

A CENTURY OF THE GLOBAL AIRLINE INDUSTRY AND THE EMERGENCE OF THE GULF'S SUPER CONNECTORS

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ABSTRACT

This article surveys the literature on the three Middle Eastern super connectors and provides insight into their early development and the mainstream research on them. Employing a semi-systematic methodology to survey the literature, this article compiles relevant literature into a single document and provides a comprehensive overview for practitioners and academics interested in understanding current research on the Gulf's super connectors. The findings highlight the limited literature on the early development of the Middle East's aviation industry. The fierce rivalry and fast expansion of the three super connectors have piqued the curiosity of industry professionals and academics, leading to two main streams of research: investments in foreign airlines and government subsidies. The motives and benefits of investing in foreign airlines remain debatable. Studying the role of government subsidies is sensitive and difficult to pinpoint.

KEYWORDS

Gulf carriers; Globalisation; Single sky; Super connectors; Government subsidies

1. INTRODUCTION

The airline industry is vital to contemporary civilisation because it is a key player in advancing globalisation, linking regions, fostering global commerce, promoting tourism, and aiding economic and social progress. Since the deregulation of the industry, air transportation has undergone a significant structural and institutional transformation. The development of low-cost carriers (LCC) and introduction of hub systems have resulted in an uneven geographic distribution of air passenger traffic. The Gulf super connectors (SC) have provoked a series of questions in recent years regarding their business practices and close ties with their respective governments. This study investigates the origins of the SC and examines the extant literature on their strategies, disputes, and long-term survivability.

2. METHODOLOGY

The aviation history of the Middle East can be studied from scattered publications and textbooks on oil exploration missions and early flights over the Middle East (see, for instance, Butt, 2011). However, the literature on the SC only recently became prominent in academia because of its significant role in the global aviation industry. Using a semi-systematic methodology, this study investigates and scrutinises the available literature on the SC from multiple sources, including academic journals, books, and company reports to derive and categorise the research streams and synthesise them in a single paper.

3. AVIATION IN THE MIDDLE EAST

3.1 THE GEOPOLITICS OF THE ARAB WORLD

The unique geographic positioning of the Gulf and Strait of Hormuz has attracted the interest of Western conquerors since 1507. Arab states are typically governed by historically dominant families or post-revolutionary nationalist regimes that depend on the military for survival. The Middle East has undergone massive economic change, but development has been uneven and, in some respects, distorted. A deep divide exists between the countries with primary oil production and those without. This complex combination has significantly influenced aviation history in this region, particularly after the discovery of oil. The discovery of oil in many parts of the Levant area attracted companies and investors to search for more resources (Bina, 2017). The exploration of oil fields in the Gulf, mainly by expatriates, accelerated the development of air routes and airfields (Watson, 2013). Airfields and routes such as the Sharjah-Bahrain-Dammam-Kuwait-Basra-Mosel were strategically developed to carry

expatriates and local merchants to and from the oil fields (Watson, 2013). Later, these wealthy Gulf states played a pivotal role in mapping the international aviation arena (Joshua and Maertens, 2020). The emergence of airline companies such as Emirates, Etihad, and Qatar Airways has allowed millions of people to exploit the region's unique geography and culture. The airline industry's growth in the Gulf states reflects their strong business practices and geopolitical influence (Joshua and Maertens, 2020).

