

## The Development of the Low-Cost Carriers in the Australia Indonesia Air Travel Market

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**Received:** 9 April 2022

**Revised:** 16 June 2022

**Accepted:** 20 June 2022

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### Abstract

The objective of this study was to examine the development of the low-cost carriers (LCCs) in the Australia Indonesia air travel market. The study covers the period 2006 to 2020. The case study found that low-cost carriers (LCCs) have significantly grown their annual inbound and outbound enplaned passengers, and this has had a very favorable impact on the low-cost carriers (LCCs) inbound and outbound passenger market shares. The first low-cost carrier (LCC) to enter the market was Jetstar Airways in 2006. Pacific Blue followed in 2008 and they operated low-cost services in 2009 and 2010. In 2011, Pacific Blue's business model changed to a full-service network carrier model and the airline was rebranded as Virgin Australia. Indonesia Air Asia-X entered the market in 2010 and they were followed by Citilink Airlines in 2019. In 2020, the low-cost carriers had captured 56.09% of the inbound market with the remaining 43.91% held by the full-service network carriers. Also, in 2020, the low-cost carriers had captured 55.19% of the outbound passenger market, with the remaining 44.81% held by the full-service network carriers. The case study revealed that Jetstar Airways is the largest low-cost carrier participating in the market, followed by Indonesia Air Asia-X, and Citilink Airlines.

**Keywords:** airlines; airline market share; Australia; Indonesia; full-service carriers; low-cost carriers.

### Introduction

Air transport plays a vital role in tourism development as the transportation of tourists to their destinations may only be possible by air (Sarilgan, 2016). In the global air transport industry, airline services are provided by low-cost carriers (LCCs), full-service network carriers (FSNCs), regional airlines, and charter/holiday airlines (Whyte & Lohmann, 2017). One of the most significant developments in the global aviation industry in recent times, has been the introduction of long-

haul intercontinental services by the low-cost carriers (LCCs) (Albers, Daft, Stabenow & Rundshagen, 2020; Soyk, Ringbeck & Spinler, 2021; Zuidberg & de Wit, 2020). The key markets for these services are the cost-conscious travelers predominantly leisure travelers (Whyte & Lohmann, 2017), such as, tourists or families travelling to visit relatives (VFR). This is not always the case as some low-cost long-haul carriers offer a premium business or premium economy class cabin, which is targeted towards business travelers and travelers willing to pay a premium for additional space and amenities. The growth in very large middle-class population bases in the Asia/Pacific region has created new leisure travel demand. Also, the markets throughout the region are separated by vast distances. These factors have led to the development of Malaysia-based AirAsia-X, Indonesia-based Indonesia Air Asia-X, Singapore-based Scoot Tigerair, and the long-haul unit of Jetstar Airways, which is based in Melbourne, Australia but focused on Asia. These airlines all operate wide-body aircraft in contrast to the traditional low-cost carriers (LCCs) reliance on narrow-body aircraft (Schofield, 2015).

The low-cost carriers (LCC), which offer cheaper air fares, have greatly influenced tourists flows all around the world (Santos & Cincera, 2018). This is because the low-cost carriers have significantly influenced tourism markets in terms of the transportation of air travelers and the promotion of tourist destinations that include both emerging and mature markets, which are underpinned by the low fares offered by the low-cost carriers (O'Connell, 2019). The low-cost carriers have had a very significant impact on inbound tourism for Australia (Taneja, 2018).

Air services play a vital role in the Australia Indonesia tourism market. This is especially so for Bali, Indonesia as the island is one of the most popular destinations for Australian travelers (Groundwater, 2018). The low-cost carriers (LCCs) first entered the Australia Indonesia air travel market in 2006 with the introduction of a low-cost services by Melbourne, Australia headquartered Jetstar Airways. Over time, the market has continued to evolve, and has seen the entry of Pacific Blue, a subsidiary of Virgin Blue Airlines, in 2008, Indonesia Air Asia-X in 2010, and the Garuda Indonesia low-cost carrier (LCC) Citilink Airlines in 2019.

The objective of this study is to examine the evolution of low-cost carriers (LCCs) in the Australia Indonesia air travel market in terms of the annual number of inbound and outbound enplaned passengers, the annual inbound and outbound enplaned passenger growth rates, and the low-cost carriers (LCCs) annual share of the inbound and outbound passenger markets.

The remainder of the paper is organized as follows: Section 2 presents the literature review. Section 3 outlines the research method that underpinned the in-depth case study. The case study

results are presented in Section 4. Section 5 provides the concluding remarks on the research findings.

## **Background**

### ***The key characteristics of the long-haul low-cost carrier business model***

#### ***A Homogenous Aircraft Fleet***

A key objective of the low-cost carriers (LCCs) is to minimize their costs through the operation of a single-type aircraft fleet (Koch, 2010; Schlumberger & Weisskopf, 2014; Vasigh & Rowe, 2020). The low-cost carriers (LCCs) operating long-haul low-cost flights typically use a homogeneous fleet, for example, Jetstar and Scoot-Tigerair operate a fleet of Boeing 787 aircraft, whilst Air Asia-X, Indonesia Air Asia-X, and Cebu Pacific operate a fleet of Airbus A330 wide-body aircraft on their long-haul international services.

The low-cost carriers (LCCs) have typically configured their aircraft with a high-density, all-economy seating arrangement (Bowen, 2019; Leick & Wensveen, 2014; Whyte & Lohmann, 2017; Wilken & Berster, 2016). However, in recent times, this trend has changed with some long-haul low-cost carriers now offering a business or premium economy class.

#### ***Low-cost carriers route network design***

The network features of air transportation are critical to those whose supply and use air services (Button & Stough, 2000). Every airline is endowed with a unique route structure, traffic catchment area, cost base, productivity levels and management skills that are the result of its path and pace of historical development, strategic intent, the characteristics of its home and regional markets, and the international regulatory system (Baxter, 2015). An airline's route network is a collection of origins-and-destinations (O&Ds), often called city pairs. If a single city-pair is regarded as one product of the airline, then, the larger the airline route network, the greater is its range of products. Route networks are therefore a factor in differentiating airlines (Kleymann & Seristö, 2016). Linear (P2) route networks simply link separate airports (Button, Haynes & Stough, 1998). Many low-cost carriers (LCCs) operate route networks that are principally based on a point-to-point (P2P) network design (Biolini, Besana, Cattaneo, Redondi & Sallan, 2022; Franke, 2018; Gross & Klemmer, 2014; Whyte & Lohmann, 2017). A linear route, point-to-point (P2P) airline therefore tends to focus its services on dense markets with sufficient origin and destination (O & D) traffic to sustain non-stop operations (Dempsey & Gesell, 1997).

