed in the leisure market, began its Australian operations in November 2007 with two bases in Adelaide and Melbourne. However, it was not a major competitor, with approximately five per cent of market share in early 2011 (Prideaux and Whyte, 2013). In July 2011, the airline was grounded for two months by the Civil Aviation Safety Authority (CASA) for serious breaches of aviation safety standards. Tiger was also forced to stop selling tickets during this period by the Australian Consumer and Competition Commission (ACCC) or else incur a severe fine (Prideaux and Whyte, 2013). Tiger re-entered the market with a maximum of 11 aircraft and under strict surveillance by the CASA. During this period, the airline closed its Adelaide base; when Tiger restarted operations, a Sydney base was opened (ABC News, 2011).

3. Data analysis and results

3.1. Aviation and non-aviation factors

Demand. As expected from the literature review (Fig. 1), the

interviewees stated that lack of demand was the most important factor in air route suspension. Ten of the 13 interviewees mentioned, in some respect, lack of demand as a crucial aspect for route suspension. Additionally, the interviews revealed that in some cases, demand existed but other factors had influenced a specific air route suspension. Peter, from the Brisbane airport, noted two examples of lessened demand and route failure. He stated that “in the first one it is a business destination, where there was a mine; when the mine finishes its work life, the reason for travel to this specific destination will no longer exist and the route will fail.” This type of example occurs often in Australia because mining is one of the country's most important economic contributors. The second example is a leisure destination because according to Peter, “every tourist destination has a cycle where it grows and gets to a mature stage for a while and then starts to lose trendiness and becomes less attractive.” According to him, demand can be driven in a leisure market; however, a better understanding of this market is needed to invest in marketing strategically to the right potential traveller.

In general, the interviewees took a broad view of demand in relation to air route suspension, expressing that while demand is paramount, it comprises much more than a passenger decision. Influencing demand is not an easy or simple process because it

