

A STUDY ON THE TRANSFORMATION OF UAE'S AIR TRANSPORT INDUSTRY FOCUSING ON ITS CONTRIBUTION TO UAE'S ECONOMY

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ABSTRACT

The UAE has made tremendous efforts to develop the air transport sector and the result of this is that today it occupies 3rd place in terms of the Air Transport Infrastructure out of 141 countries assessed by World Economic Forum in its Travel & Tourism Competitiveness Report 2015. The UAE's air transport infrastructure is characterized by the existence of seven international airports and a number of operating airlines and delivery of high quality services. The UAE air transport infrastructure is consistently known for its innovative and progressive developments and maintenance of an enviable safety record. The study finds that the policy of Open skies agreement followed by General Civil Aviation Authority (GCAA) has allowed unrestricted frequencies, capacity and types of aircraft, whether owned or leased, to be operated by the Designated Airlines of each country in any type of service (passenger or cargo) on the routes between that country and the UAE. Using secondary data this paper aims to highlight the major achievements of the UAE in the aviation sector and explore the contribution of aviation industry on employment generation and GDP of the global economy in general and UAE economy in particular.

Keywords: Aviation, UAE Economy, UAE Airports, UAE based Airlines and GDP

INTRODUCTION:

Aviation industry has been instrumental in globalisation by connecting the global countries through its fast transport network. By providing quick access to global markets it has helped in easing the international travel, international trade, foreign investments and tourism. Impact of aviation sector on the global economy is massive. According to Oxford Economics (as cited in Aviation Beyond Borders, 2016) in 2014 it generated \$ 2.7 trillion, which is 3.5 per cent of global GDP. Had aviation been a country, it would have ranked 21st largest economy in terms of GDP, similar in size to Sweden or Switzerland (Oxford Economics as cited in Aviation Beyond Borders,2016). In the same year Air transport generated employment for 62.7 million people in the world (Oxford Economics as cited in Aviation Beyond Borders,2016). Total direct employment in the sector was 9.9 million (Aviation Beyond Borders, 2016). Another noteworthy fact is that the jobs in this sector are 3.8 times more productive than other jobs (Oxford Economics as cited in Aviation Beyond Borders, 2016). In 2014 3.3 billion passengers took the services of the world airlines and in 2015 the number rose to 3.57 billion (ICAO and IATA as cited in Aviation Beyond Borders, 2016). Air transport is widely used in the transportations of very high valued and also time sensitive items like perishable products. In terms of the volume of trade shipments its share is less than one per cent; but it is around 35 per cent by value (Aviation Beyond Borders, 2016).

On January 1st 1914 the first ever scheduled flight with a paying passenger was launched. It was a historic moment as it marked an event that changed the way the world travelled. In the last 20 years the global connectivity city –pairs have now almost doubled and exceeded 16,600 in 2015, 350 more than in 2014(IATA’s Annual Review, 2016). Over that same period, average airfares have more than halved (after adjusting for inflation), which has been a major stimulus for trade, tourism, and Foreign Direct Investment associated with global supply chains. There is massive increase not only in terms of the number of passengers but also in terms of the profits of the airlines. 2014 was the fifth successive year of profitability it registered an aggregate net profit of \$16.4 billion. The year 2015 generated \$35.3 billion net ,after tax profit, which was more than double of what was generated in 2014(IATA’s Annual Review, 2016). As can be seen from the table 1, strong growth is forecasted in the aviation industry 20 years from 2014. Forecast for the year 2034 expects an increase of more than 100 per cent for many of the indicators of the aviation industry.

Table 1: Values of the major indicators of the aviation industry for the year 2014 and forecast for 2034*

	In 2014	In 2034 (forecasted)
Passengers	3.3 billion	6.9 billion
Economic Impact	\$ 2.7 trillion	\$ 5.9 trillion
Jet Aircraft in Service	21633	43,560
Job Supported	62.7 million	99.1 million
Passenger Kilometres Flown	6.2 trillion	12.8 trillion

* Oxford Economics forecast for jobs and GDP. ATAG forecast for passengers and RPKs, based on Boeing and Airbus forecast data. Boeing forecast for jets based on a global traffic growth forecast of 4.9% per annum

Source: Oxford Economics as cited in Aviation Benefits beyond Border ATAG July 2016

RESEARCH OBJECTIVES:

The study has been conducted aiming to achieve the following objectives:

- To show the contribution of aviation industry on employment generation and GDP of the global economy.
- To discuss the major infrastructural developments that took place in the air transport sector in the various Emirates of the UAE.
- To analyse the direct, indirect, induced and catalytic (tourism) impact of the aviation sector on the job creation and GDP generation in the economy of the UAE.
- To discuss the scope of the aviation sector in future in the economy of UAE.