3.2 ARAB AIR CARRIERS ORGANIZATION

The initial idea of a partnership in civil aviation between the Arab nations originated with the Alexandria Protocol in 1944. The aim was to increase and combine the ties that bind all Arab countries (AACO, 2018). The 10th conference of the Commission of Communication of the Arab League, held in Tunis in May 1964, endorsed the establishment of a permanent organisation, namely the Arab Air Carriers Organization (AACO). The first conference of AACO took place in Cairo in 1965 and was attended by 14 Arab air carriers (AACO, 2018). AACO was established according to Article 2, Paragraph B of the Arab League Pact (dated 22 March, 1945), which recommends the development of infrastructure and communications, including railroads, aviation, navigation, telegraphs, and posts. Usually, this organisation's membership is not part of any national government, although it is common for Arab state governments to participate. Since its formation, the organisation has been responsible for resolving several commercial aviation issues and encouraging its member states to foster communication systems and build railroads, air/sea infrastructure, and navigational aids (Elashiq, 1987). In addition, it seeks to establish and develop practical cooperation among its members for a better air transport system. The 1974 Marrakech session marked a significant milestone for civil aviation in the Arab world with the formation of the Arab Civil Aviation Council (ACAC). There was a unanimous agreement to adopt the 'Marrakech Declaration', which seeks the liberalisation of traffic rights between the Arab states. Moreover, the objectives extended the necessity to cooperate with the International Civil Aviation Organization (ICAO) to improve the welfare of civil aviation in the region (Elashiq, 1987). The Marrakech agreement substituted for the preceding Civil Aviation Council of Arab States (CACAS) established in November 1967 (Elashiq, 1987). Subsequently, the Arab Civil Aviation Organization (ACAO) replaced CACAS in 1996. The organisation's main objectives are as follows: (1) to provide the Arab civil aviation authorities with a framework to implement a plan for civil aviation among Arab countries and improve its safety, and (2) to develop and advance Arab civil aviation to reflect the needs of the Arab nations for a more advanced and secure air transport system. To achieve this goal, Arab transport ministers gathered in Damascus, Syria, in 2004. The initial

agreement aimed to provide the region with a similar agreement as that of the EU, but failed. The institutional and legal tools that allowed the EU to achieve its objectives do not exist in the Middle East, because it does not have power over its member states (O'Connell and Williams, 2010). Furthermore, it is challenging to implement collective initiatives, as there is a significant time lapse between what the leaders of the Arab states decide and their application at the collective regional level. In addition, there is a wide gap in the economies of the individual countries, which leads to more difficulties in freeing the transport market as a whole (Tan, 2016). The whole Middle East remains severely restricted, as it is still common for airlines to be owned by governments, leading to more restraining forces. Bilateral agreements between each state govern full market access, and the national guidelines for air transportation and competition rules vary within the region. Thus, there exists a divide between the carriers in the Gulf and those in the rest of the Middle East.

3.3 BRITISH OVERSEAS AIRWAYS CORPORATION

The establishment of the British Overseas Airways Corporation (BOAC) is pivotal in the Middle East's aviation history. Formed in 1939 from the merger of British Airways and Imperial Airways, the company provided airline services to several countries worldwide (Watson, 2013). BOAC's establishment during the war presented many operational challenges. Nonetheless, the company strategised to identify safe operational routes. Furthermore, it developed key partnerships with other players in the aviation industry to drive its economic performance. The Arabian Peninsula's strategic geography was central in persuading intercontinental flights to move through the Gulf region (Kemp, 2012). Moreover, the presence of the British protectorate influenced the BOAC's decision to acquire stakes in the region's airline industry. Sharjah and Dubai became intercontinental flight hubs connecting countries in Europe and Asia. In the late 1940s, British pilot and entrepreneur Freddie Bosworth began operating an air taxi service in parts of the Middle East (Watson, 2013), primarily between the cities on the Doha-Dhahran-Bahrain route. Bosworth expanded his operations and attracted local investors to establish a new aviation company, 'Gulf Aviation', in 1951. Later, the BOAC acquired majority shares from Gulf Aviation (Pirie, 2017a), becoming a significant shareholder in the Gulf's aviation industry and thereby extending its network to cover transatlantic countries, Africa, and the Middle East. In 1973, the governments of Qatar, the United Arab Emirates (UAE), Bahrain, and Oman purchased Gulf Aviation from BOAC and named it Gulf Air (Pirie, 2017a). Each of the four countries considered the airline their national carrier. The Bahrain International Airport became the base of operations. It expanded its operations and took advantage of the market monopoly (Satia, 2014).