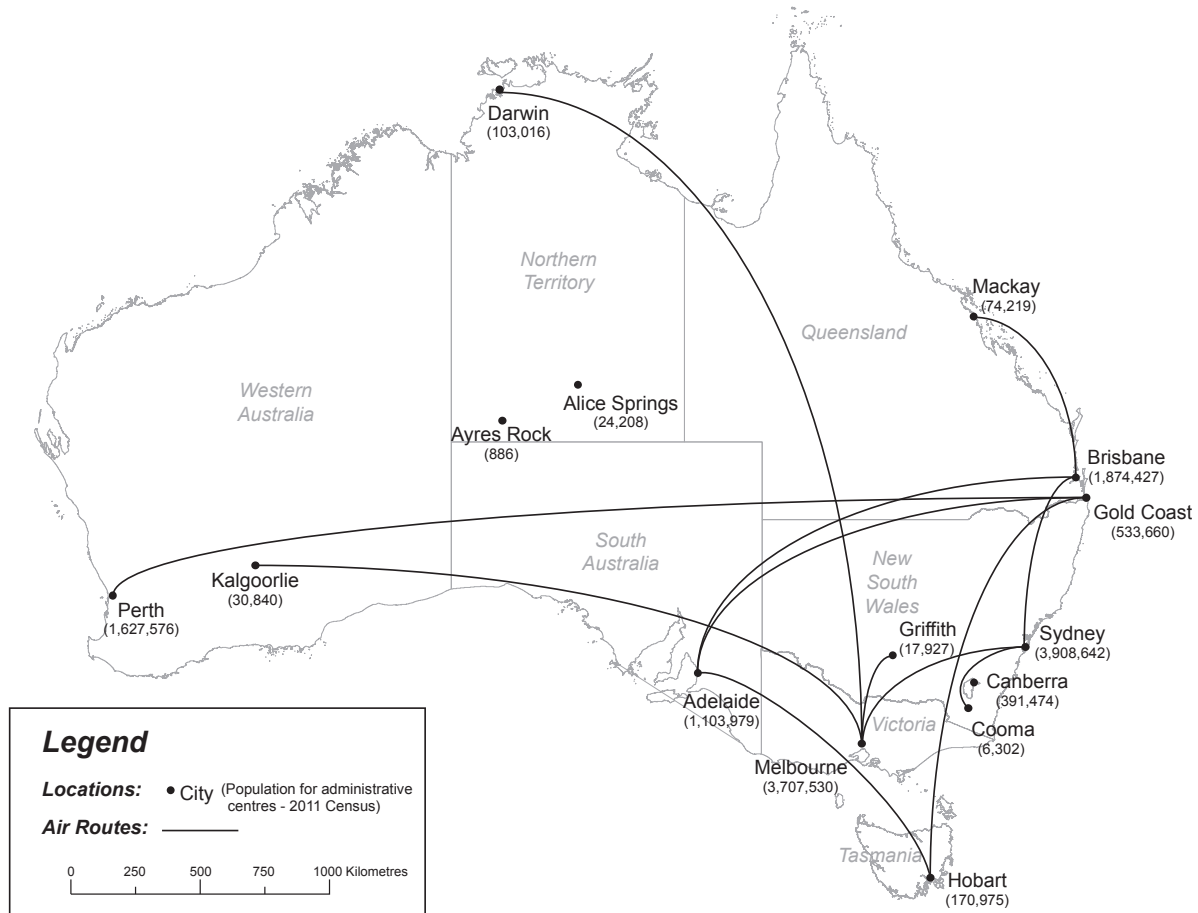


Fig. 2. Suspended routes mentioned in this paper and other points of interest in Australia.

requires various market strategies to key segments as well as market research and cooperation between stakeholders. Sometimes, a lack of involvement by all parties can be a reason for an air route suspension.

Unprofitability. As with demand, unprofitability is one of the most important reasons for an air route suspension in Australia. In 12 instances, respondents referred to unprofitability as one of the main alleged reasons for suspension of air routes. While unprofitability is most often the result of lack of demand, the interviewees indicated that it could also occur owing to a failure in airline management or to the capacity of available aircraft. Daniel, a manager from a LCC, commented that before a decision is made, the airline understands and analyses the general route performance on a regular basis and if needed, begins to work on sales performance. He stated that

at the end of the day we have to achieve some sustainability, so we would take a measured approach to understand how long we have to invest for, what [it] is going to cost us and the probability of being able to influence an improvement in that route, overall route and route performance.

After this evaluation, they would decide whether to continue or suspend the route.

Adam, from Perth airport, had a similar viewpoint, perceiving unprofitability as a key factor in decisions to suspend an air route. He stated that

if the airline cannot make money out of it, airports and government driven tourist authorities can continue to fund a particular route, but at the end of the day if the route cannot stand up alone and make money, often the decision of the airline is just to cancel it.

He believes that stakeholders' partnerships—such as airport and airlines working together in a marketing campaign—may help in terms of market strategies. However, if these strategies fail, from his point of view no other action is available to avoid the suspension of a route.

Tom noted a case at the Mackay airport in which Tiger cut a route to Melbourne owing to unprofitability. However, in his opinion, the root cause was a lack of promotion. For Tom, promotion is the key to overcoming unprofitability, with successful marketing strategies directed to the right market—corporate, leisure, or visiting friends and relatives (VFR)—requiring thorough investigation. In Australia, it is not infrequent for this type of investigation to be conducted by airports, with the airport reporting its research regarding potential new routes to the airlines. Some of the possible examples of stakeholder relationships aiming to promote routes are discussed further below.

Seasonality. Seasonality is more than a factor for air route suspensions because it presents a challenge to numerous tourism destinations around the globe. The interviews showed that different approaches can be used and the right strategy may be crucial to a route's success or failure. The seasonality factor forces all stakeholders involved in tourism development to work together,

sharing information and taking actions to overcome its effects.

