International Journal of Aviation Research

Volume 13 | Issue 01

Peer-Reviewed Article

The impact of Hong Kong protests on the aviation industry

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The desire to travel and the decision making regarding this has always been affected by various factors, with safety always being consistently stated as being a top concern whilst planning a trip. This can be seen as the perceived risk of the travellers towards their travel destination, such that the higher the perceived risk, the less likely they will be travelling to that destination. Hong Kong has been a popular tourist destination, as well as a financial centre that has extensive global business connections. Hong Kong International Airport (HKIA) facilitates air travel through providing an extensive connection network, with the geographical advantage of situating at the heart of Asia. However, given the ongoing social unrest in Hong Kong, where protests have escalated into violent clashes between demonstrators and the police, it is uncertain how the state as a global aviation and transfer hub will be impacted. Through comparative and descriptive analysis, the impact of Hong Kong's protests on the aviation industry is illustrated by the change in visitor numbers to, the operational statistics of HKIA and Cathay Pacific, as well as actions taken by other international airlines regarding to the situation happening there. It has been found that, while the demand for air travel has dropped and the airline has suffered from revenue loss, the operational statistics of HKIA have followed the historical trend despite the ongoing unrest.

Recommended Citation: Heiets, I. & Lam, V. (2021). The impact of Hong Kong protests on the aviation industry. *International Journal of Aviation Research*, 13(1), 1-18. Hong Kong has been recognised global aviation and transfer hub, with Hong Kong International Airport (HKIA) carrying over 71.5 passengers to approximately 220 countries in 2019. The outstanding performance in both passenger and cargo handling of HKIA is evident from the substantial range of international awards and certifications that have been bestowed upon it. In 2019, HKIA received Level 2 Accreditation from the ACI Airport Customer Experience Accreditation Programme, while it was also the first airport community to be awarded the Centre of Excellence for Perishable Logistics (CEIV Fresh) certification (AAHK, 2019b; AAHK, 2019a). However, the operation of the air travel sector has been severely affected owing to the ongoing social unrest in HK that started in June 2019. As the demand for air travel has been found to be affected by political, social and economic events (JADC, 2019), it was anticipated that the protests in HK would bring disruption to the aviation industry and cause changes in the air travel sector's operational status. The aviation industry can easily be affected by the surrounding environment, which makes it vulnerable when disruption occurs. Hence, there is a need to understand the process and linkages of the external factors from the macroenvironment that impact on operational decision-making within that industry.

Hong Kong is a popular tourist destination and considered a global financial hub, with these developments having been strongly influenced by the aviation sector. HKIA provides extensive network connectivity and high operational efficiency that has facilitated passenger and cargo movement, which in turn, has made a great contribution to the development of HK. With the continuous social and political unrest, it was expected the aviation sector would be impacted upon, thus causing the economy of HK to be greatly affected as well. This phenomenon may form a vicious cycle, in which the deteriorating environment impacts the aviation industry, and the suffering of the aviation sector would further damage the market environment of HK.

The main aim of this research is to investigate the ways in which the protests in HK have impacted on its status as a global aviation and transfer hub. Specifically, the objective is to shed light on the ways, if any, in which social and political protest movements in HK are affecting the operation of the aviation sector and contributing to different airline decisions. Based on the aim, the authors identified the following research questions: how has the protest been affecting the numbers of incoming visitors to HK and the operational status of HKIA? How has the protest been affecting the operation of international and financial statistics of Cathay Pacific Airways and the operation of international airlines and air travel sector?

Literature Review

Situated in the heart of Asia, Hong Kong has the geographical advantage of being the gateway to different parts of the world, while also serving as a bridge between Mainland China in facilitating trade and passenger movement. This geographical advantage has been for successfully making HK into a popular tourist destination as well as a financial hub (Jin, 2011). With HK's great proximity to many Asian-Pacific countries, it has been a popular tourist destination for the short-haul market, with many passengers making repeat visits (Yoo et al., 2004). Moreover, those in Western countries in the long-haul market see HK as an appealing location to experience Asian culture, which could be their 'once in a lifetime' experience (Yoo et al., 2004). Many consider HK as a gateway for travelling to other Asian countries, with around

16% of international travellers travelling on to Mainland China through the territory, for example (Tsui et al., 2018).