RESEARCH METHODOLOGY:

This study is descriptive in nature. Secondary data has been used to project the overall contribution of aviation industry on the global economy in general and on the economy of the UAE in particular; and to highlight the major development done and achievements made in this sector. Data for this study has been taken from the official websites of General Civil Aviation Authority (GCAA), Various airport authorities such as Abu Dhabi Airports Company (ADAC) and Dubai Airports Company (DAC), airlines like Etihad Airways, Emirates

Airlines etc., various reports such as Air Transport Action Group's (ATAG) Aviation Benefits beyond Borders April 2016, various reports of International Air Transport Association (IATA), UAE's leading newspapers and other sources on the internet.

MILESTONES IN THE HISTORY OF AVIATION IN THE UAE:

From a modest beginning made in 1932 with the opening of Sharjah Airport to today with the presence of seven International Airports and four UAE based Airlines; aviation sector has come a long way in the UAE. GCAA has signed Air service agreements with a number of countries. In November 2015 when The United Arab Emirates signed an open skies agreement with the Government of the Slovak Republic; the number of air service agreements reached to 168 of which 122 were open skies. Open skies agreement allows unrestricted frequencies, capacity and types of aircraft, whether owned or leased, to be operated by the Designated Airlines of each country in any type of service (passenger or cargo) on the routes between that country and the UAE (UAEinteract 2015).

Opening of Sharjah International Airport and the launch of Air Arabia Airlines:

The aviation sector had a humble beginning on October 5, 1932 with the opening of Sharjah Airport for operations which was used as a stopover en-route to India and Australia by Imperial Airways (sharjahairport.ae). This airport was situated near city centre and remained in operation until December 14, 1971. Due to the spread of the city and new developments, the airport had to be relocated to its current location which is 10 kilometres away from Sharjah's city centre. The construction for the current airport commenced during 1970s and it was opened on January 1, 1977(sharjahairport.ae). Sharjah enjoys an "Open Sky Policy" which permits the Airlines Traffic rights without any hindrance. It has the most competitive rates in terms of landing and handling. It consists of the most modern equipment and infrastructure which can handle aircraft of all types and is complemented by professional, efficient and courteous staff (Sharjah International airport, government of Sharjah). "Flights to and from the airport arrive and leave on time 98% of the time, beating the industry average of 82%"(Sharjah International airport yearbook 2016). Air Arabia the first low cost carrier in the middle started its operations in October 2003. It has its head office at Sharjah and also runs fully-owned operations in Ras Al Khaimah, the most northern emirate in the UAE, and a joint venture in Egypt. On 19th September 2007 Air Arabia P JSC ("the Company") was incorporated as a Public Joint Stock Company in accordance with UAE Federal Law No. 8 of 1984 (as amended) to become the first publicly listed airline in the region. It is listed on the Dubai Financial Market and traded under ticker symbol: (DFM: AIRARABIA) as a holding company with assets worth over AED 11 billion. It serves over 101 destinations spread across the Middle East, North Africa, Asia and Europe. Air Arabia operates from five international hubs that are Sharjah International Airport, UAE; Ras Al Khaimah International Airport, UAE; Mohamed V International Airport in Morocco; Burj Al Arab International Airport in Alexandria, Egypt; and Queen Alia International Airport in Jordan, Amman. In 2015, 23 routes were added to its network including the significant achievement of becoming the first low-cost airline from the Middle East and Africa to enter the Chinese market with the launch of regular non-stop services to Urumqi, the largest city in Western China. It's this network expansion strategy that led to significant growth in the passenger numbers in 2015. More than 7.6 million passengers flew with Air Arabia in 2015, a 12 per cent year-on-year increase. Air Arabia fleet is one of the youngest fleets in the world comprised entirely of Airbus A320 aircraft. It has done heavy investment on the fleet and ordered 44 A320 aircrafts back in 2007. In 2015 Air Arabia received 6 new aircraft and thus had taken delivery of 36 out of the 44 A320 aircrafts ordered taking the fleet total to 41 Aircraft. It rewarded the 55 million customers that chose to fly Air Arabia since inception by launching an award-winning low cost loyalty program 'Airewards' (Air Arabia Annual Report 2015). In the same year it expanded its route network to more than 115 destinations and increased its total fleet size to 44 new Airbus A320 aircraft (Sharjah International airport yearbook 2016).