Australia's Gold Coast is an example of a very seasonal leisure destination. According to Maria, from a tourism authority in Queensland, intensive work must be done throughout the year to counter seasonality. Airlines know the importance of pricing and yield in the high season (such as school holidays). In the low season, the tourism authority works very closely with airlines to ensure that loads and rates still satisfy their yield requirements. Across this lower demand period, the authority works in partnership with the airlines in marketing campaigns, targeting both first-time and return visitors.

Seasonality is a particular challenge for the routes of a LCC. According to Daniel, from a LCC in Australia, the challenge is "to get local support, because the market does extend to both ends, you do need to give them the service all year round." Because Daniel's LCC predominantly targets the leisure market, it has neither the corporate market throughout the year to support sustainability of the route nor a partnership with another airline or alliance to increase seats connecting their domestic network to the international market. In Daniel's view, another strategy for controlling route performance during the low season is investment in cargo.

Socio-economic factors. Economic and social issues have a strong impact on both leisure and corporate traveller behaviour. In recent years, access to air travel has become easier because prices have become more reasonable. Interviewees suggested that few actions could be taken to avoid a suspension related to economic factors because these are uncontrollable external factors.

Maria from a tourism authority in Queensland believes that some routes to the Gold Coast were suspended due to a diminution of the mining market. According to her,

In the past Virgin had direct flights from Townsville down into Coolangatta [where Gold Coast airport is located]. Unfortunately they were not able to be sustained and again [Virgin] had to do a reallocation of aircraft, and so now to those regional points in Queensland where there is a lot of fly-in fly-out miners, they are all out of Brisbane.

Simon, from a tourism authority from South Australia, also emphasized external factors:

There are external factors such as the economy, mining, we have a fairly diverse economy here, but as wherever the economy goes up now, some of the strengths are mining, defence, agriculture, wine. If one of them is not going well, it can influence the front of the plane and it can make [it] not as profitable to fly.

However, at the moment he believes that because the domestic South Australia regional market is very stable and growing; examples of air route suspensions are few. Sarah, from the Gold Coast airport, gave two other examples of socio-economic issues that have affected the domestic air travel market in Australia, notably the global financial crisis in 2008. Three other interviewees also mentioned economic factors as an important issue for air travel.

Cost is another important issue, especially in smaller airports, as interviewees noted. Michael, from a Western Australia tourism authority, believes that regional airports' operational costs are much higher than those of capital city airports and that these regional airports have difficulty covering these costs because they do not have diversified revenue, as capital city airports do. According to Michael, this lack can be a reason for an air route suspension. Laura from the Alice Springs airport had a similar opinion.

Daniel, from a LCC, also referenced costs. He noted that when airlines evaluate a route's performance, they check whether the

route contributes to the entire network. He stated that

if it is contributing, not all routes [...] are going to achieve route operating profit, but [it is] essential that the route primarily contributes, and if it contributes, then it can still play a major part in the total network performance.

Capacity and scheduling of available aircraft. A factor that affects air route suspension is the capacity and schedule of available aircraft. While this factor is not presented in detail in the literature, it was mentioned four times during the interviews and has had a strong impact in some cases. Especially for small airports or short routes, the available aircraft and its schedule can be a decisive factor in route success or failure. As an example of a route affected by the aircraft available, John, from the Adelaide airport, mentioned the Adelaide-Hobart route:

Fundamentally, none of them [airlines] had the right aircraft type. Virgin has been operating with 737,163 seats, and also Tiger and Jetstar with the A320 and that is really 175 plus [seats], so the airplane is just too big for the route. To make it sustainable we really do need a daily service and it would ideally suit a 717, approximately 100 seats or Embraer with the same sort of configuration or even a Q400, which Qantas Link operates.

Another example mentioned was the case of Jetstar between the Gold Coast and Perth. Maria from a Queensland DMO believes that the route was not as profitable as the airline expected, and at that time the aircraft Jetstar had available did not contribute to a sustainable profitability. Adam, from the Perth airport, speculated that Jetstar had more interest in using the aircraft on a more profitable route, as the airline has with the route from Brisbane to Perth, which Gold Coast passengers have the option to fly owing to the proximity of both airports.