Mainland China is also one of the largest markets for air travel, which takes up to 22% of the total passenger throughput at HKIA (Tsui et al., 2018). It was expected that revenue generated from Chinese tourists would become a major source of income of HK, given the rapid economic growth of the mainland. This was seen as supporting more Chinese residents engaging in sightseeing, while the ease of Mainlanders in travelling to HK was facilitated by the introduction of Individual Visit Scheme that allowed travellers from Mainland China to visit HK on an individual basis (Cheng, 2012; Fung et al., 2006). Furthermore, HK has close business links with companies in Mainland China, with the majority of Chinese visitors being repeat business travellers. All travellers are recognised as a major source of foreign-exchange and tourism-related activities (Tsui et al., 2018; Yoo et al., 2004). Apart from inbound visits and tourism, HK people have a relatively high desire to conduct outbound tourism to other regions and countries. The demand for outbound tourism for the HK people has been steadily growing in the recent decades, for both short-haul and long-haul flights (Law et al., 2011; Mastercard, 2017). It is the case that many travellers favour destinations at a longer distance to what are seen as exotic places, whilst others choose destinations that are closer, thus reducing both the time and financial cost (Yoo et al., 2004).

The air travel sector has contributed substantially to the economic development of HK, in particular with regard to financial services, trading and logistics, tourism as well as producer and professional services, which are the four pillar industries, which rely heavily on the efficient flow of people and goods (AAHK, 2018). According to a report by IATA, the air travel sector makes a great economic contribution to HK, constituting up to 10% of GDP (IATA, 2018). HK's aviation sector was affected by several events in the past two decades, in particular, there was the outbreak of disease in the form of SARS in 2003 and swine flu in 2009 as well as the global financial crisis in 2008. During these times, the number of passengers experienced a significant drop, but demand rebounded shortly after these crisis had ended (Siu and Wong, 2004, Chon et al., 2010).

Whilst HK has been a major hub for both passenger and cargo in the Asia-Pacific Region, HKIA has been facing competition from regional airports, especially owing to the rapid growth of the aviation sector in Mainland China. In particular, Shanghai has been recognised as the most significant national and international cargo hub in China. Moreover, the establishment of the new Pudong Airport equipped with substantial air-cargo handling facilities and capacity, demonstrated its interest in building an air-cargo business for the city (Zhang, 2003). The distance from Shanghai Pudong International Airport (PVG) to Hong Kong International Airport is 1,255 km. Regarding the air-cargo business in HK, these activities at HKIA are dominated by 'gateway' business, where the cargo either originated from or was destined for the manufacturing region in Southern China; places connected to Hong Kong by sea, land or other transport links (Zhang, 2003). Air-cargo for businesses such as these accounts for over 70% of the total trade of HK (Zhang, 2003, Fung et al., 2006). If more efficient air-cargo business would be greatly

affected. Shanghai Pudong International Airport (PVG) can be a new cargo hub for business in the Asia-Pacific region and compete with Hong Kong International Airport.

The perception of risks by passengers to their travel plans will affect their travel decisions and repurchase intentions regarding airline services. Among different travel risks, physical risk, political risk and performance risk are the three main considered as critical in affecting the performance of the airlines (An et al., 2010). Physical risk refers to the possibility of being physically harmed during the travel, whilst political risk pertains to the perceived level of political instability at the travel destination and the performance risk refers to the perceived degree of the difference between the expected service quality and the actual cost (An et al., 2010). Physical and performance risk have been found to affect the satisfaction level of travel significantly, while political risk impacts on repurchase intention (An et al., 2010; Sönmez and Graefe, 1998).