Many airlines structure their route networks on short haul, medium-haul, and long-haul services (Baxter & Bardell, 2017). In addition, as the numbers of passengers increase on a route, it becomes possible for airlines to deploy larger aircraft types and/or offer a more frequent service. In the airline industry, there are "thin" routes, that is, routes that have a small number of

passengers per day, and “dense” routes, where there are substantial numbers of passengers per day. Typically, dense air routes receive a point-to-point (P2P) service, whilst thin routes are combined using the hub-and-spoke system (Morrison, 2007).

#### ***Low-cost carriers use of secondary and gateway airports***

A key element of the low-cost carriers (LCCs) business model is the operation of services from secondary airports (Beria, Laurino & Postorino, 2017; Dobruszkes, Givoni & Vowles, 2017; Pan & Truong, 2018; Whyte & Lohmann, 2017). These airports are normally located farther away from the main urban area than primary airports. From a strategic perspective, the low-cost carriers (LCCs) are endeavoring to broaden their traffic catchment area and increase their market shares by offering flights at lower air fares (de Wit & Zuidberg, 2014). However, not all long-haul low-cost carrier operate their services from secondary airports. Jetstar Airways, for example, operates its Boeing 787 on flights from Melbourne Airport to Denpasar, Indonesia.

#### ***Airline competition and market share***

In the world airline industry, airlines compete for both passengers and for market-share. These commercial and strategic objectives are attained from the frequency of flights offered and the departure schedule on each route served; the price (air fare) charged, relative to competitors, to the degree to which the regulatory framework permits price competition; as well as the quality of service and products offered by the airline, including airport and in-flight amenities, and/or restrictions on discount fare products (Belobaba, 2016, p. 67).

### **Research Methodology**

#### ***Research approach***

The research undertaken in this study was underpinned by an in-depth longitudinal case study research design (Baxter & Srisaeng, 2021; Derrington, 2019; Hassett & Paavilainen-Mäntymäki, 2013; Neale, 2019). The primary advantage of this research technique is that it reveals change and growth in an outcome over time (Kalaian & Kasim, 2008). An in-depth qualitative case study also allows for the exploration of complex phenomena (Remenyi, Williams, Money, & Swartz, 2010; Yin, 2018). In addition, an in-depth case study enables a researcher(s) to gather and use rich, explanatory information in their study (Ang, 2014; Mentzer & Flint, 1997). A further benefit of a case study research approach is that it enables researchers to connect with real world practice (McCutchen & Meredith, 1993).

#### ***Data collection***

The enplaned passenger data was sourced from the Bureau of Infrastructure, Transport and Regional Economics (BITRE). The study therefore used secondary data. The three principles of

data collection as recommended by Yin (2018) were followed: the use of multiple sources of case evidence, creation of a database on the subject and the establishment of a chain of evidence.

### ***Data analysis***

The empirical data collected for the case studies was examined using document analysis. Document analysis is often employed in case studies (Grant, 2019; Hardina, 2013; Monios, 2016) and focuses on the information and data from formal documents and company records that have been gathered by the researcher(s) (Oates, 2006; Ramon Gil-Garcia, 2012). The documents gathered for the study were examined and assessed by four key criteria: authenticity, credibility, representativeness, and meaning (Fulcher & Scott, 2011; Scott, 2014; Scott & Marshall, 2009).

Following the guidance of Yin (2018), all the documents collected for the study were downloaded and stored in a case study database. The study's documents were all in English. Each document was carefully read, and key themes were coded and recorded in the case study (Baxter, 2021; Baxter & Srisaeng, 2020).

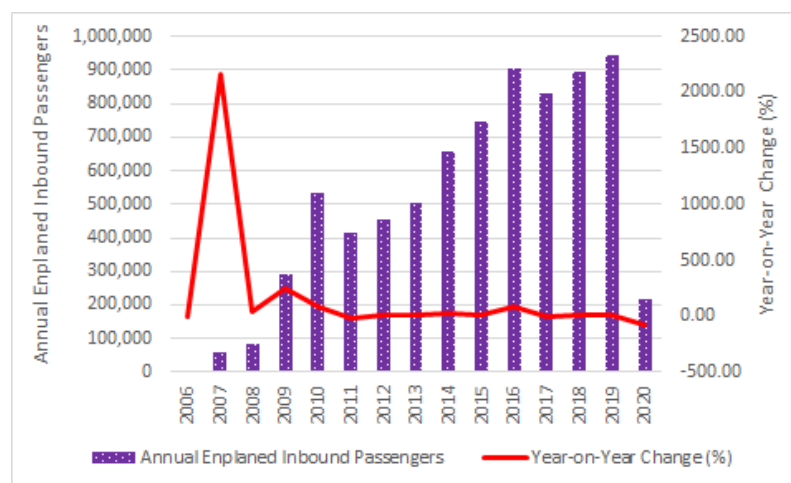
## **Results**

### ***Evolution of the low-cost carriers in the Australia Indonesia aviation market***

Australia-based Jetstar Airways was the first low-cost carrier (LCC) to enter the Australia Indonesia air travel market when it launched its services in 2006. Jetstar Airways was the sole low-cost carrier (LCC) operating in the market in 2007 and 2008. Australia-based low-cost carrier Pacific Blue Airlines entered the market in 2008, and immediately captured a substantial market share. However, Pacific Blue's business model and name was changed in 2011 to a full-service network carrier (FSNC) business model and the airline adopted the name Virgin Australia. In 2010, Indonesia-based low-cost carrier (LCC) Indonesia Air Asia-X entered the market, and they were in turn followed by the commencement of services by Indonesia-based low-cost carrier Citilink Airlines in 2019.

The total annual inbound passengers carried by the low-cost carriers between Indonesia and Australia and the year-on-year change (%) for the period 2006 to 2020 is presented in Figure 1. As can be observed in Figure 1, the total annual inbound passengers carried by the low-cost carriers (LCCs) has largely exhibited an upward trend, increasing from a low of 2,582 passengers in 2006 to a high of 943,432 passengers in 2019. The overall upward trend in the number of inbound passengers carried to Australia by the low-cost carriers (LCCs) is demonstrated by the year-on-year percentage change line graph, which is more positive than negative, that is, more values are above the line than below. Figure 1 shows that there was three years in the study period where the total number of inbound passengers decreased on a year-on-year basis. These decreases were recorded in 2011 (-21.78%), 2017 (-8.19%), and 2020 (-76.94%). The significant decrease in 2011 could be

attributed to the Pacific Blue change of business model to that of a full-service network carrier (FSNC). The large decrease in 2020 could be attributed to the government and airline-related measures associated with the Corona-19 virus pandemic. In 2020, the global airline industry experienced a very sharp and sustained decline in air passenger demand, which had a very adverse impact on the world’s airlines (Garrow, Lurkin & Marla, 2022; Xuan, Khan, Su & Khurshid, 2021). Australia’s response to the COVID-19 pandemic involved the closure of international borders by the Australian Government (D’Souza & Dunshea, 2021). In Australia, travel bans, border closures, and the stay-at-home orders severely disrupted various industries including the country’s aviation industry (Gao & Ren, 2020).

