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Vision 2030 and prospects for network airlines in Saudi Arabia

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Abstract

The air transport industry in Saudi Arabia is experiencing rapid growth of late, fuelled in large part by the Kingdom's Vision 2030 aspirations and national development plan. This ambitious national vision seeks to diversify the Kingdom's economy, and in the process, develop and expand a wide range of industry and public sectors. Central to these plans is air transport, including not only the building of new airports and related transport infrastructure, along with expanding the wider travel and hospitality sectors, but also the launch of a new network airline in 2025 – Riyadh Air. This new airline will join current national flag carrier Saudia, and together they will play central roles in growing both the domestic and international air markets in the Kingdom, mainly out of the two main hubs Riyadh Airport (RUH) and Jeddah Airport (JED). The paper here aims to assess this coming network carrier duopoly, including the future prospects for both airlines as they seek to compete in a region, and indeed globally, against well-established legacy and flag carriers. Evidently, the future of network airlines in KSA could very well shape and determine prospects for the industry more generally for decades to come.

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Keywords: Saudi Arabian air transport; Vision 2030; Middle East aviation; network airlines/carriers; duopoly

1. Introduction

This paper investigates the prospects for network airlines (aka network carriers) in Saudi Arabia, an air market which is poised for significant development and expansion over the coming years due to large-scale national investment guided by the country's Vision 2030 objectives and aspirations (KSA, 2016). The paper aims to identify these future prospects within the context of a duopolistic air market of network airlines evolving over time in Saudi

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Arabia, by assessing the current strategies of flag carrier Saudia, the likely approach of the soon to be launched Riyadh Air, along with the wider competitive environment in the Middle East.

The Kingdom of Saudi Arabia (KSA) is the largest country in the Middle East by land area, and the fifth most populous. The Kingdom was established in 1932 and the territory is the birthplace of Islam, the second largest religion in the world (Lipka & Hackett, 2017). Its economy is largely based on the extraction and production of petroleum and derivatives, which accounted for 71% of all exports in 2021 (OPEC, 2022). Thus, as part of the policy expressed in the Saudi Vision 2030, the country is aiming at growing and diversifying its economy, as well as at increasing employment. Developing the tourism sector, which is currently largely dependent on religious pilgrimage to the holy cities of Islam, is one of the objectives in the Vision 2030 programme, with the intention to provide 1.6 million jobs by 2030. Similarly, the role of trade and commerce is crucial to ensure economic diversification. And commercial aviation is viewed as an enabler of tourism and facilitator of trade and commercial opportunities (Dron, 2023).

1.1. Methods

This paper follows a similar approach as the one provided by Vespermann et al. (2008) in their original analysis of the expansion of Middle Eastern carriers. In that sense, it is based on a qualitative analysis of demand growth opportunities for the airlines of concern, along with a discussion of the quantifiable characteristics of the strategies currently adopted by the main network carrier (Saudia) and its position in the regional market. Growth opportunities are assessed considering the contextual understanding of the implications of the Vision 2030 strategic plan. Particular attention is devoted to the potential effect of tourism, given the findings of Alsumairi and Hong Tsui (2017) of the mutual relationship between air transport and tourism development in KSA, extrapolating from their analysis of low-cost carriers. The characteristics and expression of the competitive market of network airlines in the region are based on the evolution of critical airline supply data from OAG (2022, 2023). At a national level, it considers the network developments of Saudia in the domestic and international markets from 2010. At a regional level, it considers the foretelling conclusion of Vespermann et al. (2008), confirmed by the analysis of O'Connell and Escofet Bueno (2018), with regards to the relevance of hub connectivity for Middle Eastern carriers. As such, our assessment focuses on the provision of connectivity for international markets.

2. Background: The 2030 vision for the Kingdom of Saudi Arabia

Vision 2030 is an ambitious plan to diversify Saudi Arabia's economy and open the country up to foreign investment, developing and expanding a range of sectors in the wider travel industry, from new hotels, airlines, and airports to professional sports (e.g., football & golf) and entertainment. Saudi Arabia is projected to have around USD $2 trillion in its Public Investment Fund by 2030, and then becoming "the world's largest" (Zakaria, 2023, para. 4).

2.1. The role of aviation in the 2030 vision

Vision 2030 (KSA, 2016) emphasises the development of a robust aviation industry in the KSA, encouraging investment in infrastructure, airline development, aircraft maintenance, repair and overhaul (MRO) facilities, aviation training centres, and aviation related research and development (R&D). It envisions the expansion and modernisation of existing airports in the country, along with the construction of new airports to accommodate the increasing demand for air travel. This includes the development of airport facilities with state-of-the-art technology, passenger amenities, and cargo handling capabilities. Concurrently, the government aims to privatise certain airports to enhance efficiency, attract private investment, and to improve the overall management and operation of these airports.