Safety remains as the greatest concern affecting the travel decisions of passengers (Quintal et al., 2010). It was found that frequent and experienced travellers as well as visitors that had previous experience in visiting to a destination will have less concern in the degree of safety and that they will perceive lower physical and political risk regarding their travel than other travellers. Ingram et al. (2013) elicited that other visitors, especially family travellers, will opt for travel destinations that they think are safer (Floyd et al., 2004, Sönmez and Graefe, 1998).

However, some budget travellers would consider the conditions of having social and political instability at the destinations as extra opportunities to travel at a lower cost. Several studies investigating the travel behaviour of international tourists discovered that some travellers believed that when the destination was under threat from social and political instability, airlines would reduce their airfares due to reducing demand, while travel associated costs, such as hotel accommodation, would also be slashed significantly, thus creating opportunities for cheap leisure travel (Ingram et al., 2013; Ivanov et al., 2017, Saha and Yap, 2014).

The protests in HK started with a peaceful march opposing the introduction of the Fugitive Offenders and Mutual Legal Assistance in Criminal Matters Legislation (Amendment) Bill 2019, which would allow for the extradition of wanted criminals to Mainland China, a provision not available at that time. Protesters believed that, if the extradition bill were passed, it would undermine HK's judiciary and legal system, thus harming the high level of autonomy of the city. The protests soon accelerated after clashes between protestors and the police force became violent, which included the use of petrol bombs by the protestors, while the police fired live bullets (BBC, 2019b). The social unrest turned some universities into battlefields and caused havoc in many districts. As a result, in August 2019, the Australian Government told visitors to exercise a "high degree of caution" when travelling to Hong Kong (Choi, 2019).

The protests impacted significantly on the operation of HKIA in August 2019, where the protesters blocked access to the airport and paralysed it for a several days, causing hundreds of flights to be cancelled (BBC, 2019a). After the protests had been temporarily held back, the

airport only allowed airport staff with valid identification documents and passengers with a valid air ticket or boarding pass departing in the next 24 hours to enter the terminal building (Allen, 2019).

According to the presented information in this section, we can conclude that the protests in Hong Kong impacted significantly not only the HKIA operation but their passenger travel decisions (An et al., 2010, Quintal et al., 2010).

Methodology and data collection

For the research, a quantitative approach was adopted, for which the operational status of HKIA and HK's flagship airline, Cathay Pacific Airways, are compared regarding the period of the protests with the same time period from the previous year. Comparative and descriptive design were used in analysing the situation, which provides a conceptual overview of changes on the local scale, covering the operational status of HKIA and Cathay Pacific Airways. Moreover, the descriptive analysis is utilised to explain the impact of the protests on the global scale in terms of illustrating the actions taken by other international airlines to adapt to the changing environment and consideration of some predictions made by market analysts. The results are presented with the aid of charts and tables, to display the major findings in a systematic way. To illustrate the impact of HK's protests on the aviation sector, the data presentation is divided into two parts, these being, first, the situation at the local scale in relation to HKIA and Cathay Pacific's operations and second, how the protests have affected the sector on a global scale, through explaining the measures taken by international airlines serving HKIA in regard to the unrest. Monthly statistics have been taken for a fixed period of time from April to March (12 months), which covers the major timeline of the protests that started to intensify from June 2019 onwards and which are still ongoing.

Analysis

At the Local Scale

Data on visitor numbers to HK was obtained from the Hong Kong Tourism Board (HKTB), the official website of which has published passenger statistics for a period of 12 months (Table 1 and Fig. 1).