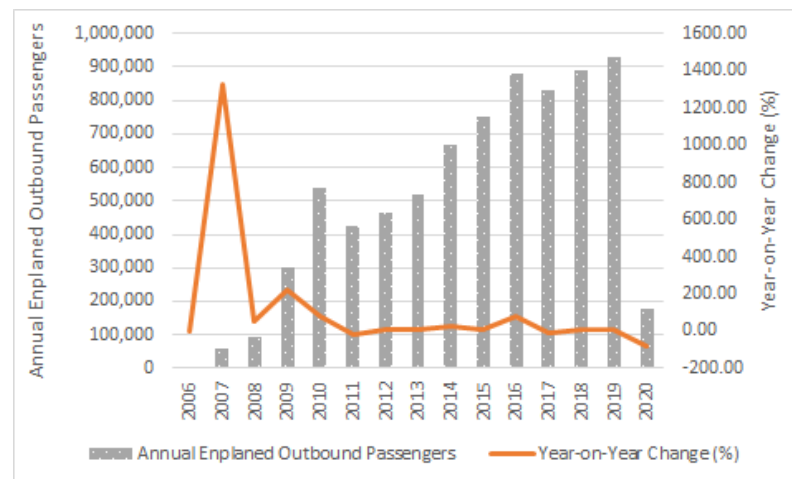


**Figure 1.** The total annual inbound passengers carried by the low-cost carriers in the Australia Indonesia air travel market and the year-on-year change (%): 2006 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

The total annual outbound passengers carried by the low-cost carriers between Australia and Indonesia and the year-on-year change (%) from 2006 to 2020 is presented in Figure 2. As can be observed in Figure 2, the total annual outbound passengers carried by the low-cost carriers (LCCs) has also largely exhibited an upward trend, increasing from a low of 4,197 passengers in 2006 to a high of 930,981 passengers in 2019. The overall upward trend in the number of outbound passengers carried from Australia to Indonesia by the low-cost carriers (LCCs) is also demonstrated by the year-on-year percentage change line graph, which is more positive than negative, that is, more values are above the line than below. As can be observed in Figure 2, there was a very pronounced spike in this metric in 2007, when it increased by 1329.97% on the 2006 level. This large increase in 2007 was due to the first full year of commercial services by Jetstar Airways in the Australia Indonesia air travel market. Figure 2 also shows that there was a significant increase in this metric in 2009, when it increased by 222.15% on the 2008 level. This increase could be attributed to the first full year of operations by Pacific Blue in the market. There were also other

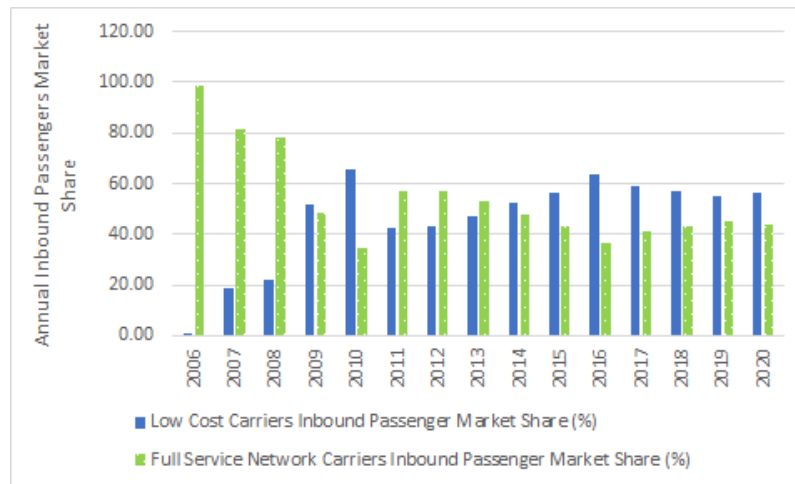
significant increases in this metric in 2010 (+79.76%), and 2016 (+77.14%) (Figure 2). The significant increase in 2016 was due to the greater passenger volumes of passengers carried by Jetstar Airways. However, during the study period, there were three years where the total number of outbound passengers carried by the low-cost carriers (LCCs) declined on a year-on-year basis. These decreases occurred in 2011 (-21.39%), 2017 (-5.92%), and 2020 (-80.72%), respectively (Figure 2). As previously noted, Pacific Blue changed its business model in 2011 and the air travel market was adversely impacted by the Corona-19 virus in 2020.



**Figure 2.** The total annual outbound passengers carried by the low-cost carriers in the Australia Indonesia air travel market and the year-on-year change (%): 2006 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

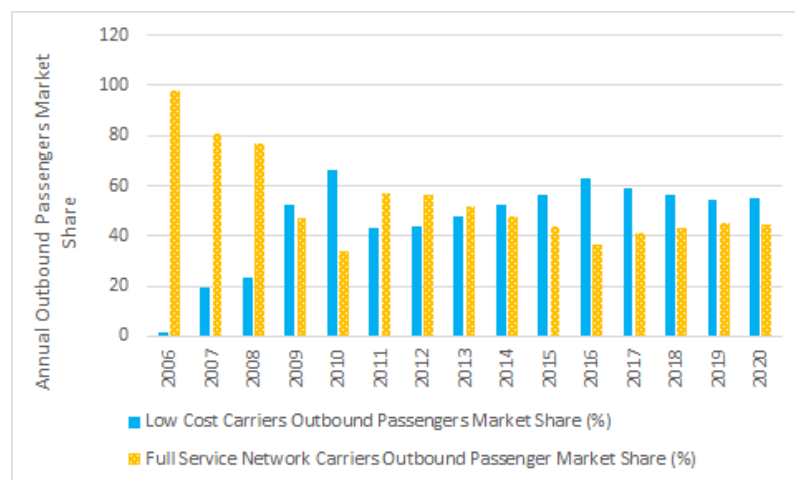
The low-cost carriers (LCCs) and full-service network carriers (FSNCs) annual inbound passenger market shares (%) and the year-on-year change (%) for the period 2006 to 2020 is depicted in Figure 3. The Australia Indonesia air travel market is served by five full-service network carriers (FSNCs): Batik Air Indonesia, Garuda Airways, Malindo Air, Qantas Airways, and Virgin Australia (from 2011 onwards). As can be observed in Figure 3, the full-service network carriers (FSNCs) annual market share decreased from a high of 98.90% in 2006 to a low of 34.56% in 2010. The full-service network carriers (FSNCs) annual inbound passenger market shares displayed a general downward trend from 2011, decreasing from 57.20% in 2011 to 44.81% in 2020. In contrast, the low-cost carriers market share increased from a low of 1.10% in 2006 to a high of 65.44% in 2010. In the latter years of the study, that is, 2017 to 2019, the low-cost carriers annual market share decreased on a year-on-year basis, before once again increasing to 56.09% in 2020. From 2016 to 2020, the low-cost carriers annual market shares have been greater than the full-service network carriers, with the low-cost carriers (LCCs) capturing over half of the total annual passengers travelling from Indonesia to Australia.