To improve air transport connectivity within the domestic market of the KSA, and with other international destinations, the ambition is to increase the number of direct flights to various cities around the world and enhance domestic air travel options. This is directly related to the proposal of strengthening Saudia, to enhance their competitiveness and service quality in the global aviation market, as well as the introduction of Riyadh Air.

Presently, Saudia (member of the SkyTeam global airline alliance) remains the official flag carrier of the Kingdom, with key domestic counterparts being Saudia's low-cost subsidiary flyadeal, along with three government authorised competitors "flynas, Saudi Gulf and Nesma Airlines" (Aquilina-Spagnol & Ellis, 2021, p. 325).

2.2. The role of tourism in the 2030 vision

The recent wider opening of Saudi Arabia to tourism, briefly stalled by the onset of the Covid-19 pandemic, is having a considerable impact on aviation in the country. Vision 2030 seeks to promote an aviation policy where the industry plays a vital role in supporting the growth of tourism in the KSA. The plan aims to attract more international tourists by improving air transport infrastructure, connectivity and flight operations. The ambition is to also build new cities and attractions with the potential to become tourist destinations. The development of Neom in the northwest, for instance, plays a significant role within the changing environment towards promoting tourism (KSA, 2016).

Tourism already supported 1.1 million jobs in the Kingdom in 2018 (WTTC, 2019). As Figure 1 shows, international tourist arrivals have been growing substantially over the past decades, and similarly to the United Arab Emirates (UAE) – another country in the region that has emphasised economic diversification, tourism, and aviation for its development (Dron, 2021). In fact, one of the material expressions of the Vision 2030 programme is the creation of a new full-service flag carrier for KSA, named Riyadh Air and based in Riyadh (Jolly, 2023), the capital of the Kingdom. The implications of these developments for the airline market in the Middle East, and for the main network carrier in the KSA – Saudia – are largely dependent on the ability of all of these key objectives to materialise as set out in this national policy programme.

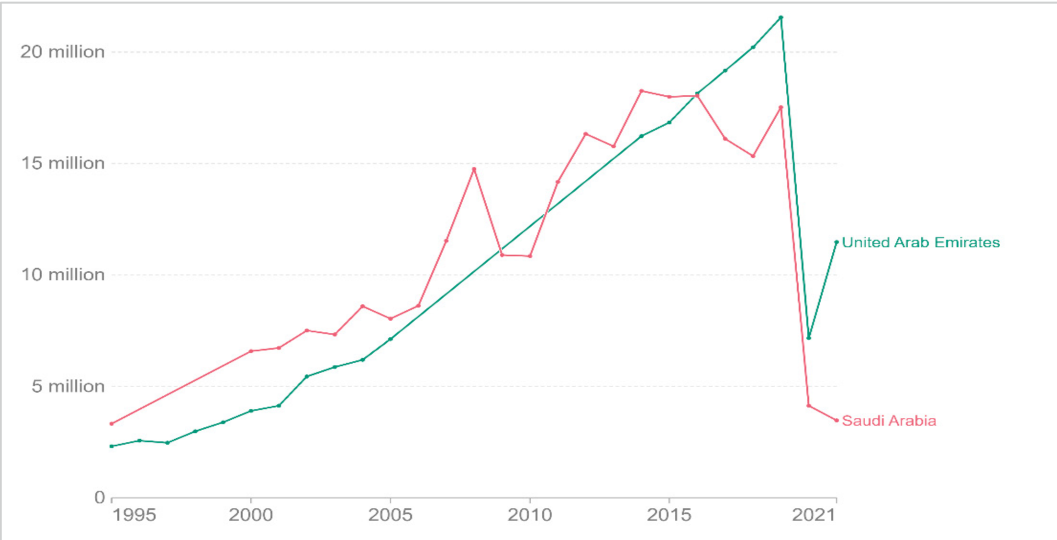

Fig. 1. International tourist arrivals to Saudi Arabia and the United Arab Emirates. Source: Our World in Data (2023).

3. Results and analysis

3.1. Airline network strategies in KSA

Airline market supply in Saudi Arabia witnessed substantial growth in the first half of the 2010's, mostly fuelled by increasing available seats in the international segment (see Figure 2). Then, after 2016, available seats in terms of international flights decreased slightly before reducing by half due to the response to the global Covid-19 pandemic. The domestic market grew substantially as well, and more so in the second half of the last decade, doubling the total number of seats in 2019 compared with 2010. Saudia, the government-owned flag carrier, is by far the dominant airline. It supplied 64% of domestic seats, and 38% of international, in 2019 (OAG, 2022).