Month	Total number of visitors 2018-2019 (passengers)	Total number of visitors 2019-2020 (passengers)	% change (2018/2019)	
April 2018	5,301,602	5,577,201	5.19	
May 2018	4,953,003	5,916,541	19.45	
June 2018	4,741,779	5,143,734	8.47	
July 2018	5,461,222	5,196,969	-4.83	
Aug 2018	5,895,951	3,590,571	-39.10	
Sep 2018	4,718,536	3,104,049	-34.21	
Oct 2018	5,884,512	3,311,571	-43.72	
Nov 2018	5,995,027	2,646,127	-55.86	

Table 1. The number of visitors entering HK in 2018-2019

Dec 2018	6,586,268	3,191,466	-51.54
Jan 2019	6,784,406	3,207,802	-52.71
Feb 2019	5,589,628	19,9123	-96.43
March 2019	5860346	82,285	-98.59

It can be seen that HK experienced a significant drop of visitors after the intensification of the protests. Before the occurrence of the social unrest, total visitors to HK were increasing and there had been positive growth compared with the same period from the previous year. While the mild drop between April and June was consistent with the trend obtained in the previous period, between the months July and August, when there should be an increase in visitor numbers, as shown by historical trends, the actual visitor numbers kept dropping, and the number of visitors was not restored and be different from the previous year.



Figure. 1. Graph comparing the visitor numbers to HK in 2018-2020

Moreover, the number of visitors continued to fall significantly after August, which varied from a reduction of between 40% and 55% up until January 2020. Whilst a massive reduction in visitor numbers, which almost reduced them by 100%, has been recorded since February 2020, the major reason for this can be attributed to the outbreak of coronavirus, rather than the impact from the ongoing protests.

Statistics of the operational status of HKIA were retrieved from the Civil Aviation Department (CAD) of the Hong Kong Government at the official website (CAD, 2020). The data from HKIA were divided into three categories: number of aircraft movements (Fig. 2), number of passengers (Fig. 3) and the tonnes of air-cargo handled (Fig. 4). While negative growth of both aircraft movements and passenger numbers was registered from June 2019 onwards, which was the point at which the protests intensified, the air-cargo figure had experienced negative growth even before this.





Figure. 2. Number of Aircraft Movements at HKIA in 2018-2020

Fig. 2 illustrate the change in the number of aircraft movements at HKIA, which started to fall after July 2019. The drop between August and September was expected, being consistent with the previous trend. After September, the number of aircraft movements actually experienced a similar trend as the same period for the previous year, just in a reduced amount. That is, this shows that aircraft movement at HKIA, even during the operating process had followed the historical pattern, just in a smaller capacity.



Figure. 3. Number of passengers passing through HKIA in 2018-2020

Similar to the results on aircraft movement, the number of passengers decreased from July onwards, but still followed the historical pattern until January, when there was a sudden drop (Fig. 3). Moreover, as with the pattern in aircraft movement, there was a rebound after February in passenger numbers. However, both aircraft movement and passenger numbers decrease sharply in 2020 and thus, it may be safe to assume that the drop in passenger numbers was directly linked to the reduced aircraft movement.



Figure. 4. Graph comparing the amount of air-cargo handled at HKIA in 2018-2020

Different to the aircraft movement as well as passenger numbers, the amount of air-cargo during the first month of the data set (April) was lower than in the same month for the previous year (Fig. 4). Whilst the amount of air-cargo remained low during all months of the fixed period, the pattern of ups and downs still followed the historical pattern, which was consistent with the results found for aircraft movement and passenger numbers.

Data from Cathay Pacific Airways on their operational status was obtained from their monthly report from their official website, as well as the results in the annual report. The presentation order of data is passenger related statistics, cargo related statistics, the general financial results and the breakdown of the total revenue.

Month	Total RPK	% change in	Total ASK	% change in	Passenger	Change in load
		RPK		ASK	load factor	factor (2018/2019)
		(2018/2019)		(2018/2019)		
Apr 2018	11,324,591	7.3	13,493,711	8.1	83.90%	-0.6
May 2018	11,190,050	7.8	13,495,182	6.6	82.90%	0.9
Jun 2018	11,900,997	9.1	13,731,593	7.3	86.70%	1.4
Jul 2018	12,600,590	6.4	14,642,473	7.2	86.10%	-0.6
Aug 2018	11,501,041	-3.6	14,392,234	5.1	79.90%	-7.2
Sep 2018	9,926,480	0.1	13,480,282	9.8	73.60%	-7.2
Oct 2018	10,633,529	-2.7	13,709,615	2.4	77.60%	-4
Nov 2018	9,934,989	-5.3	12,409,574	-1.5	80.10%	-3.2
Dec 2018	11,721,757	0	13,795,313	-1.3	85.00%	1.2
Jan 2019	11,830,575	-1.8	13,962,739	-0.3	84.70%	-1.3
Feb 2019	4,735,301	-54.1	8,924,428	-29.3	53.10%	-28.6
Mar 2019	1,776,537	-84.3	3,605,276	-73.2	49.30%	-34.6