Overcapacity. Overcapacity was mentioned four times during the interviews as a reason for air route suspension. In most cases, competition exists in routes with higher demand, including Sydney–Melbourne, Sydney–Brisbane, and Melbourne–Brisbane, with all domestic airlines having an interest in operating them. Overcapacity was considered one of the reasons for the suspension of the Gold Coast-Perth route. According to Adam, from the Perth airport,

Considering that Gold Coast airport is relatively close to Brisbane, there has been a significant amount of capacity out of Brisbane, recently. Qantas, Virgin and Jetstar—they all added capacity to Brisbane, so that does make it a little bit more difficult for the Gold Coast route.

Laura, from the Alice Springs airport, mentioned a case at Ayers Rock, which Qantas used to serve, with Virgin also starting to compete. However, according to her, the market that they were pursuing was not developed, and as a result the demand was merely divided. Qantas pulled out less than 12 months later. She believes that overcapacity killed the market and that before adding competitors, there must be an effort to grow the market.

3.2. Stakeholder engagement

Airport role and engagement with the airlines. In the interviews, airport managers were asked what they consider the role of airports to be in preventing air route suspension. Which actions would they put in place, and how could airport managers engage with airlines in relation to this matter?

Tom, from the Mackay airport, explained that airports would

usually present business cases to airlines, in which they describe the type of passengers and the charges they will be able to make to keep the route sustainable. According to him, airports should constantly seek to strengthen the relationship with airlines. Other important information that Tom shared is that each airport operates differently and market strategies can differ around the country, depending on the type of segment they serve.

Sarah, from the Gold Coast airport, noted that the airport is always looking for an airline to operate routes that it believes passenger volume will support. If a route is suspended, then the airport will conduct research, and if the route seems viable, then the airport will invest in business cases to present to different airlines to bring the route back to the airport. In relation to leisure routes, the Gold Coast airport works in partnership with airlines and tourism bodies to drive some interest into the region.

Peter, from the Brisbane airport, explained that the airport has procedures to avoid air route suspension:

We keep an eye on each of the flights ... and we look at things like load factor. There are a number of reasons, there are a number of ways, which can improve a flight, maybe the time of the day does not suit the market, and maybe the aircraft type is too big or too small. Maybe there has not been enough promotion ... There are all these sorts of factors and it is almost never one thing, it is almost always a combination of things.

He noted that while airlines follow up on their routes, airports should also monitor conditions in their overall catchment area and the destinations it serves.

Laura, from the Alice Springs airport, believes the main airport role in preventing air route suspension would be building the business cases for the airlines because the cases will give the airlines all the information they need in relation to the route, such as the aircraft type needed, what potential feed traffic will work, what pricing is appropriate, and which markets should be promoted. Airlines will also conduct research to determine whether these data are accurate. However, because case-building is expensive, she agrees that stakeholders must invest in partnerships.

Steven, from the Canberra airport, had a different opinion from the other interviewees. He believes that while involvement between airlines and airports has been increasing, much remains to be done. He particularly noted the limited cooperation because airlines do not share yield information with any organization.

I guess the information available to airports is only dealing with one half of the equation, you maybe have been told you are getting a 75% load factor, which for most airlines is in profitable territory, but that load factor as I said it is only telling you part of the equation, you need to understand the yield, the airline keeps that very close to its chest.

In his opinion, airlines end up deciding to withdraw service, typically with very little notice to the airport—usually four to six weeks or less. When the airport is notified, the decision has already been made, which leaves no opportunity for the airport to introduce an action plan to avoid suspension. Ryan, from the Adelaide airport, seemed to support this claim.