3.4 EMIRATES, QATAR, AND ETIHAD AIRWAYS (SUPER CONNECTORS)

The change of ownership of Gulf Aviation in 1973 marked a new era. First, the company's name changed to Gulf Air. Second, the airline operated with a quarter share from each of the four independent states of Qatar, Oman, Bahrain, and the UAE (Kemp, 2012). This transition welcomed a new wave of business opportunities. In 1990, the airline became the first to fly the Australian route (Bailey *et al.*, 2019). Furthermore, it operated direct flights to South Africa (Henderson, 2014). In subsequent years, the airline operated as the largest airline company in the Middle East. However, during the mid-1990s, the Middle East's aviation market began to evolve, and market competition intensified. Till this day, Gulf Air remained under the ownership of Bahrain and operated under stiff competition (O'Connell and Bueno, 2018). However, the rapid economic growth and infrastructure development the region has experienced since then have led to the introduction of more airlines in the region.

Emirates was the first to be established, in 1985. Since then, it has enjoyed close ties with Dubai's ruling family (Squalli, 2014). The company's early growth was aided by the expanding mass markets (Squalli, 2014) and mass movement of labour migrants. By the mid-2000s, the airline was transporting more than 3 million passengers annually. In 2018, it transported more than 58 million passengers, had a fleet size of 266 aircraft, and flew to 157 destinations worldwide (O'Connell and Bueno, 2018). Another major airline was Qatar Airways, launched in 1994 and relaunched in 1996 (Douglas, 2019). Its early growth was promoted by the country's leadership shift in 1995, whose vision was to adopt an internationalisation strategy that allowed the airline to connect Qatar to the rest of the world. Qatar Airway's global strategy has enabled it to increase its passenger numbers annually. Between 2015 and 2019, its number of passengers grew from 22 million to more than 29 million, and it served 172 destinations (Douglas, 2019). The competition increased in 2003 with the launch of Etihad Airways. Etihad's success is attributed mainly to stable financial backup. In 2008, the airline acquired 205 new aircraft valued at more than USD 20 billion (Bose, 2018). This strategy enabled Etihad Airways to compete with the world's largest airlines. Today, the three SCs carry more passengers than the majority of large-scale European airlines. They compete with and often outperform the world's greatest airlines in terms of quality and services.

4. KEY FINDINGS

4.1 BUSINESS MODEL

The three SCs operate with 40 minutes of flight time with no domestic operations, and under an identical business model of shifting crowds from the East to West, and back. They function in an environment characterised by high competition between them. In addition, with the development of more efficient and newer ultra-long-range aircraft, the airlines operating in these strategic hubs will gradually find themselves with a thinning flow of passengers. Currently, these airlines attract passengers because of their ability to maintain a highly complex hub and spoke network. Furthermore, they frequently operate flights that serve destinations that would be impossible for other airlines, as they will not have a viable load factor to be considered profitable. Through Emirates, Dubai has set the standard for how a country's vision can benefit its airline operations. Dubai's less restrictive entry requirements and more accessible business environment ensured that Emirates remained profitable. The idea of airline privatisation needs to be developed, as governments can no longer operate these airlines by themselves. Nevertheless, the danger of transferring ownership rapidly may result in complex issues related to rent, fuel, and the usage of airport slots. The current unclear operating mechanism does not provide clarity regarding the costs incurred by these airlines. The introduction of strict environmental measures can further increase operating costs and shrink airlines' profits. In addition, the COVID-19 pandemic exposed the SC's vulnerability to global events. The complete halt of air transport during the pandemic grounded airlines' entire fleets for an extended period. However, running costs were still incurred, regardless of whether the aircraft were in storage or airborne. During these challenging times, governments worldwide ensured the survivability of their airlines by injecting a massive amount of cash to keep them afloat.

4.2 SUPER CONNECTORS' INVESTMENTS ON OTHER AIRLINES

Over the years, the three SCs have expanded their network to almost every continent. They have also grown their presence in other airlines by buying shares therein (Table I). Emirates purchased a 43.6% stake in Sri Lanka Air in 1998 and sold it back to the Sri Lankan government in 2010. Since then, it has not invested in any other airline. In contrast, Qatar and Etihad made significant investments in several other airlines (Table I). Qatar plans to acquire shares in airlines that will allow it to extend its network through code sharing and utilise some of its older aircrafts by leasing them to new partners. Meanwhile, Etihad invested heavily in struggling airlines, believing it could turn things around and make a profit. However, this has not been the case, and Etihad has been forced to swallow more failed investments. Qatar Airways' recent investment in Rwanda Air, and the Rwanda Airport, is another example of its attempt to expand its presence on the African continent.