Table 2. Passenger related operational statistics of Cathay Pacific Airways

Passenger related indicators includes Revenue per kilometre (RPK) that show how much profit was obtained from passenger travel, Available Seat Kilometres (ASK) that indicate the

passenger capacity and passenger load factor that describes the utilization of capacity provided (Table 2).

It was found that both RPK and ASK remains in positive growth until July, which at this point the passenger load factor had started to decrease slowly. RPK continue to reduce after August, while ASK started to decrease in November after a few months of continuous negative growth of the RPK. On the other hand, passenger load factor was reducing continuously with no sign of increasing, which indicate an over-supply of passenger seats.

Therefore, the reduction of ASK shall be a decision driven by the reducing ASK and the passenger load factor, which helped the airline to optimize their operation. For example, it was highlighted in the annual report that due to the continuous social unrest that result in a lower demand, Cathay Pacific Airways had reduced the flight frequency to Colombo during the winter season(Cathay Pacific, 2020a).

Month	Total	% change in	Total AFTK	% change in AFTK	Cargo and	Change in
	RFTK	RFTK		(2018/2019)	mail load	load factor
		(2018/2019)			factor	(2018/2019)
Apr 2018	907,893	-7.3	1,451,844	0.9	62.50%	-5.5
May 2018	940,209	-2.6	1,471,533	4.6	63.90%	-4.7
Jun 2018	928,056	-9.7	1,477,548	1.5	62.80%	-7.8
Jul 2018	952,088	-9.4	1,508,183	0.8	63.10%	-7.2
Aug 2018	925,497	-11.6	1,520,626	-0.6	60.90%	-7.5
Sep 2018	960,548	-5.3	1,467,109	0.1	65.50%	-3.7
Oct 2018	1,017,11	-5.9	1,496,317	-2.5	68.00%	-2.4
Nov 2018	998,641	-5.8	1,455,051	-3.8	68.60%	-1.5
Dec 2018	979,537	-5.7	1,475,946	-3.8	66.40%	-1.3
Jan 2019	855,433	-5.4	1,422,019	-3.2	60.20%	-1.8
Feb 2019	698,019	-6.9	1,048,778	-15.1	66.60%	5.8
Mar 2019	743,757	-29	960,608	-37.2	77.40%	9

Table 3. Cargo related operational statistics of Cathay Pacific Airways

The indicators for cargo and mail service include the Revenue Freight Tonne Kilometres (RFTK) that refers to the profit made, the Available Freight Tonne Kilometres (AFTK) pertaining to the supply of the service, and the load factor, indicating the degree to which the available capacity is being used. RFTK and the load factor were in negative growth from the start of the selected time period, while AFTK just started to reduce in August, thus showing a similar pattern to that for passenger statistics (Table 3).



Figure. 5. Graph summarising the change in operational statistics of Cathay Pacific Airways in 2019/2020 compared to the same month in 2018/2019

Monthly statistics from Cathay Pacific Airways show that the airline first had reduced revenue generated per kilometre, with a falling load factor, which indicates an over-supply (Fig. 5.). The airline then reduced its service capacity, as shown by the reduction in ASK and AFTK. Both passenger and cargo statistics reveal a similar pattern, but the revenue generated from passenger service still had a positive growth before July, whilst that for cargo service had experienced reduced revenue since the first month of the time period.