Launch of International Airports at Dubai and Dubai based airlines:

The year 1959 saw the launch of Dubai International Airport (DXB). In 2013 Annual passenger traffic touched 66,431,533, registering an increase of 15.2 per cent compared to 57,684,550 recorded during 2012. During the same year 28 new passenger destinations were added thus making the number of passenger destinations served by Dubai International to reach 239. From serving just 12.3 million international passengers and being the 30th busiest airport in 2000, Dubai International Airport overtook London's Heathrow as the world's busiest airport for international traffic in 2014 as it welcomed 70.4 million passengers witnessing an increase of 6.1 per cent over the previous year (Dubai Airports Review, 2014). Holding on to the status of the world's busiest airport for international traffic in 2015, DXB welcomed more than 78 million passengers and is expected to receive more

than 85 million passengers in the year 2016 and surpass 100 million by 2020 (Dubai Airports Review, 2015). Today Dubai boasts of not one but two International airports. Al Maktoum International at Dubai World Central (DWC), started cargo operations on June 27, 2010 as part of the first phase of the project. It started providing services to passengers on October 27, 2013 with Wizz Air as the launch airline. Kuwait-based Jazeera Airways hurred services from October 31st, while Gulf Air began flights from December 8, 2013. Qatar Airways commenced operations on March 1st 2014 (dubaiairport.com). Combined passenger traffic at Dubai International and Al Maktoum International at Dubai World Central (DWC) exceeded 71.3 million in 2014 and is expected to surpass 126 million by 2020 and 200 million by 2030 (Dubai Airports Review, 2014). Dubai is investing on long term projects to expand the infrastructural facilities. In the year 2011 Strategic Plan 2020 a US\$7.8 billion airport and airspace expansion programme was launched to boost capacity at DXB from 60 million to 90 million passengers. On 24 February 2016 Concourse D the result of a \$1.2 billion investment was opened to enhance service and boost capacity for some 60 international airlines that now provide 350 flights per day to 94 destinations around the globe at Dubai International, the world's number one hub for international passenger traffic. Another expansion project is underway at DWC to increase its capacity to 26 million passengers by 2018. This project is the forerunner to the US\$32bn expansion plan intended to make DWC the world's largest airport with an annual capacity exceeding 240 million passengers a year and 16 million tonnes of freight (Dubai Airports Review 2015).

On 25th October 1985, Emirates airline which is based at Dubai International Airport started its flights with just two aircraft—a leased Boeing 737 and an Airbus 300 B4. Today Emirates has evolved into a globally powerful airline known in the world for its assurance to the highest standards of quality. It has the honour of being First to offer mobile phone service on its aircrafts (theemiratesgroup.com). Today Emirates is the world's largest international airline and it carried 51.9 million passengers and 2.5 million tonnes of cargo in the year 2014-16. During the same year it expanded its network to 153 points on six continents and fleet to 251 aircrafts. According to an economic study conducted in 2015-16 by Emirates in collaboration with the National Council of Applied Economic Research (NCAER) in India, Emirates' operations in India contribute an estimated US\$ 848 million each year to India's GDP, while supporting over 86,000 jobs (Emirates Annual Report, 2015-2016). Operations were started on Oct 14, 2008 Emirates Terminal 3 at Dubai International Airport (gulfnews.com). Inaugurated on May 1st 1998, Dubai International Airport Terminal 2 is now the base and home to Dubai's budget airline Fly Dubai. Fly Dubai is the second low-cost carrier in the UAE and had launched operations on June 1, 2009(dubaiairport.com).