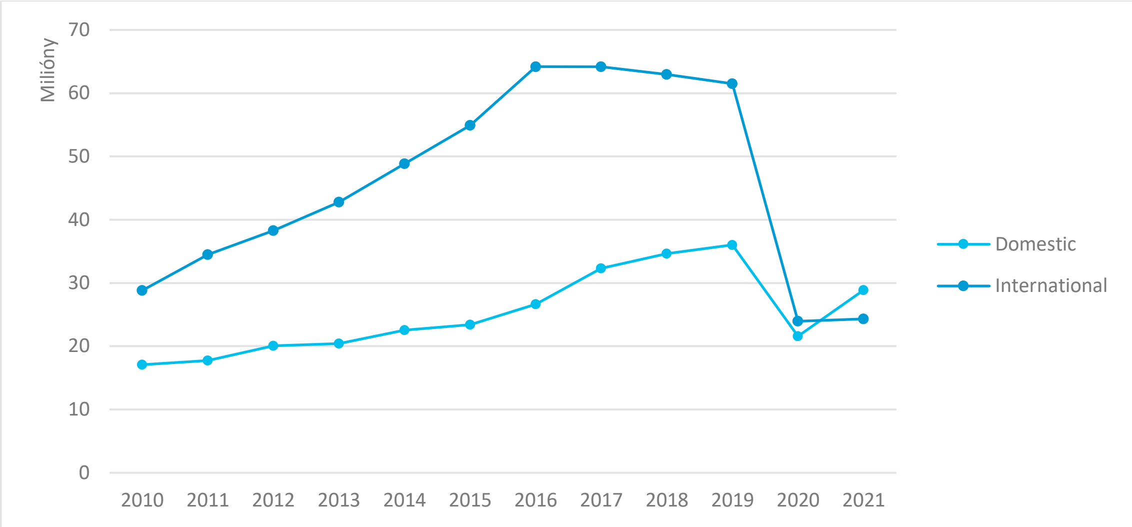

Fig. 2. Total available seats to, from and within Saudi Arabia. Source: OAG (2022).

Saudia has a strong position at both main airports in KSA; Jeddah (JED) and Riyadh (RUH). However, since 2013 the focus of Saudia has seemed to shift in favour of JED, with around two million more departing seats offered than in RUH just before the Covid-19 pandemic. Yet, the recovery path seems to suggest more parity between the two airports (see Figure 3). Dammam (DMM), the epicentre of the Saudi oil industry, has been rather stagnant at two million departing seats, while Medina Airport (MED), serving a sacred city in Islam, had the same level of supply from Saudia, without accounting for special pilgrimage flights. Overall, in 2019 JED concentrated 37% of Saudia's offer, while RUH had 30%, DMM and MED 7% each, and the rest of the airports in the country shared the remaining 19% (OAG, 2022).

Evidently, the *dual-hub* strategy for Saudia is not straightforward. As Figure 4 shows, the number of seats offered between JED and RUH, both ways, has remained fairly constant since 2010. For the domestic market, despite connections between JED and RUH to the rest of KSA growing at similar rates, there is a clear focus on RUH concentrating more seats. In the international market, however, Saudia is clearly focused on JED, with about two thirds of the combined offer from both airports, in 2019. The main destinations from each airport were slightly different (see Figure 5). Egypt, Pakistan and India were in the top five from both JED and RUH, but the United Arab Emirates (UAE) was the main destination from RUH, with an average of one daily flight to Abu Dhabi and five daily flights to Dubai. The offer was very similar from JED, but the UAE was only the sixth largest destination. JED also had more variety in the destinations offered; but the only destinations in the "rest of the world" that have, on average, at least daily frequencies are Bahrain, Kuwait, and Beirut, both for JED and RUH (OAG, 2022).

For the other countries that are inside the top international routes, most high-frequency routes are to a single city, usually the capital. Pakistan has four destinations with at least daily flights, in fact three of them with at least twice-daily flights, but only from JED. Whereas from RUH, there is service to four destinations but all with less than daily frequencies. Egypt, that figures prominently for both *hubs* is largely dominated by Cairo, with eight-daily flights on average from JED, and four-daily from RUH, whilst Alexandria and Sharm-El-Sheikh have at least daily frequencies from both. There are no destinations in India with more than once-daily flights, and all Indian cities served from RUH have less than daily services (OAG, 2023).