**Figure 3.** The annual low-cost carriers and full-service network carrier’s inbound passenger market shares and the year-on-year change (%): 2006 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

The low-cost carriers (LCCs) and full-service network carriers (FSNCs) annual outbound passenger market shares (%) and the year-on-year change (%) for the period 2006 to 2020 is depicted in Figure 4. As can be observed in Figure 4, the annual trend in the low-cost carriers (LCCs) and full-service network carriers (FSNCs) annual outbound passenger market shares has followed a similar trend to the inbound passenger market shares. The full-service network carriers annual market share declined from a high of 98.26% in 2006 to a low of 33.81% in 2010. The low-cost carriers (LCCs) annual market share increased from a low of 1.74% in 2006 to a high of 66.19% in 2010. Figure 4 also shows that the low-cost carrier’s annual market share from 2016 to 2020 exceeded those of the full-service network carriers providing services in the Australia Indonesia air travel market. In 2020, the low-cost carriers (LCCs) market share was 55.19%, whilst the full-service network carriers were 44.81% (Figure 4).



**Figure 4.** The annual low-cost carriers and full-service network carrier’s outbound passenger market shares and the year-on-year change (%): 2006 to 2020.



Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

The low-cost carriers’ annual inbound passenger market share and the year-on-year change (%) for the period 2006 to 2020 is presented in Figure 5. As can be observed in Figure 5, the low-cost carriers (LCCs) increased their market share over the study period. Figure 5 shows that there was a very significant increase in market share in 2007, when it increased by 1604.54% on the 2006 level. This was due to the first full year of operations by Jetstar Airways. There was also significant market share growth in 2009 (+135.39%) due to the success of Pacific Blue. The low-cost carriers market share increased by 50.16% in 2011 and this increase came as a result of Jetstar Airways strong passenger growth in 2011. The low-cost carriers market share increased by 37.01% in 2016 following the entry of Indonesia Air Asia-X in the market. Figure 5 shows that there were three years in the study period where the low-cost carriers market share decreased on a year-on-year basis. These decreases occurred in 2017 (-7.23%), 2018 (-3.41%), and 2019 (-3.60%) (Figure 5) and reflected the increased market share of the full-service network carrier (FSNCs) in these respective years.

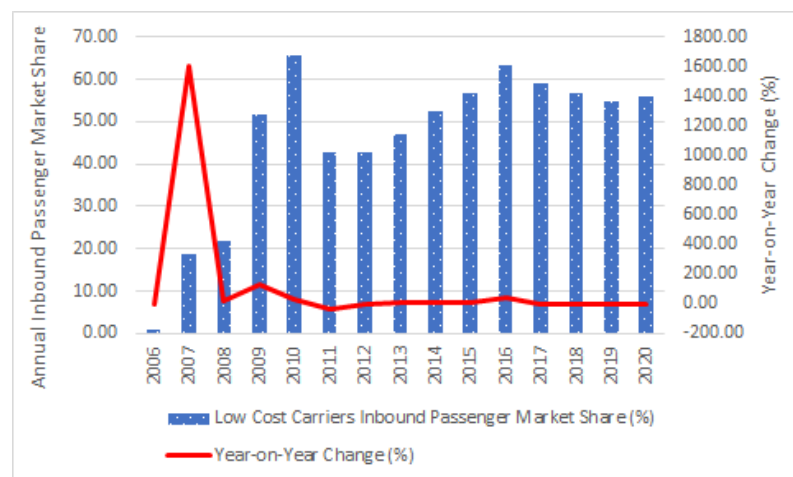


Figure 5. The low-cost carriers’ annual inbound passenger market share growth and the year-on-year change (%): 2006 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

The low-cost carriers’ annual outbound passenger market share and the year-on-year change (%) for the period 2006 to 2020 is presented in Figure 6. Since the inception of low-cost carriers (LCCs) services in the market, there have been two quite pronounced spikes in their annual market share and the associated growth rate. The first spike occurred in 2007 when the low-cost carriers (LCCs) outbound passenger market share increased by 998.85% on the 2006 level. As noted, 2007 marked the first full year of services by Jetstar Airways. The second significant spike occurred in 2009 (+125.01%) and could be attributed to the growth in both Jetstar Airways and Pacific Blue’s outbound passenger traffic. The low-cost carriers (LCCs) outbound passenger market share

increased by 37.17% in 2016. Figure 6 shows that there were four years in the study period where the low-cost carriers market share decreased on a year-on-year basis. These decreases occurred in 2011 (-34.61%), 2017 (-6.65%), 2018 (-4.05%), and 2019 (-3.60%) (Figure 5) and reflected an increase in the full-service network carriers (FSNC) outbound passenger volumes. As noted, Pacific Blue changed its business model in 2011 to that of a full-service network carrier.

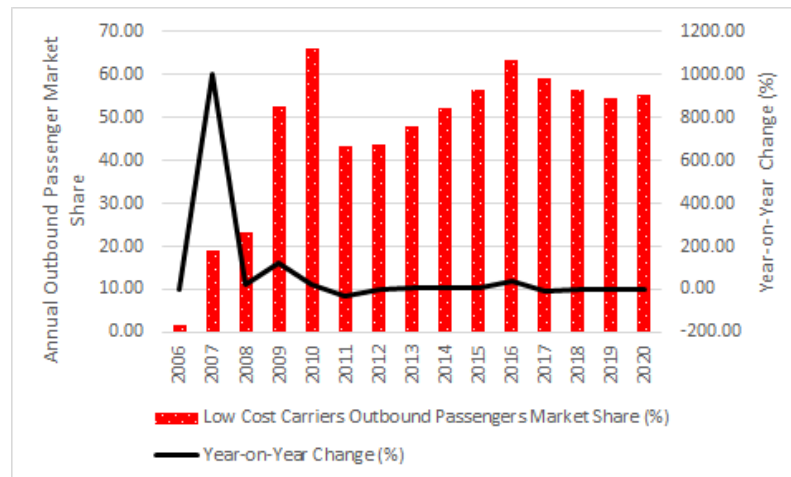


Figure 6. The low-cost carriers’ annual outbound passenger market share growth and the year-on-year change (%): 2006 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

### *Evolution of the Australia-based low-cost carriers in the Australia Indonesia air travel market*

#### *Jetstar Airways*

In 2003, Qantas Airways established Melbourne headquartered low-cost carrier (LCC) Jetstar Airways (Srisaeng, Baxter & Wild, 2014). This followed a similar strategy of full-service network carriers (FSNCs) based in North America and Europe (Homsombat, Lei & Fu, 2014). Jetstar Airways is a fully owned subsidiary of the Qantas Group. The airline commenced low fare operations in May 2004 (Collins, Hensher & Li, 2010; Knibb, 2004; Forsyth, 2018; Lück & Gross, 2016). At the launch of Jetstar Airways, Qantas announced an order for 23 Airbus A320 aircraft (Airline Business, 2004a) as the Qantas Group had decided to move Jetstar Airways into a standardized fleet of 177 seat Airbus A320 aircraft (Airline Business, 2004b).