Developments of aviation sector at Abu Dhabi:

In the year 1968 Al Bateen Airport was launched in Abu Dhabi. Soft opening of the operations of Abu Dhabi International Airport was done on 2nd January 1981(gulfnews.com). Abu Dhabi International Airport is now home to more than 40 renowned airlines and serves over 93 destinations in 54 different countries around the globe. It comprises of three terminals with a joint handling capacity of around 12.5 million passengers annually. The spanking new and emblematic Air Traffic Control (ATC) Tower having 109 m height was opened in 2011. The same year, witnessed the re-opening of Terminal 1 after a complete refurbishment, taking the 30-year old airport in line with the modernity of Terminal1. Abu Dhabi International which is also the first 4-star airport in the Middle East serves as the base and hub for Etihad Airways (adac.ae).Etihad Airways was established in July 2003, by Royal (Amiri) Decree. It initiated its commercial operations on 5th November 2003. Recognised as the National carrier of The UAE, Etihad Airways has become the fastest growing airline in the history of commercial aviation (etihad.com). Abu Dhabi's second international airport which is Al Ain International Airport started its operations in 1994. It is situated 18kms from Al Ain city centre and serves nine destinations and operates three airlines (Abu Dhabi Airports).

Establishment of Ras Al Khaimah International Airport:

Another vital development took place in the year 1976 as the year witnessed the establishment of Ras Al Khaimah International Airport. It provides access between Ras al Khaimah and the world. It covers a variety of destinations including Europe, the Middle East, North & East Africa, Central Asia, Sub-continent and the Far East and offers both passenger and cargo services. In April 2007 a wide extension program was initiated to significantly upgrade the passenger terminal building, public transport infrastructure, and the building of new cargo terminal (RAK airport).

Opening of the Fujairah International Airport:

Fujairah International Airport which is the fifth airport in the UAE started its operations on 29th October 1987. Being strategically located and possessing world class facilities it serves as an ideal trading and transit point in the booming sea-air cargo business between East and West (Fujairah airport).

Establishment of the General Civil Aviation Authority:

In 1996 The General Civil Aviation Authority (GCAA) was established by Federal Cabinet Decree (Law 4) with the objective of regulating Civil Aviation. The body emphasizes on the safety and security and aims at strengthening the aviation sector within the UAE and its upper airspace. A new Air Navigation Centre named as The Sheikh Zayed Centre was started in late 2009. In terms of its design it is one of the world’s most technically advanced centres and is regarded as the largest and busiest air traffic management facility in the Middle East (GCAA).

BENEFITS OF AVIATION TO GLOBAL ECONOMY:

Impact of air transport industry can be classified into four categories i.e. direct impact, Indirect, Induced and Catalytic (Spin off) impact. Benefits created through airline and airport operations, upkeep of aircraft, regulation of air traffic, services provided to air passengers in the form of check –in ,baggage handling etc., manufacturing and selling of planes by aerospace manufacturers to airlines etc. all form part of the direct impacts. Indirect benefits include the employment and income generation made possible through the activities of suppliers of the air transport industry-such as aviation fuel suppliers; construction companies that build airport facilities and comprehensive activities in the business services sector etc. Jobs that are supported by spending of those who are directly or indirectly employed in the air transport industry constitute the induced impact. The catalytic or spin-off impact includes its contribution to the performance of the other sectors such as Tourism and World trade etc. Air transport plays a vital role in supporting tourism. It has now become the preferred mode of transport as now over 54 per cent of international tourists take services of air transport (UNWTO Tourism Highlights, 2016). Table 2 highlights the contribution of the aviation sector on global employment and GDP for the year 2014. As can be seen from the table aviation generates millions of jobs around the world and in total contributes worth trillions of US dollars to global GDP.