When all these core elements are considered, any *dual-hub* strategy seems to be more the product of the low frequencies offered in most cases from both hubs, so that demand in the thinner routes could be spread out by complementing the direct services that each city, Jeddah and Riyadh, can sustain by themselves. Moreover, the large number of destinations with less-than-daily frequencies hinder the position of Saudia to offer connectivity in the global landscape, especially in the absence of strong ties with the SkyTeam partners in any of the hubs. In fact, as Figure 6 shows, the only other SkyTeam airline with a visible presence is Middle Eastern Airlines (MEA), which only flies from Beirut to both JED and RUH (OAG, 2022).

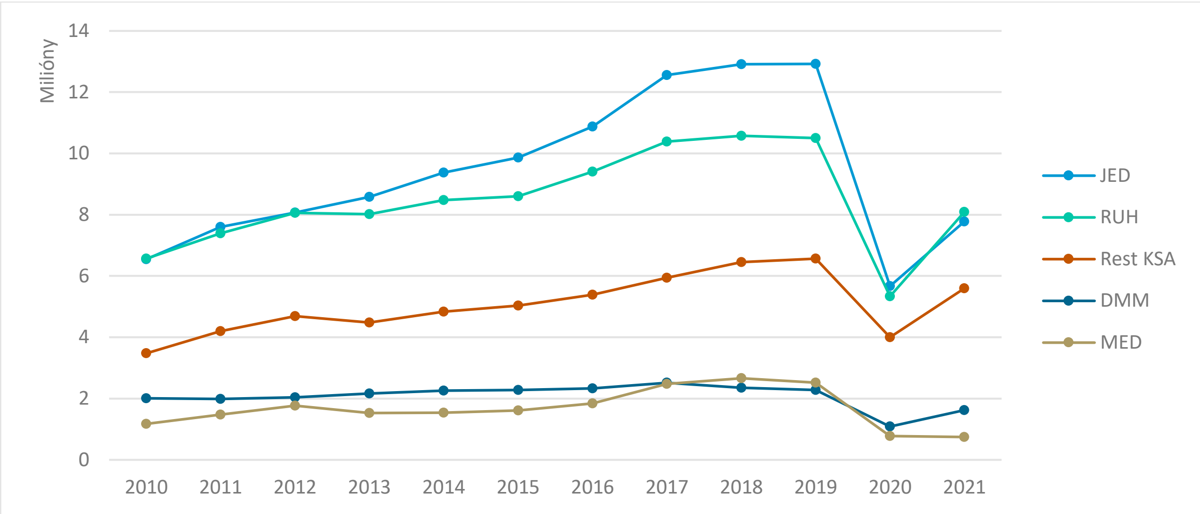

Fig. 3. Departing seats by origin in KSA - Saudia. Source: OAG (2022).

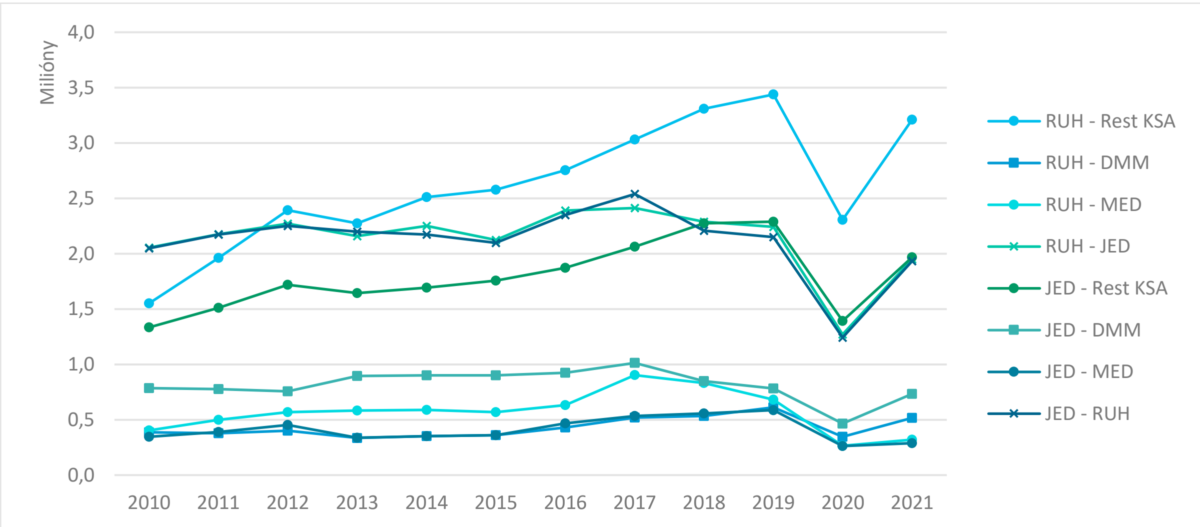

Fig. 4. Departing seats within Saudi Arabia – Saudia. Source: OAG (2022).