In 2006, Qantas announced plans to launch a new low-cost international division, Jetstar International. The focus of the international division of Jetstar Airways was the market between single-class low cost and the traditional two-or-three class international airline services. In the early phase of the new airline’s operation, Jetstar’s international services involved initial flight stage lengths ranging between 6 to 10 hours. The airline began commercial services to key Asian

and Pacific leisure destinations (Knibb, 2006). Jetstar International launched its long-haul international services in November 2006 (Ionides, 2007). Bali, Indonesia has historically been Jetstar Airways most popular tourist destination (Curran, 2022).

Jetstar Airways annual enplaned inbound passengers and the year-on-year change (%) for the period 2006 to 2020 is presented in Figure 7. As can be observed in Figure 7, the airline’s annual enplaned inbound passengers have displayed an upward trajectory, increasing from a low of 2,582 passengers in 2006 to a high of 772,986 passengers in 2019. One passenger enplanement measures the embarkation of a revenue passenger, whether originating, stop-over, connecting or returning (Holloway, 2016). The overall upward trend in the airline’s inbound passenger market share is also demonstrated by the year-on-year percentage change line graph, which is more positive than negative, that is, more values are above the line than below. As can be observed in Figure 7, there was a very pronounced spike recorded in 2007 (+2167.58%) as 2007 represented the first full year of operations by the airline in this air travel market. Figure 7 also shows that there was a further significant increase in the airline’s enplaned inbound passengers in 2009, when the airline’s passenger traffic increased by 114.82% on the 2008 levels. During the study period, there were two years where the airline’s annual enplaned inbound passengers decreased on a year-on-year basis. These decreases occurred in 2013 (-0.87%), and 2020 (-77.28%), respectively (Figure 7). The significant decrease in 2020 could be attributed to the government and airline-related measures in response to the Corona-19 virus pandemic. Jetstar Airways suspended its flights to Bali in late March 2020 (Curran, 2022).

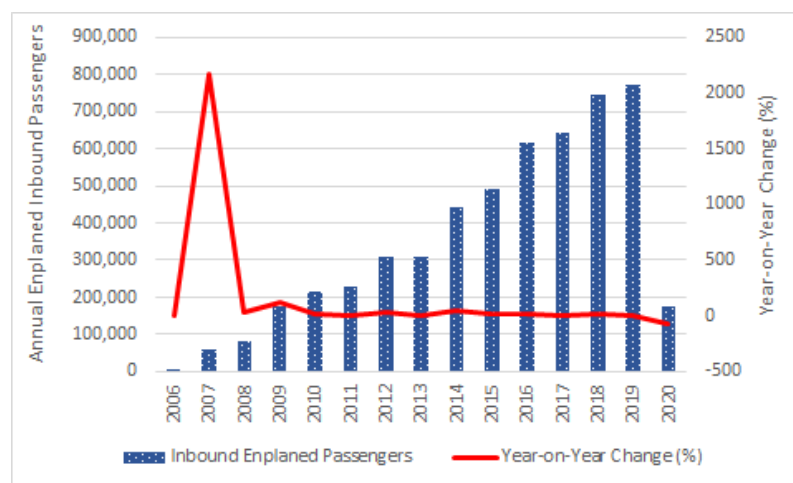
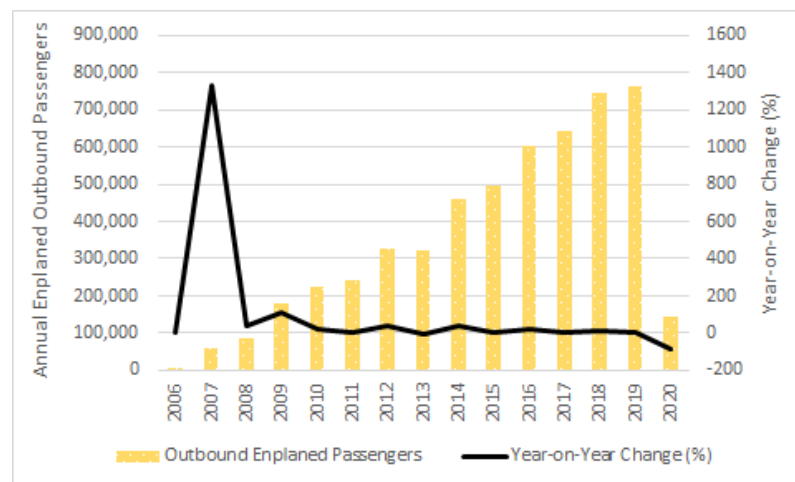


Figure 7. Jetstar Airways annual inbound passenger traffic and the year-on-year change (%): 2006 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

Figure 8 presents Jetstar Airways annual enplaned outbound passengers and the year-on-year change (%) for the period 2006 to 2020. As can be observed in Figure 8, the airline’s annual enplaned outbound passengers have also displayed a pronounced upward trajectory, increasing

from a low of 4,197 passengers in 2006 to a high of 764,286,986 passengers in 2019. The overall upward trend in the airline’s inbound passenger market share is also demonstrated by the year-on-year percentage change line graph, which is more positive than negative, that is, more values are above the line than below. There were two significant annual increases in the airline’s enplaned outbound passengers, with these increases being recorded in 2007 (+1,329.97%), and 2009 (+111.46%) (Figure 8). As noted earlier, 2007 was the first full year of operations in the Australia Indonesia air travel market. The increase in passenger volumes in 2009 reflected a very strong growth in the demand for the airline’s services in 2009, when the annual passenger volumes increased by 95, 673 passengers (Figure 8). Figure 8 shows that there were two years in the study period, where Jetstar Airways annual enplaned outbound passenger volumes declined on a year-on-year basis. These decreases occurred in 2013 (-1.38%), and in 2020 (-80.92%), respectively. The large decrease in 2020 could be attributed to the measures taken by governments and the airline in response to the Corona-19 virus pandemic.