Table 1. Investments by Emirates, Qatar, and Etihad

Airline	Investment	Comments
Emirates Airline	<ul style="list-style-type: none"> • Sri Lankan Airlines, acquiring a 43.6% stake 	The only investment Emirates had ended in 2010
Qatar Airways	<ul style="list-style-type: none"> • IAG (British Airways, Aer Lingus, Iberia): 21.46% • LATAM Airlines: 10% • Cathay Pacific: 9.6% • Air Italy: 49% • China Southern Airlines: 5% • 49% stake in Rwanda Air 	Qatar Airways' investment in Air Italy ended in 2020.
Etihad Airways	<ul style="list-style-type: none"> • 29.2% stake in Air Berlin • 49.8% stake in Niki • 49% stake in Air Serbia • 40% stake in Air Seychelles • 49% stake in Alitalia • 24% stake in Jet Airways • 21.8% stake in Virgin Australia 	Alitalia declared bankruptcy in 2018

4.3 RESEARCH ON THE THREE SUPER CONNECTORS

The rise of the Gulf carriers has profoundly impacted the aviation industry (Durganhee, 2013). Their explosive growth, as demonstrated by the near doubling of their combined passenger numbers between 2008 and 2013, has made them the new force in the world of air travel and confirms the Gulf as a critical node of global travel and trade flow (Hooper *et al.*, 2011). Their massive expansion has piqued the curiosity of both practitioners and academics, because of their strong investment profile and international performance. Nonetheless, they have also provoked several arguments and debates on how they conduct and manage their businesses. Several publications and reports have examined and explored their strategies, achievements, and business models (Table II). A common tendency when researching these three SCs is to analyse their network and fleet size development, as well as distortion in the competition, factoring in government subsidisation.

Table 2. Research on the three super connectors

	Title	Authors	Comments
1	Mission statements of international airlines: a content analysis	Kemp and Dwyer (2003)	Airlines' mission statement analysis
2	The changing dynamics of the Arab Gulf based airlines and an investigation into the strategies that are making Emirates a global challenger	O'Connell (2006)	Examines the changing dynamics of the region's airlines and researches the core principles; investigates why Gulf-based airlines are outperforming the world's airlines
3	Aviation growth in the Middle East: impacts on incumbent players and potential strategic reactions	Vespermann <i>et al.</i> (2008)	Competition and traffic patterns
4	From hub to tourist destination—An explorative study of Singapore and Dubai's aviation-based transformation	Lohmann <i>et al.</i> (2009)	Analyses the developments in Singapore and Dubai by examining interactions between their airlines, airports, governments, and tourism authorities
5	Strategic management of services in the Arab Gulf States	Kassem and Habib (2011)	Examines Gulf Air's early development and strategic planning
6	The development of the Gulf region's air transport networks—The first century	Hooper <i>et al.</i> (2011)	Evolution of air transport networks in Asia and the Gulf region
7	Can Gulf carriers sustain their current growth rate?	Alamdari (2011)	Performance and sustainability
8	Potential for Abu Dhabi, Doha, and Dubai Airports to reach their traffic objectives	Murel and O'Connell (2011)	Expansions, strategies, and hub development
9	The rise of the Arabian Gulf carriers: an insight into the business model of Emirates Airline	O'Connell (2011)	Strategy and business model

10	Political-geographic interpretations of massive air transport developments in Gulf cities	Derudder <i>et al.</i> (2013)	Geopolitical and geographical advantages
11	Building blocks: the Gulf gateways are working flat out to ensure their airport infrastructure can handle the growth strategies of the region's global network carriers	Morrison and Kingsley-Jones (2015)	Development and strategy
12	The growth of Gulf airlines: implications for airports, passengers and competitors	Grimme (2015)	Growth and competition among the European airlines
13	U.S. airlines reveal evidence they say proves Gulf Carriers get unfair subsidies	Clampet and Schaal (2015)	Competition and impact on U.S. airlines
14	Commentary: U.S. white paper on Gulf carriers distorts my academic report	O'Connell (2015)	Competition and impact on U.S. carriers
15	The impact of Gulf carrier competition on U.S. airlines	Dresner <i>et al.</i> (2015)	Competition and impact on U.S. carriers
16	Gulf Airlines and the changing map of global aviation	Ulrichsen (2015)	Questions the sustainability of the three aggressively expanding airlines within such a concentrated region (and market)
18	Gulf carriers against the trend? A conceptual framework of motivations and downsides related to joining multi-partner alliances in the airline industry	Werne (2016)	Alliance's selection
19	Low-cost carriers in the Middle East and North Africa: prospects and strategies	Morrison and Mason (2016)	Low-cost carriers in the Middle East
20	Persian Gulf and Turkish airlines in Africa	Pirie (2017b)	Expansion of the Gulf carriers in Africa