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Results	Measure	2019	2018	Changes
Revenue	HK\$ million	106,973	111,060	-3.75%
Profit attributable to the shareholders of Cathay Pacific	HK\$ million	1,691	2,345	-27.9%
Airways				
Earnings per share	HK cents	43.0	59.6	-27.9%
Dividend per share	HK\$	0.18	0.30	-40.0%
Profit margin	%	1.6	2.1	-0.5%pt

Table 4. Annual Financial Statistics of Cathay Pacific Airways, (Cathay Pacific (2020a)

Annual revenue of the airline is provided in the annual report of Cathay Pacific Airways, for which all aspects of revenue were reduced compared to the 2018. Whilst the airline was doing well in the first half of 2019, at the second term which the airline usually would have generated a greater revenue than the first half-year based on historical trend, the airline group had reported an attributable loss of HK\$434 million (Table. 4). In the meantime, the airline reported an attributable profit of HK\$675 million in the first half of 2019, while an attributable profit of HK\$1,253 million was obtained for the second half of 2018 (Cathay Pacific, 2020a). Inbound travel dropped significantly and the desire to purchase premium travel was low due to the ongoing protests (Cathay Pacific, 2020a).

Table 5. Annual revenue breakdown of Cathay Pacific Airways, (Cathay Pacific, 2020a)

	Group			Cathay Pacific and Cathay Dragon		
Revenue	2019	2018	Changes	2019	2018	Changes

	HK\$ million		%	HK\$ n	%	
Passenger services	73,985	73,119	+1.2%	72,168	73,119	-1.3%
Cargo services	23,810	28,316	-15.9%	21,154	24,663	-14.2%
Other services and recoveries	9.178	9.625	-4.6%	8,284	8,730	-5.1%
Total revenue	106,973	111,060	-3.7%	101,606	106,512	-4.6%

When breaking down the revenue of Cathay Pacific Airways, it can be related back to the analysis on passenger and cargo services in the previous part. Whilst all services recorded negative growth, the reduction in the total revenue from passenger service was minimal (1.3%), which the low reduction may be mostly compensated by the revenue generated from the first half of 2019 (Table 5). The cargo service recorded the highest reduction, with a revenue decrease of 14% in 2020, but as illustrated previously, RFTK was lower from the beginning, when the social unrest had not even started.

The Global Scale

The protests in HK have not only been affecting local air travel. Being one of the major global aviation and transfer hubs, the unrest has also impacted on the airlines connecting HKIA.

In response the intensification of the protests in HK, some international airlines, such as Qantas and United Airlines, reduced their flight capacity and frequency to HKIA. Qantas announced a US\$17.1 million hit on the half-yearly profit on its HK route due to the ongoing strife. This resulted in the decision to reduce the flight capacity on its HK connection routes by about 7%, mainly for the economy class (Lee, 2019).

Virgin Australia was investing and had great prospects of opening new routes connecting with HK, as shown in the annual report of the airline in 2018 (Virgin Australia, 2018), but the company had to withdraw its HK connecting routes. Specifically, Virgin Australia announced the suspension of its Hong Kong-Melbourne route from 11 Feb 2020, while the Hong Kong-Sydney would be ceased from 2 March 2020. The decision was made, with the reason being given that HK was no longer a commercially viable route to operate under the current circumstances (Virgin Australia, 2020).

The Chicago-based United Airlines, cut capacity, lowered the flight frequency and suspended some of its connecting routes to HK. In 2019, the airline suspended the Chicago and Guam route, while switching to smaller aircraft, from Boeing 777-300ERs to 777-200ERs, with fewer seats, for the services between San Francisco and New York Newark to Hong Kong (Martin, 2019). For the Newark services, the flight frequency was also reduced from daily services to three times a week (Lee, 2020).