Most of the competition for Saudia at an international level comes from Flynas, a Saudi low-cost carrier which was the third largest airline at JED, and the second largest at RUH in 2019 (in terms of international seats); as well as from high frequency services from Emirates, Turkish and Etihad from their respective hubs. All airlines offered at least daily connections to DMM and MED as well, while Turkish Airlines included flights to other secondary cities from its main Istanbul Airport (IST), but also a few services from Sabiha Gokcen (SAW) on the Asian side of Istanbul, and also from the capital of Türkiye, Ankara. Egyptair also had high-frequency services to both DMM and MED, mainly from Cairo. The other minor carriers in the region like Oman Air, Kuwait Airways, Gulf Air and Royal Jordanian had a reasonable presence at the main cities in KSA too. Flydubai, on the low-cost side, had a very good coverage of secondary cities, with at least daily services from Dubai to Abha, Gassim and Taif, as well as DMM and MED (OAG, 2022).

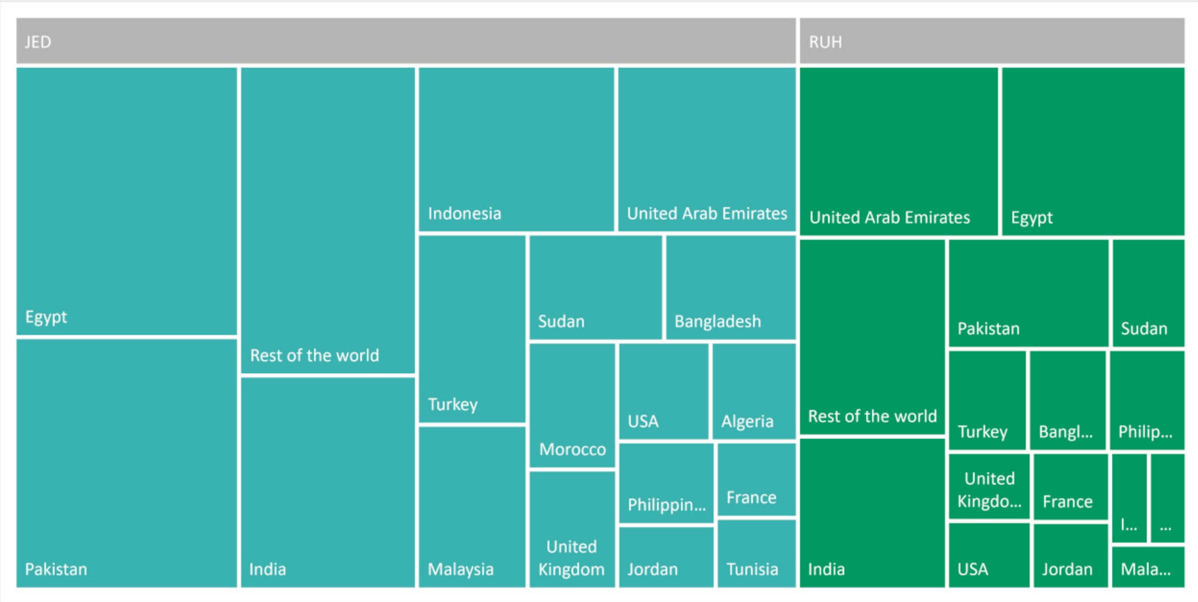

Fig. 5. International departing seats - Saudia 2019. Source: OAG (2022).