Finally, looking at the other side of the relationship, Daniel, from a LCC, noted that the airline works with airport partners to help each other understand the challenges presented by this market to achieve some sustainability in the routes that the airline operates. For this particular LCC, airports can help significantly in terms of sharing overall data and locations of new feed markets, and large airports have significant route development teams. He believes a

healthy partnership is possible, even in light of the confidentiality and sensitivity of information, because these partners also work with other airlines. According to him, route sustainability is about transparently sharing knowledge and devising not only a corporate marketing spending plan but also a corporate marketing strategy.

DMOs' role and engagement with airports and airlines. DMOs' managers were asked what they believe are their main roles in avoiding air route suspension and how they engage with airports and airlines in regard to this matter.

Simon, from a South Australian DMO, believes their main role is to drive demand travel to the destination, focusing on marketing to maintain and increase the movement of travellers and consequently improve airlines' load factors. The DMO does maintain relationships between airlines to bring more routes and strengthen existing routes, also maintaining relationships with airports to share information and keep the destination successful. However, he stated that the DMO has more ability to influence international than domestic markets because domestic markets are more stable.

Maria from a Queensland DMO explained that because the region receives predominantly leisure travellers, the schools' holiday periods have much more demand than other times of the year. In the low season, the DMO tends to work more closely with airlines to increase demand through marketing campaigns to ensure that load factors are high enough to keep routes sustainable. According to Maria, the main challenge in relation to engagement with airlines is that LCCs have shrunk their staffs and now have fewer marketing planners. Regarding the avoidance of air route suspension, she stated that the information goes first to the airport, which will involve the DMO if necessary to invest in marketing to stimulate the market and promote a new air route to the region.

The interviews showed that in some destinations, the stakeholders work very closely with each other, while in others they still must develop these relationships. Overall, the stakeholders agree that although avoiding air route suspension is a challenge, avoidance is easier when stakeholders develop partnerships and share knowledge.

4. Discussion

4.1. Aviation and non-aviation factors

The interviews revealed demand as the main factor in air route suspension. Regardless of the context, lack of demand is usually the consequence of another factor, such as seasonality or socio-economic issues (Calderón, 1997). The interviews demonstrated that demand can be influenced in some ways, especially in relation to physical geography characteristics, because these characteristics can be highlighted to the target market. In relation to economic activities, challenges exist—for example, attempting to influence demand during an economic crisis is difficult.

While unprofitability is a result of lack of demand, the causes of reduced demand need further investigation. This study discusses various factors that can result in lack of demand and consequently unprofitability. The literature relates unprofitability to a failure in airline management because profitability in aviation involves elements such as air traffic forecasting, profit cycles, airline growth, and survivability (Chin and Tay, 2001). The interviews support the literature in this case, with interviewees noting failure in airline management as a cause of unprofitability. Seasonality also influences demand and consequently unprofitability. Although climate and location are linked to seasonality, interviewees did not specifically refer to them. Both the interviewees and the literature state that to overcome seasonality, tourism destinations and airlines must have a strategic plan that aims to promote the destination year round (Pegg et al., 2012).

Although socio-economic issues have a strong impact on the tourism and aviation industries (Chin and Tay, 2001), the airlines do not control socio-economic factors (Calderón, 1997), and the interviewees believe that if an economic issue affects a route, little can be done to address it. The economy affects demand and consequently profitability in both positive and negative ways. Both leisure and corporate tourist markets are affected by socio-economic factors. Additionally, interviewees emphasized the importance of air transport to regional development, which is also supported by the literature (Smyth et al., 2012) and which explains the efforts of airports and DMOs to avoid air route suspensions and to work continuously to attract new services.

Interviewees revealed two important cases of routes suspended because of issues with the capacity and availability of the right aircraft. The argument in this case is whether the airline has an interest in investing in aircraft for a specific route because the larger aircraft would probably offer greater flexibility across the entire network. Additionally, passengers prefer larger aircraft because they offer a better-quality flight experience (Calderón, 1997). Another important factor neglected by the literature on route suspension is overcapacity. Overcapacity may have contributed to the suspension of the Gold Coast-Perth route because this route is offered by three airlines from a nearby airport, i.e., Brisbane.