21	Gulf airline subsidisation: should the European Union and the United States collaborate to combat this alleged threat?	Moon (2018)	Subsidisation of Gulf airlines
22	Airline business strategy	Lohmann and Spasojevic (2018)	Strategy
23	A study into the hub performance Emirates, Etihad Airways and Qatar Airways and their competitive position against the major European hubbing airlines	O'Connell and Bueno (2018)	Competition and performance
24	Do the Gulf airlines distort the level playing field?	Douglas (2019)	Gulf carriers and subsidisations
25	Viewing the Middle East big three (MEB3) carriers as heterogeneous	Aquilina-Spagnol <i>et al.</i> (2020)	Future development and strategy
26	The economics of Africa's floriculture air-cargo supply chain	Button (2020)	Competition and impact on the U.S.
27	The role of Qatar Airways in the economic development of Qatar: before and during the Gulf crisis	Petcu (2021)	Examines the Qatar Airways crisis before and during the Gulf crisis (blockade)
28	Analysis of the dispute between American and Gulf carriers in aviation	Fernando (2021)	Competition and dispute

5. DISCUSSION AND CONCLUSION

Aviation has played a pivotal role in global poverty by creating international routes that connect people and continents. The Middle East has had no success in regional cooperation initiatives. The closest regional collaboration was Gulf Air in 1973. The significance of regional cooperation should be discussed as a crucial factor and key stepping stone in achieving borderless skies. As such, the EU has shown the importance of cooperation that extends past a sovereign nation and into a regional grouping. The need for a national airline is strongly felt worldwide, with prestige and political communication perhaps being the most obvious reasons. As the role of airlines continues to expand, the existing bilateral framework is rapidly becoming

incapable of accommodating the industry's technological revolution. There is a need for a universal liberalisation mechanism and updated air transport network strategies. Consequently, these efforts must be consistent and harmonised on a regional level, with ICAO making inroads in encouraging the methodical global development of civil aviation. Moreover, air transport within the Arab states is of great importance due to the vast geographical dimensions of the region and absence of a modern ground transportation system. With its rich history and common descendants, the Arab states share countless economic, social, and cultural characteristics. Thus, there is an urgent need to develop close cooperation within the region to meet the ever-increasing cost of air transport and establish collaboration to overcome technical difficulties. Here, ACAO must play a substantial role in creating a spirit of cooperation on civil aviation matters among the Arab countries. Both ICAO and ACAO can introduce a discourse among the Arab nations to establish an agreement on how to open our skies and ease air movement. This might ignite other initiatives towards more freedom and joint efforts, such as aerial navigation and a radar control system parallel to the block system in the EU. Furthermore, regional training centres and authorised maintenance hubs should be developed to reduce the cost and time required to develop skilled local personnel. Finally, the three SCs can negotiate a better future for the region's air transport industry. Their massive investment in developing highly technical infrastructure and airport hubs can help smaller airlines codeshare, allowing them to act as feeders to their hubs so that passengers can benefit from the vast network. Moreover, with coordination and better management, smaller regional airlines can persuade their governments to establish a joint, less restrictive visa arrangement and more liberalisation of existing bilateral agreements. They can invest in negotiating the building blocks of a joint single sky agreement, if not with the whole Arab nation, then at least on the Asian side of the Middle East.

6. LIMITATIONS AND FUTURE RESEARCH

The limitations of this study include the difficulties in analysing government subsidies due to the confidentiality of the subject. Future studies could explore the benefits of investing in other airlines as well as the implications of those that fail.

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