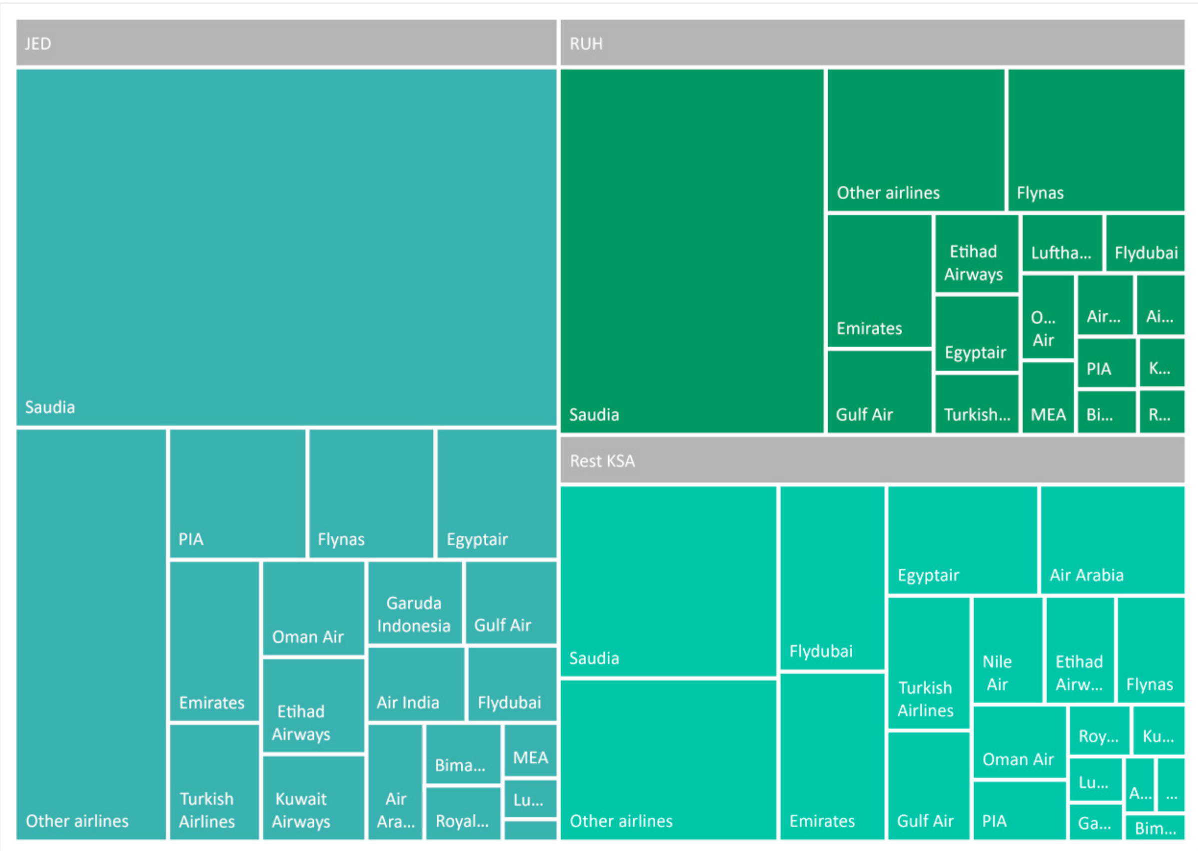

Fig. 6. International seats by arrival airport and carrier - 2019. Source: OAG (2022).

Because the data used for the previous analysis focuses on 2019, the position of Qatar Airways at the time could not be included due to the effect of the blockade still being imposed on Qatar by its neighbours including Saudi Arabia (which ended in early 2021). However, the next section examines the competitive environment of Saudia (as a proxy for network airlines in KSA) with respect to the three main carriers in the Middle East (Emirates, Qatar and Etihad), and with more emphasis on international connections.

3.2. Competitive environment in the Middle East

Vespermann et al. (2008) wrote a foretelling analysis of the then emerging network carriers in the Middle East. According to their insights, "Middle Eastern carriers will soon emerge as serious global competitors to the established carriers. Since there is no sufficient regional demand to fill their capacity, these carriers aim at redirecting international traffic flows from Europe and the Americas to Asia" (p. 388). The accuracy of their results shows the importance of international connectivity in the region to provide sufficient demand to sustain viable airlines, but also the effect of executing a coherent strategy, out of which airlines are a crucial component. Moreover, it exposes the difficulties of attempting a remake of a similar strategy, given that the incumbent carriers (along with airports and travel ecosystem) would be strongly established in the same region that allows them to extract some competitive advantages.

In order to analyse the competitiveness of the three main carriers in the Middle East, in comparison to Saudia as the main network carrier in KSA, and considering the focus of Emirates, Qatar and Etihad in competing with established network carriers to connect different regions of the world (Ellis, 2019); OAG Connections Analyser (OAG, 2023) was used to determine all viable international connections for each airline (not considering any partner or alliance) over one representative week in May 2019, with a maximum circuity of 175 (i.e. the resulting connection cannot produce a route that is longer than 175% of the direct flight), and a maximum connecting time of 240 minutes (4 hours). A viable connection is a combination of flights to origin-destination pairs (O&D), whose schedule fits within a connecting window defined by the minimum connecting time (usually defined in coordination between the airline and the airport), and the maximum connecting time, as well as other parameters defined above. This implies that O&D pairs can be repeated; for instance, a flight from London Heathrow (LHR) that lands at Dubai (DXB) can connect with four different flights departing to Riyadh (RUH) within 4 hours of its arrival and create four different connections London Heathrow – Riyadh (as long as all flights are offered by the same airline and the first flight to Dubai departs at least a minimum connecting time after the London arrival). If the same flights are operated with the same schedules seven days a week, they still account for four connections, and each connection will have seven frequencies. This does not mean that all these connections are actually marketed by the airlines to passengers, only that the connecting opportunity exists. The circuity restriction avoids obviously inconvenient connections (such as London – Doha – Paris, for instance) to be accounted for.