**Figure 8.** Jetstar Airways annual outbound passenger traffic and the year-on-year change (%): 2006 to 2020.  
Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

Jetstar Airways annual enplaned inbound passenger market share and the year-on-year change (%) for the period 2006 to 2020 is presented in Figure 9. Figure 9 shows that there has been an overall upward trajectory in the airline’s enplaned inbound passenger market share, which increased from a low of 1.10% in 2006 to a high of 47.23% in 2018. There was a very significant increase in this metric in 2007, following the first full year of operations in the market, when it increased in 2007 by 1,604.54% on the 2006 level. Figure 9 shows that there was a further pronounced spike in this metric in 2009, when it increased by 48.46% on the 2008 levels. There were five years in the study period where the airline’s annual market share decreased on a year-on-year basis. These decreases were recorded in 2010 (-14.07%), 2011 (-8.62%), 2013 (-1.7%), 2016 (-6.71%), and 2019 (-4.95%) reflecting lower levels of passenger demand in these respective years

(Figure 9). Of the low-cost carrier serving the Australia Indonesia air travel market, Jetstar Airways has captured the largest inbound passenger market share.

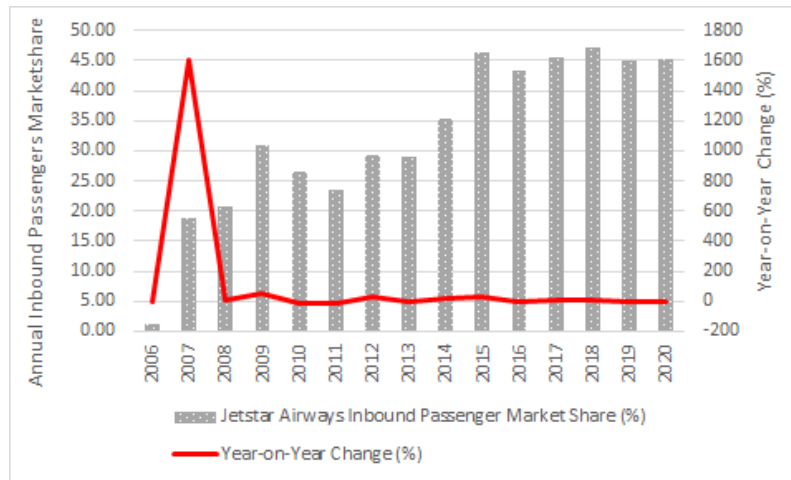
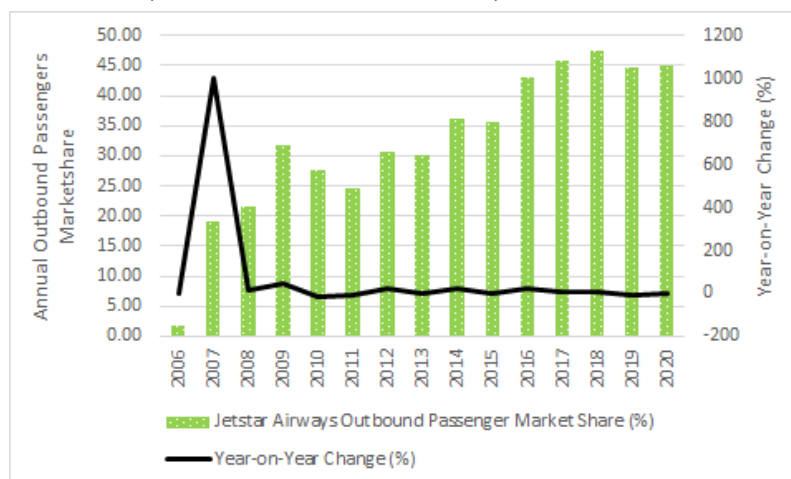


Figure 9. Jetstar Airways annual inbound passenger market share growth and the year-on-year change (%): 2006 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

Jetstar Airways annual enplaned outbound passenger market share and the year-on-year change (%) from 2006 to 2020 is presented in Figure 10. Figure 10 shows that there has been an overall upward trajectory in the airline’s enplaned outbound passenger market share, which increased from a low of 1.74% in 2006 to a high of 47.35% in 2018. There was a very significant increase in this metric in 2007, following the first full year of operations in the market, when it increased by 998.85% on the 2006 level. There were five years in the study period where Jetstar Airways annual enplaned outbound passenger market share declined on a year-on-year basis. These decreases were recorded in 2010 (-13.54%), 2011 (-8.94%), 2013 (-2.27%), 2015 (-1.05%), and 2019 (-5.49) reflecting lower levels of demand by passengers for the airline’s services from Australia to Indonesia (Figure 10). Of the low-cost carrier serving the Australia Indonesia air travel market, Jetstar Airways has captured the largest outbound passenger market share.



**Figure 10.** Jetstar Airways annual outbound passenger market share growth and the year-on-year change (%): 2006 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2008-2021); Bureau of Transport and Regional Economics (2007).

### ***Pacific Blue Airlines***

Virgin Blue Airlines began domestic services in Australia in August 2000 with two Boeing B737 aircraft. The airline initially operated 7 flights per day between Brisbane and Sydney. Following the collapse of Ansett Australia in 2001, Virgin Blue sought a capital injection. Patrick Corporation purchased a 50 per cent stake in Virgin Blue in 2002. The airline was subsequently publicly listed on the Sydney Stock Exchange in 2003 (Thomas, 2006). Toll Holdings purchasing a controlling shareholding in Virgin Blue in 2006 (Knibb, 2008a). However, in July 2008, Toll Holdings transfer its 62.7 per cent stake in Virgin Blue to the company's other shareholders (Knibb, 2008b). In March 2020, Virgin Australia filed for bankruptcy and was subsequently acquired by Bain Capital from the airline's executors (Baer, 2021; Morrell, 2021). Virgin Blue Airlines launched its Christchurch, New Zealand leisure-based airline, Pacific Blue in January 2004 (Knibb, 2005a, 2005b). On the 7th of December 2011, the "Virgin Australia" group of airlines officially launched its international airlines "V-Australia" and "Pacific Blue" under the new brand, "Virgin Australia". At the same time, the airline's business model changed towards a full-service network carrier (FSNC) (Whyte, Prideaux & Sakata, 2012). This was part of the airline's business transformation process.

Pacific Blue entered the Australia Indonesia air travel market in 2008. In 2008, the airline carried 4,152 passengers from Indonesia to Australia and 7,485 passengers from Australia to Indonesia. In 2009, Pacific Blues carried 116,958 inbound passengers, which was an increase of 2,716.9% on the 2008 levels. The airline uplifted 119,126 passengers from Australia to Indonesia in 2009, which was an increase of 1491.52% on the 2008 levels. In the airline's final year (2010) as a low-cost carrier (LCC), Pacific Blue carried 180,239 inbound passengers, an increase of 54.1% on the 2009 levels, and 175,894 passengers from Australia to Indonesia. This was an increase of 47.65% on the 2009 levels.

In 2008, Pacific Blue inbound passenger market share was 1.06%. In 2009, the airline's inbound passenger market share increased by 1839.62% to 20.56%. In 2010, Pacific Blue's inbound passenger market share grew again by 7.68% to 22.14%, which was the airline's highest inbound passenger market share.