Emirates, the Dubai-based airline, also reduced their flight capacity to HK. Regarding the three daily flights connecting Dubai and HK, one of those flight was to be run with a Boeing 777-300ER, with the Airbus A380 being replaced, starting from 12 December 2019 (Singh, 2019). A380 is like a symbol for Emirates as the large aircrafts have enough space for various onboard amenities that allow for the provision of a premium travel experience. However, with the ongoing unrest, the airline had found it difficult to fill the huge capacity of the A380, which led to the decision to changing to a smaller twin-engine aircraft (Singh, 2019).

The largest airline in Japan, the All Nippon Airways (ANA), reduced its capacity through aircraft downgrade and lower flight frequency on three routes connecting HK. The daily service from Tokyo Narita was decreased from two to one, while the aircraft was downgraded from a Boeing 787-9 aircraft with 215 seats to a 767-300ER aircraft with 202. Services between Nagoya and Hong Kong were suspended, while the aircraft used for operating flights between Osaka Kansai and HK were changed from the Boeing 767-300ER with 202 seats to the Airbus A320 with 146 seats (Nukina, 2019) (Fig. 6).



Figure. 6. Summary on actions taken by different major international airlines amid the HK protest **Discussion**

The main aim of this research was to investigate the ways in which the protests in HK have impacted on its status as a global aviation and transfer hub.

From the comparative and descriptive analysis performed in the previous part of the report, the authors investigated how protests in HK have impacted on Cathay Pacific Airway and Hong Kong International Airport operations. Based on research questions, the following findings of the research have been identified. Firstly, the number of visitors to Hong Kong was greatly reduced after July 2019, during the intensification of the protests. Secondly, both aircraft movement and passenger numbers dropped in HKIA after June 2019, which fits with the timeline regarding the protests intensifying. However, air-cargo was already in negative growth before the start of the unrest. The protest did reduce the capacity, but did not alter the pattern of the activities. That is, most of the data from HKIA still followed the same pattern of the previous year, where the trends of increase or decrease between the different monthly periods were the same, just lower in number. Moreover, the flagship airline of HK, Cathay Pacific Airways, reported an attributes loss of HK\$434 million in the second half of 2019. The annual financial results registered a drop in all elements of the company's revenue. The statistics of Cathay Pacific Airways on its cargo and mail service aligned with the finding of point 2, whereby the revenue generated was already lower compared to the previous year at the start of the investigated fixed time period, i.e. before the protests had commenced. In addition, many of the international airlines serving at HKIA reduced their capacity either through aircraft downgrade or reducing flight frequency, while some routes were even axed owing to the fall in demand.

The reduction of visitors to HK from July 2019 was in line with the expectation that

political stability would have a negative impact on tourism, which was evident in the cases of Thailand and Ukraine, which suffered from social unrest in the recent years, thus affecting tourism in those countries (Ingram et al., 2013; Ivanov et al., 2017).

The drop in visitor numbers further strengthens the claim that safety is a key consideration affecting holiday planning and visits, which has been highlighted in several studies (Sönmez and Graefe, 1998; Floyd et al., 2004; Quintal et al., 2010). With the situation of political and social instability, the passengers would have perceived higher risks for their travel and thus, would choose a destination that they thought would be more secure.

All in all, whilst airlines were lowering their capacity connecting to HK, which can be seen in the operational status of Cathay Pacific Airways, whereby it reduced both passenger and cargo capacity from November 2019, along with the different international airlines downgrading their connecting aircraft with fewer seats, the operational statistics of HKIA had already experienced a reduction in both passenger and aircraft movement since August 2019. The result from HKIA had then provided evidence in explaining the reason for the international airlines in reducing their capacity, which the reduction in operational statics of the HKIA had to represent a lower travel demand.

Limitations and Recommendations

The research scope of this report has been limited to investigating the impact of the protests in HK on the aviation sector on the local scale, with only small proportion in highlighting the effects in the global scale. Also, the data for this research are all secondary in nature, being obtained from existing literature, which may not represent the unique situation happening in HK. Whilst the research has involved analysing the impact of the protests on the aviation industry, what the future situation would be, if the unrest ended or were to be prolonged, cannot be ascertained from these data. With one study suggesting that countries with a strong image would only be affected by political instability for a limited period of time (Ingram et al., 2013). As HK has been a popular tourist destination for both short-haul Asia-Pacific Markets and long-haul European Markets, this advantage may help it to overcome the effect of negative publicity from the social unrest.