4.2. Stakeholder engagement

Airport role and engagement with airlines. The interviews revealed that in larger airports, the relationship with the airlines flows more easily than in small airports, mainly because routes are more profitable and set-up costs are absorbed more quickly. Although the literature states that certain daily operational processes might be more expensive and slower during peak times (Kemppainen et al., 2007), the interviewees revealed that airlines know that operating in larger airports increases the chances for success.

Interviewees noted that most airlines today do not have the resources or the time to house research teams. One successful exception is the Gold Coast airport, which developed a business case and used the data gathered to persuade Qantas to restart its operations in 2012. Because most larger metropolitan airports in Australia are privately owned, profitable routes are important to them as well as to the airlines because as private companies both are focused on maintaining sustainable business. The interviewees revealed that the main reason that airports collaborate with airlines is to participate in information and data-gathering to avoid air route suspensions or establish new services.

DMO role and engagement with airports and airlines. The interviewees emphasized the differences between the relationship of airports with airlines and that of DMOs with airports and airlines. DMOs demonstrated a closer relationship with airports because they both represent the same region. Airlines engage with DMOs when they must improve demand from specific regions or establish marketing for a new service. Regarding the relationship between DMOs and airports, the interviewees emphasized that they usually work together, although airports have more access to information than DMOs, which become involved when a route is not going well and needs promotion or when a new route is released.

The interviews revealed some level of engagement, and each relationship can differ according to the region. However, this interaction does not occur on a regular basis because airlines are not easily accessible. In relation to the air route suspensions, like airports, the DMOs usually do not have the opportunity to establish any strategy to overcome the issue and avoid suspensions. While the DMOs have a strong marketing force, the interviewees revealed that airlines are interested in collaboration only when a route is not

performing well but they still want to invest in it. However, if the airline has already decided not to invest in a specific route, it will not engage with the DMOs involved but instead will usually communicate the suspension and reallocate the fleet.

5. Conclusion

This research set out to address two specific objectives for investigation of the suspension of domestic air routes in Australia. These research objectives were to identify and discuss the main factors in air route suspension in the Australian domestic scheduled aviation market and to identify and discuss the main roles of directly related stakeholders—airports, airlines and DMOs—in the process.

In relation to the first objective, we found that the literature suggests most of the factors and that they are almost all related to demand (Calderón, 1997). Lack of demand is a consequence of other factors, such as profitability, seasonality, and socio-economic factors. The interviews confirmed these factors. However, while the literature notes factors such as physical geography (Calderón, 1997) and business strategies (Brueckner, 2001), the interviewees did not emphasize these aspects. Other factors not mentioned by the interviewees were the role of airline network strategy, the end of incentives and new competitors. Most of the suspended routes analysed in Australia were outside the major domestic and international hubs of the country, i.e., Sydney and Melbourne, which emphasizes the ability of hubs to eventually better support routes considering the opportunities for cross-subsidization to feed profitable routes. In terms of incentive schemes, the routes analysed were not part of the Remote Air Service Subsidy Scheme (and equivalent state-level schemes) because in Australia they exist only to support accessibility to very remote rural and indigenous communities, usually with weekly flights only.

In terms of competition, during the period covered for route analysis, there has not been the entry of a strong competitor in Australia. The only exception was Tiger, which began operating in late 2007. Tiger's operations actually resulted in more competition being created with the Qantas group changing its policy of not operating Qantas on routes served by Jetstar, the Qantas' LCC subsidiary (Srisaeng et al., 2014). Overall, Tiger has never been a strong competitor, struggling on a number of issues, such as delays and later being grounded, in 2011, for safety issues. Additionally, while factors such as capacity and schedule of available aircraft (which is not related to demand) as well as overcapacity were not widely acknowledged in the literature, interviewees saw these aspects as important factors in the air route suspension cases that occurred in Australia.