Pacific Blue Airlines outbound passenger market share in 2008 was 1.88%. There was a very significant increase of 1,011.17% in 2009 at which time the airline's outbound passenger market share increased to 20.89%. In 2010, Pacific Blue's annual outbound passenger market share increased by 3.11% to 21.54%.

### ***Evolution of the Indonesia-based low-cost carriers in the Australia Indonesia air travel market***

#### ***Citilink Airlines***

Garuda Indonesia launched its fully owned low-cost carrier subsidiary Citilink Airlines in 2001 (de Boer, 2018). Citilink commenced services in 2001 as a low-cost shuttle service between key Indonesian cities and the airline expanded in 2012 at which time it became an independent business entity (Creedy, 2020). Citilink Airlines entered the Australia Indonesia air travel market in 2019 with the introduction of direct services from Denpasar to Perth (Curran, 2019). Citilink Airlines launched a new service from Denpasar to Melbourne's Avalon Airport in January 2020 (Creedy, 2020).

In 2019, Citilink Airlines carried 3,185 passengers on its services from Indonesia to Australia. The airline recorded a very significant growth rate of 158.49% in 2020, when it carried 8,233 passengers to Australia. Citilink Airlines uplifted 5,474 passengers from Australia to Indonesia in 2019. The airline grew its outbound passenger volumes by 13.28%, when it carried 6,201 passengers on its services from Australia to Indonesia in 2020. In 2019, Citilink Airlines inbound passenger market share was 0.18%. In 2020, the airline's inbound passenger market share increased by 1077.77% to 2.12%. Citilink Airlines outbound passenger market share in 2019 was 0.32%. There was a very significant increase of 493.75% in 2020 at which time the airline's outbound passenger market share increased to 1.90%.

#### ***Indonesia Air Asia-X***

Indonesia AirAsia-X was formed in December 2004, as a 49:51% joint venture with AirAsia, when AirAsia acquired a private airline called AW Air International. The airline was subsequently renamed Indonesia AirAsia-X and began commercial operations in 2005 (Bowen, 2019). Indonesia AirAsia-X entered the Australian market in 2010 (Bureau of Infrastructure, Transport and Regional Economics, 2011). In October 2015, Indonesia AirAsia-X commenced Airbus A330-300 services from Denpasar Airport, Bali to Sydney. The route was operated five times per week (Anna Aero, 2015). Indonesia Air Asia-X withdrew from the Denpasar to Melbourne and Sydney markets in September 2016 (Australian Aviation, 2016).

Indonesia AirAsia-X annual enplaned inbound passengers and the year-on-year change (%) for the period 2010 to 2020 are depicted in Figure 11. Figure 11 shows that Indonesia Air Asia-X annual enplaned inbound passenger volumes oscillated throughout the study period. There were four quite significant increases recorded in the study period. In 2011, the airline carried 187,597 passengers to Australia, which was an increase of 37.68% on the 2010 levels. The second spike occurred in 2013, when the airline's annual enplaned inbound passengers increased by 35.02% on the 2012 levels. In 2016, the airline uplifted 288,152 passengers, which was a 14.79% increase on the 2015 levels.

In 2019, Indonesia Air Asia-X carried 167,261 passengers on its services from Indonesia to Australia, which was an increase of 10.44% on the 2018 levels. Figure 11 shows that there were also four pronounced decreases in the airline’s annual enplaned inbound passengers during the study period. These decreases occurred in 2012 (-23.73%), 2017 (-34.85%), 2018 (-19.32%), and 2020 (-79.86%), respectively (Figure 11). The decreases in 2017 and 2018 may be attributed to the cessation of services to the key markets of Melbourne and Sydney in 2016. The 2020 decrease could be attributed to the impact of the Corona-19 virus pandemic and the associated government and airline responses.

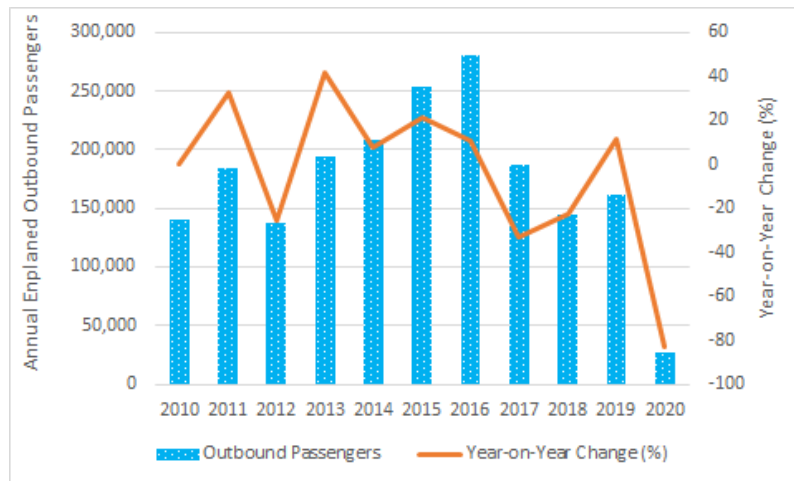


**Figure 11.** Indonesia Air Asia-X annual inbound passenger traffic and the year-on-year change (%): 2010 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2011-2021).

Indonesia AirAsia-X annual enplaned outbound passengers and the year-on-year change (%) for the period 2010 to 2020 are depicted in Figure 12. Figure 12 shows that there were four quite significant decreases in the airline’s outbound passengers in 2012 (-25.25%), 2017 (-33.3%), 2018 (-22.42%), and 2020 (-82.94%), respectively. Indonesia Air Asia-X recorded strong growth in the enplaned outbound passengers in 2011 (+32.67%) and 2012 (+41.35%) due to higher patronage levels for its services. The airline increased the number of outbound passengers carried on its services in 2016, when it uplifted 279,882 passengers from Australia, which represented a 10.57% increase on the 2015 levels. Indonesia Air Asia-X carried 161,221 passengers on its services from Australia in 2019, which was increase of 11.33% on the 2018 levels. The decision to exit the Melbourne and Sydney markets in 2016 together with the impact of the Corona-19 virus pandemic related measures had a significant impact on the airline’s outbound enplaned passengers.