Table 2: Aviation’s Global employment and GDP impact in the Year 2014

	Jobs	GDP in US Dollars
Direct	9.9 million	664.4 billion
Indirect	11.2 million	761.4 billion
Induced	5.2 million	355 billion
Tourism Catalytic	36.3 million	892.4 billion
Total	62.7 million	2.7 trillion

Source: Oxford Economics as cited in Aviation Benefits beyond Borders ATAG July 2016

IMPACT OF AVIATION ON THE UAE ECONOMY:

The aviation sector includes the activities of airlines as well as ground based infrastructure including off site services such as air navigation and air regulation. Table 3 indicates that for the year 2014 the overall economic benefit including direct, indirect, induced and catalytic impact of aviation industry was of the value US \$46,829 million. This sector contributed immensely to employment and its overall impact including the catalytic led to the creation of 691000 jobs. Table 4 shows the comparison of the UAE aviation industry with the aviation industry of selected Middle East countries. Of all the selected Middle East countries the UAE ranks number one in terms of the job creation (direct,indirect,induced and tourism) by the aviation sector. Its total contribution to GDP US \$ 46829 million in the economy of the UAE is also highest as compared to other selected Middle East countries mentioned in table 4.

Table 3: Contribution of Aviation to GDP and Jobs in The UAE in the year 2014

	Employment (000s)	GDP (US \$ million)
Direct	138	9,461
Indirect	99	7,453
Induced	56	4,183
Tourism	398	25,732
Total	691	46,829

Source: Aviation Benefits beyond Borders ATAG July 2016

Table 4: Contribution of Aviation to GDP and Jobs in The Middle East* in the year 2014

Country	Israel	Jordan	Lebanon	Saudi Arabia	UAE
Employment(000s)					
Direct	24	14	10	103	138
Indirect	45	16	9	90	99
Induced	26	8	5	37	56
Tourism	92	54	149	305	398
Total	187	92	173	534	691
GDP (US \$ million)					
Direct	4850	435	348	11200	9461
Indirect	3862	357	278	6112	7453
Induced	2262	188	153	2500	4183
Tourism	7440	1388	4701	14498	25732
Total	18415	2368	5480	34310	46829

* For other countries in the Middle East, enough data is not available for a reliable country-specific analysis
Source: Aviation Benefits beyond Borders ATAG 2016

CONCLUSION:

The aviation industry in the UAE has come a long way since October 5, 1932 when the Sharjah Airport was opened for operations and now boasts 7 international airports; Abu Dhabi, Dubai, Al Ain, Fujairah, Sharjah, Ras Al Khaimah and Al Maktoum airport in Dubai. They together with the four home carriers of the UAE i.e. Etihad Airways, Emirates Airline, Flydubai and AirArabia remain dedicated to making the UAE the most successful region in the world for aviation and continue to strive forward in order to achieve this. Etihad Airways and Emirates Airline dominate the long haul international market for the region and flydubai and AirArabia show their strong presence in the short to medium haul market in the region. All are showing major potential for the future to continue the growth and development of global business (Sharjah International airport yearbook 2016). A lot of factors like UAE being the business hub of the region, need to travel in and out of UAE as large population of the country is composed of expatriates thus generating VFR (Visiting Friends and Relatives) traffic, low average age of the fleets-leading to somewhat lower operating costs and continuous investments in aviation infrastructure and modern aircraft have helped in the expansion of the industry (GCAA- The General Civil Aviation Authority). The extraordinary growth of the sector has been pushed by expansion of UAE local carriers Emirates Airline, Etihad Airways and flydubai. Supported by the strategic geographical location and efforts of the government and airlines the UAE has emerged as one of the world’s leaders in aviation. The present challenge is to maintain this advantage through effective long-term strategy and building the best infrastructure in the world. One of the Challenges faced is the congested airspace and if this problem is left unaddressed, traffic delays and fuel costs stemming from congestion could cost the industry Dh36 billion. Emirates has focussed on making Dubai the world’s busiest hub airport by operating hundreds of routes with its own equipment, Etihad has followed the policy of alliances and partnerships, which has helped in creating an international network that is more flexible and cheaper to operate. These strategies complement each other and provide the aviation sector with room to be able to survive in a notoriously volatile market. Continued investment in the quality infrastructure and greater communication to make air traffic run smoothly will ensure long-term growth (the National 2016).The massive investments by UAE to enhance airport capacity and facilities are expected to create great opportunities not only for the country’s aviation sector but also for the global airline industry.

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