Addressing the second objective, the interviewees confirmed the information available in the literature in regard to the stakeholders' roles and their interrelationships to avoid air route suspension. We conclude from this research that in the Australian domestic market, the major role that airports play is with regard to their ability to undertake location-specific market research. The right interaction with DMOs, joining these data resources with the marketing approach, makes the destination image more appealing to the right target market. Consequently, this information usually triggers airlines' interest in the region, saving routes from suspension or reinstating routes previously suspended, and also creating new routes. DMOs, which in Australia are predominantly publicly funded, also have an important role in that they promote the destination and engage with local businesses to increase demand. They also engage with travel agencies and airlines by supporting and promoting events. The DMOs' role has previously been acknowledged by the literature (Bornhorst et al., 2010).

With respect to the airlines' role, we conclude from this research

that although airlines seek profitability, market share is also important. In addition to undertaking internal research work, some airports also offer incentives to airlines. These incentives contribute to the retention of some routes and to the instatement of new routes, or to fund promotion initiatives. This study concludes that in most cases, DMOs and airports have the power to influence demand. However, the final decision comes from the airlines, which use the information provided by airports and DMOs and engage with them when doing so is viable and useful. Some useful practical recommendations can include: (a) the development of an early warning system to identify routes at risk of suspension; (b) following up on the warning system, a pre-agreed scheme on how to support these routes with an appropriate timeline and available resources; (c) clear strategies on risk sharing and potentially a designated coordinated department, possibly involving airports at both ends of the route.

These results should be taken not only in the particular context of the domestic aviation sector in Australia but also in regard to the limitations of the examples/cases identified in the written media. If resource constraints are less limited than in the case of this research, future studies on this topic can benefit, for example, by analysing route suspensions from airline databases, particularly the OAG. Additionally, this study is limited by focusing on the suspension of scheduled routes, with the possibility of other forms of air transport, such as charter services, picking up demand left by scheduled domestic airlines. Nevertheless, the study establishes a foundation to better understand air route suspension. Further research can be developed, particularly examining in more detail (1) the challenges faced by regional and leisure routes because trunk routes between major commercial hubs seem less prone to suspension; (2) the perspective of airlines and the views of their managers in regard to key factors associated with route suspension (a limitation in his study was having access to only one airline manager), notably examining these challenges for various airline business models (LCCs, hybrid airlines, full service network carriers, regional airlines and charters); or (3) further examining the strategic opportunities among aviation and non-aviation stakeholders to strengthen and establish air routes so that suspensions can be avoided. In particular, it would be useful to know what criteria DMOs use to support a route at risk of suspension. Overall, it seems that more than one particular solution is needed; the success of supporting routes potentially at risk of suspension relies on a combination of several initiatives involving relevant stakeholders.

Appendix A. Semi-Structured Interview Guide

This study deepens the understanding of how aviation and non-aviation factors are taken into consideration in decisions to suspend domestic air routes in Australia. This research aims to provide a framework analysis in the decision-making process and the roles played by different factors and stakeholders in this process. Previous research has identified that several factors contribute to air route suspension, including lack of demand, seasonality, socio-economic factors, unprofitability, and physical geography.

- What are your thoughts in relation to these factors?
- Is there any other reason for a domestic air route suspension in Australia from your experience that was not mentioned?
- Is there any particular route at the moment that in your opinion could be suspended soon?
- What would be the reasons for suspension in that particular case?
- What are the reasons not to suspend this route?
- What do you believe the airline should do to avoid this suspension?

- From your point of view, what actions can the airport take in this case?
- How can the DMO engage in this case to prevent this suspension?
- From your experience, how do you think the stakeholders involved could better collaborate with each other to avert air route suspension?
- What are your thoughts on this particular case of route suspension?
- Brief description of one case related to the interviewee's region.
- What could have been done to prevent this situation?
- Do you have any example of an air route suspension involving (interviewee's region) that would be worth investigating?

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