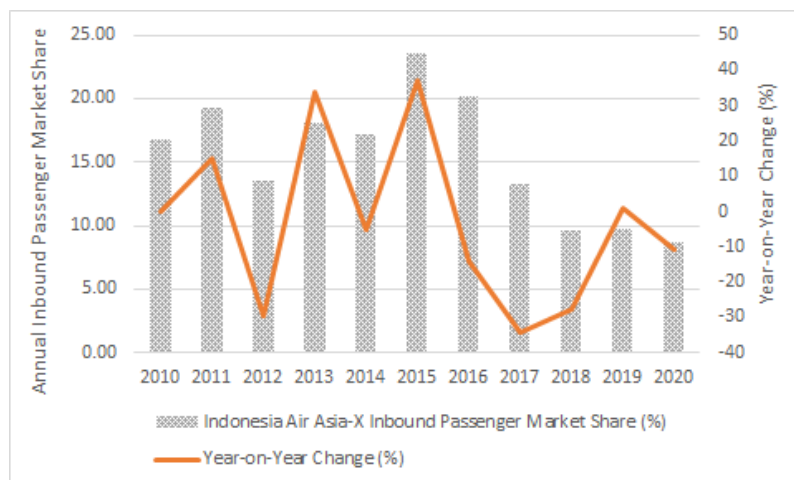




**Figure 12.** Indonesia Air Asia-X annual outbound passenger traffic and the year-on-year change (%): 2015 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2011-2021).

Indonesia Air Asia-X annual enplaned inbound passengers market share and the year-on-year change (%) for the period 2010 to 2020 is depicted in Figure 13. Figure 13 shows that the airline’s annual enplaned inbound passenger market share has fluctuated throughout the time that the airline has served the Australia Indonesia air travel market. The airline’s highest annual enplaned market share was in 2015 (23.58%), whilst the lowest annual enplaned inbound passenger market share occurred in 2020 (8.68%) (Figure 13). The single highest annual growth in this metric was recorded in 2015, when the airline’s market share increased by 37.17% on the 2014 level (Figure 13). The most significant annual decrease in this metric was recorded in 2017, when the airline’s annual enplaned inbound passenger market share decreased by 34.17% on the 2016 levels (Figure 13). This decrease could be attributed to the cessation of services to Melbourne and Sydney in 2016.



**Figure 13.** Indonesia Air Asia-X annual inbound passenger market share (%) and the year-on-year change (%): 2015 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2011-2021).

Indonesia Air Asia-X annual enplaned outbound passengers market share and the year-on-year change (%) for the period 2010 to 2020 is depicted in Figure 14. Figure 14 shows that the airline’s annual enplaned outbound passenger market share has also fluctuated throughout the study period. The airline’s highest annual enplaned market share was in 2015 (23.41%), whilst the lowest annual enplaned inbound passenger market share occurred in 2020 (8.45%). The single highest annual growth in this metric was recorded in 2015, when the airline’s market share increased by 43.61% on the 2014 level. The airline’s annual enplaned outbound passenger market share increased by 40.17% in 2013 (Figure 14). The most significant annual decrease in this metric was recorded in 2017, when the airline’s annual enplaned inbound passenger market share decreased by -33.83% on the 2016 levels (Figure 14). This decrease could be attributed to the cessation of services to Melbourne and Sydney in 2016. Figure 14 also shows that there was one year in the study period when the airline’s annual enplaned outbound passenger market share increased on a year-on-year basis. This increase occurred in 2019, when the airline’s market share increased by 2.61% on the 2018 level. Figure 14 also shows that there were two further significant decreases in the airline’s annual enplaned outbound passenger market share, which occurred in 2012 (-31.17%), and 2018 (-30.61%), reflecting lower levels of demand for its service in those years.

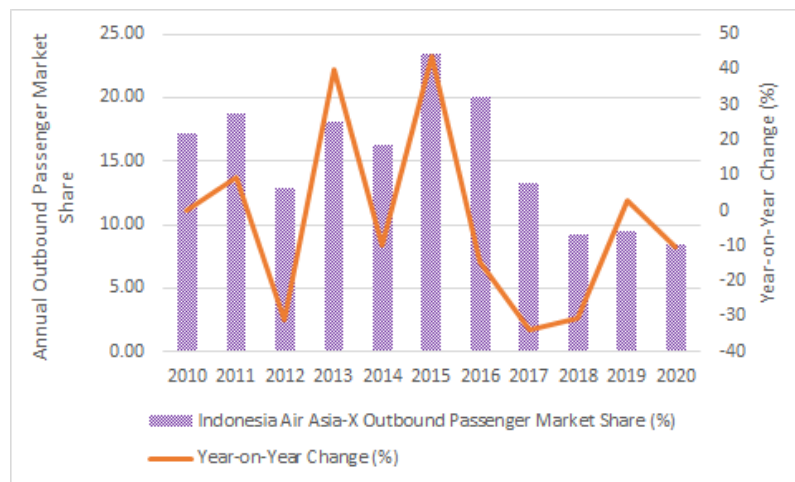


Figure 14. Indonesia Air Asia-X annual outbound passenger market share (%) and the year-on-year change (%): 2015 to 2020.

Source: Data derived from Bureau of Infrastructure, Transport and Regional Economics (2011-2021)

## Conclusions

Using an in-depth qualitative longitudinal case study research design, this study has examined the development of the low-cost carriers (LCCs) in the Australia Indonesia air travel market. The period of the study was from 2006 to 2020. The qualitative data was analyzed using document

analysis. The study was underpinned by a case study research framework that followed the recommendations of Yin (2018).

The case study found that the low-cost carriers (LCCs) annual enplaned inbound and outbound passengers grew strongly over the study period. The low-cost carriers (LCCs) annual enplaned inbound passengers increased from a low of 2,582 passengers in 2006 to a high of 943,432 passengers in 2019. Similarly, the low-cost carriers annual enplaned outbound passengers grew from 4,197 passengers in 2006 to a high of 930,981 passengers in 2019. Like their full-service network carrier counterparts, the low-cost carriers annual enplaned inbound and outbound passenger traffic declined in 2020 due to the government and airline-related measures that were imposed in response to the Covid-19 pandemic.

The low-cost carriers (LCCs) enplaned inbound and outbound passenger market shares grew significantly throughout the study period. The low-cost carriers (LCCs) annual inbound passenger market share increased from a low of 1.10% in 2006 to a high of 65.44% in 2010. The low-cost carriers (LCCs) annual outbound passenger market share increased from a low of 1.74% in 2006 to a high of 66.19% in 2010. In 2020, the low-cost carriers had an inbound passenger market share of 56.09%, with the remainder held by the full-service network carriers (43.91%). The full-service network carriers inbound market share displayed an overall downward trend, declining from a high of 98.90% in 2006 to a low of 36.56% in 2016. Similarly, the full-service network carriers outbound market share also displayed a general downward trend, declining from a high of 98.26% in 2006 to a low of 36.86% in 2016.

The case study also revealed that the decision by Virgin Australia to change the business model of its Pacific Blue Airlines subsidiary in 2011 to that of a full-service network carrier had an impact on the low-cost carriers' (LCCs) passenger traffic and market share in 2011. Another important development was the decision by Indonesia Air Asia-X to exit the major Melbourne and Sydney markets in September 2016. The case study revealed that Jetstar Airways is the largest low-cost carrier serving the market and they are followed by Indonesia Air Asia-X in second position, and Citilink Airlines in third position.

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