Overall, feasible connections measure the ability of a network carrier to capture market segments in O&D pairs that lack frequent direct services. Figure 7 shows that Saudia is clearly lagging behind its competitors in terms of international connectivity, particularly at Riyadh (RUH), which does not come as a surprise given the analysis shown in the previous section, but Jeddah (JED) does not offer substantial improvement despite the higher focus of Saudia on international destinations form JED. Indeed, considering only the total number of possible connections, Qatar Airways has a robust schedule that could allow the carrier to offer almost 60,000 connections over a whole week at Doha (DOH), 13 times more than Saudia at RUH and more than seven times the offer at JED. It is clear that Qatar and Emirates have a global presence that will be very difficult to imitate, even by Etihad that still offered only a third of feasible connections than Emirates, and a fifth of Qatar's.

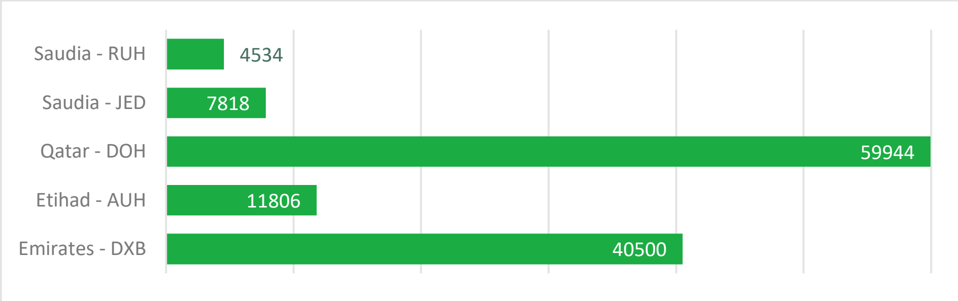

Fig. 7. Total number of international connections in w/c 13/05/2019 per airline at their hubs. Source: OAG (2023).

Meanwhile, Table 1 shows a characterisation of the international connections identified as feasible. The emphasis of Emirates on longer sectors is evident in their connections showing the longest average distance and, naturally, the longest total trip duration. It is also clear that the advantage of Qatar in the total number of connections is associated with the much lower minimum connecting (wait) time it is able to offer at Doha; this puts the airline as the best in terms of average waiting time, with 2 hours and 20 minutes, and compensates for a slightly longer average circuity in their connections. Saudia, on the other hand, lacks the global coverage of the other Middle Eastern carriers, and this is reflected in much shorter average distances, while the reduced availability of higher frequencies increases their average wait time to about 3 hours (OAG, 2023).

Table 1. Characterisation of international connections per airline and hub. Source: OAG (2023).

Airline - hub	**Minimum distance (km)**	**Maximum distance (km)**	**Average distance (km)**	**Average circuity**	**Average elapsed time (min)**	**Minimum wait time (min)**	**Average wait time (min)**
Emirates - DXB	516	15559	6366	116	1002	90	165
Etihad - AUH	516	14749	5128	113	844	90	158
Qatar - DOH	671	15476	5295	118	874	45	140
Saudia - JED	379	13276	3096	123	626	90	189
Saudia - RUH	484	9473	2679	114	574	90	176

4. Discussion: Key prospects for Saudia and Riyadh Air

If entry of Riyadh Air into the KSA air market goes ahead as planned in 2025, the resulting increased network competition does not necessarily mean that challenges for Saudia will outweigh opportunities, nor that Riyadh Air will engage in fierce competition with its national counterpart where only one airline can emerge victorious. Air market duopolies exist and thrive around the world, including in Australia (Qantas Airways & Virgin Australia), Japan (ANA & Japan Airlines), neighbouring UAE (Emirates & Etihad) and Taiwan (China Airlines & EVA Air). Though precise strategies for both Saudia and Riyadh Air are yet to be publicly articulated, it seems "that Saudia's new role will consist of a combination of domestic flights (already a significant part of its services) and carrying religious tourists from throughout the Islamic world to Saudi Arabia for the Hajj and Umrah pilgrimages" (Dron, 2021, p. 14).