To provide more credible and comprehensive results, primary data should be collected that clearly uncover the unique situation of HK. This includes collecting travellers' opinions on whether they would travel there, if the protests are sustained how the unrest is impacting on their travel plans and travel desire.

Future Research

Future research could be focused on the regional market of HK's air travel sector, in particular, investigating how the relationship between Hong Kong and Mainland China is being affected by the protests and how this would it impact on the aviation industry. From the reviewed literature, it is already clear that Mainland China is one of the major markets for HKIA in both passenger and cargo transport (IATA, 2018, AAHK, 2019a).

Whilst economic growth on the Mainland is expected to facilitate tourism development in HK further (Cheng, 2012), its rapid development of the air travel sector has started to become a competitor threatening the status of HKIA as the gateway to Mainland China for the rest of the world (Zhang, 2003). Therefore, it would be worth researching whether the relationship between HK and the Mainland is likely to continue deteriorating, with HKIA being at risk of losing one of its major market sources and thus, having its air travel sector substantially damaged.

Conclusion

The authors conclude that the protests in HK would appear to have affected the status of HK as being a global aviation and transfer hub, which can be seen from the declining trend of incoming visitors as well as the negative operational and financial impact on HKAI, Cathay Pacific Airways and other international airlines.

The number of travellers entering HK has been decreasing at a steady trend since the intensification of the protests. Leisure travellers, especially family groups, have expressed how safety greatly influences their travel choice and hence, the situation in HK of violent social unrest would have led to perceived higher risk associated with travel there. With around half of the visitors travelling to HK being tourists, the reduction the desire to travel there was inevitable, with evidence seen in the fall in passenger numbers and this is bound to have a negative impact the operations of HKIA.

However, whilst the protests in HK have clearly resulted in a reduction in aircraft movement and passenger numbers, the amount of cargo handled would appear to have less affected. That is, whilst both aircraft movement and passenger numbers started to drop in August 2019, the amount of cargo handled was already at a lower capacity than for the same period in the previous year when the troubles began and did not show any marked further fall that could be attributed to the unrest subsequent to this. The decrease number of passenger flow had matched with the trend of the decreasing in the total visitors to HK, representing the drop in passenger demand in air travel. However, by comparing the three categories of the operational statistics, this has shown that the operational status still followed the historical pattern, which suggested that the socio-political protest had a minimal effect in breaking the original performance pattern and made it easier to predict for future trends.

For HK's flagship airline Cathay Pacific Airways, the operational statistics were generally in alignment with the results obtained from the analysis of HKIA, with the airline reporting a lost in the second half of 2019, when the protests intensified. The operational statistics of both passenger and cargo services have shown that there was first a drop in the revenue generated (RPK and RFTK), which was then followed by decreasing capacity (ASK and AFTK). This sequence of events suggests that the capacity, which pertains to the supply of the service, was driven by the revenue that indicated the demand. Also, the annual financial results have shown a decrease in revenue across all aspects, with that for the cargo and mail service being greater than for passenger services. This result matched with the cargo statistics from HKIA and Cathay Pacific Airways itself, which cargo and mail service were already at a lower capacity than the previous year at the start of the investigated fixed period. The protests in HK not only affected the air travel sector locally, but also, other international airlines serving HKIA. Given the unstable social and political environment reduced the desire for leisure travel, future bookings destined for HK dropped substantially, which resulted in an over-supply of passenger seats. To address this, most of the major international airlines, such as Qantas, United Airlines, Emirates and ANA, reduced the capacity of their connecting services to HK through downsizing aircraft and reducing the flight frequency. Some routes were even stopped, which has further restricted the capacity for HKIA to provide extensive network connections all over the world.

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