4.1. Risks and opportunities

It is naturally expected that Riyadh Air would be true to its name and expand the international network at RUH, where this analysis has shown there is a wider landscape to fill, but an apparent smaller demand. If the new airline is to capture the opportunities of a growing interest in the KSA for international tourists, then there is a risk of a slower delivery of new attractions and overall strengthening of the tourism sector in the country. Moreover, as not all destinations would be located in or closely around Riyadh, the carrier would need to develop supporting short-haul domestic operations, or use Saudia to complement the network with local services, as Riyadh Air has only announced the purchase of wide-body aircraft so far (CAPA, 2023).

The relatively short history of the main Middle Eastern carriers has shown that the focus on international connectivity paid off to allow them an established position (Verspermann et al., 2008; O'Conell & Escofet Bueno, 2018). The context is now different for network carriers in KSA, yet the country also benefits from a wider domestic market and a much larger area, along with established key religious destinations, to develop a stronger position as a catalyst for air travel, rather than a connecting point alone. As the results from Alsumairi and Hong Tsui (2017) already suggest, "an increase in airline seat capacity of both [network] and [low-cost carriers] is associated with a significant increase in the number of monthly international tourist arrivals to Saudi Arabia" (p. 142).

Both Saudia and Riyadh Air have considerable scope and possibility to be at the forefront of Saudi Arabia's ongoing national development, including taking on regional rivals in the UAE and Qatar (and elsewhere), and helping the Kingdom in the process to realise its Vision 2030 goals. The central challenge is that key entrenched competitors such as Emirates Airline and Qatar Airways are not going to passively accept growing market share threats from their neighbour. Added to this reality, the Kingdom's economic growth trajectory and openness policies will to some extent benefit airline competitors in the region as key metrics like inbound tourist numbers are likely to outstrip KSA-based airline seat supply for some time to come. Likewise, staff supply, training and retention – to name a prominent few examples – are all challenging at the best of times, and currently during the post-Covid-19 pandemic recovery they are particularly difficult issues for the air transport industry globally.

5. Concluding thoughts

A growing desire to diversify its economy away from its historical reliance on oil revenues, together with an ever-increasing national wealth fund, and ongoing significant national investment in infrastructure, are all combining to underpin the future development of the air transport industry in KSA. Within this overall context, it does seem clear that Saudi Arabia's economic development – with aviation prominently represented – will not merely be a clone of its Gulf neighbours, nor will it be reliant on attracting travellers away from more established destinations in the region to be successful. Unlike its neighbours, the Kingdom has a number of unique competitive advantages that cannot simply be replicated. Firstly, being home to some of the most holy sites in Islam ensures that pilgrims will continue to want to travel to the country, and this demand is not susceptible to changing travel trends or preferences.

Secondly, when looked at purely from an aviation industry perspective, the current growth and development throughout the Kingdom has substantial domestic air market consequences, along with important international air market implications. The continued expansion of the domestic air market in KSA provides competitive opportunities and strengths that many neighbours cannot replicate due to their relatively small land areas, chiefly Bahrain, Qatar, the UAE and Kuwait. Saudi Arabia is able to supply considerable domestic feeder services for its airlines, helping to highlight how both inbound travellers (i.e., international tourists – leisure/business, pilgrims & VFR passengers), and outbound travellers (i.e., Saudi citizens wishing to visit other countries), are important parts of this story of air market expansion. In fact, the domestic market presents the most obvious opportunities for both network carriers (Saudia and Riyadh Air) to cooperate, at least during the inception of the new airline as it establishes itself.

Finally, a more open and prosperous Saudi Arabia will help to encourage more meaningful economic, cultural, educational, technological, political and religious connections with the Kingdom (amongst others), helping to some extent to foster closer diplomatic ties across the region and world, and in the process reduce the likelihood of regional misunderstandings, high level tensions and/or conflict. Though the pathway ahead for the Kingdom and its air transport sector is unlikely to be linear or without complications or obstacles, it does seem clear that the airline industry – and aviation more broadly – can play an important role in connecting and building for the future. In this manner, air transport represents a valuable antidote to isolation and disconnection, and a clear enabler of national development. Nevertheless, it must also be acknowledged that ever increasing demand for air transport acts to hinder our collective ability to combat and adapt to climate change, while making it harder for individual countries to achieve their commitments on greenhouse gas emissions reduction. Therefore, starting a new airline in the Kingdom could be seen as an unparalleled opportunity to drive the efficiency of the sector heading forward, thus positively impacting and shaping not only its own operations, but the practices of the entire travel value chain to improve its environmental performance.

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