GLOBAL AVIATION INDUSTRY

The Wright brothers, Wilbur and Orville, if alive today, could not have been happier. Recently, their invention of the airplane in the early 20th century completed 100 years of commercial flight. Airplanes transported about 3.31 billion passengers and 51.3 million tonnes of cargo across almost 50,000 routes in 2014. In other words, airlines facilitate 35% of global trade, equivalent to USD17 billion worth of goods by value, every day.

The aviation industry has not only supported tourism and trade but has also been a major contributor to growth of the world economy. According to the International Air Transport Association (IATA), the aviation industry’s global economic impact is around USD2.4 trillion (~3.4% of the world’s GDP) and it supports close to 60 million jobs worldwide.

Exhibit 1: Impact of the aviation industry on global GDP and employment

Source: ATAG, Al Masah Capital Research

The aviation industry has grown steadily over the last 10 years, with global revenues increasing to USD751 billion (~1% of the global GDP) in 2014 from USD379 billion in 2004. During 2004–14, passenger revenue, which accounts for the major part of revenues for the aviation industry, increased at a compound annual growth rate (CAGR) of 7.4% to USD598 billion, and cargo revenue expanded at a CAGR of 2.8%. Several aviation companies are focusing on generating revenues through ancillary services such as fees for baggage, ticket change, frequent flyer programs and onboard duty-free sales.

The rise in global population, increased per capita income, a preference for faster means of transport and attractive offerings from aviation companies amid high competition have driven demand for air travel in recent years. The steady supply of air transport has been supported by easily available financing and technological developments.

Growing competition in the aviation industry resulted in a decline in the average one-way passenger fare from USD256 per passenger in 2012 to about USD231 per passenger

1 International Air Transport Association (IATA)
in 2014. The passenger load factor, which has remained steady at around 79% over the last four years, has ensured demand-supply balance.

Nevertheless, owing to the steep decline in crude prices since H2 2014, airlines are expected to have posted a collective profit of USD19.9 billion in 2014, up from USD10.6 billion in 2013 and USD6.1 billion in 2012.

Exhibit 2: Global aviation – Key statistics

<table>
<thead>
<tr>
<th>Particulars</th>
<th>2004</th>
<th>2014E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues USD bn</td>
<td>379</td>
<td>751</td>
</tr>
<tr>
<td>Passenger USD bn</td>
<td>294</td>
<td>598</td>
</tr>
<tr>
<td>Cargo USD bn</td>
<td>47</td>
<td>62</td>
</tr>
<tr>
<td>Others USD bn</td>
<td>38</td>
<td>91</td>
</tr>
<tr>
<td>Passenger departures million</td>
<td>2.08</td>
<td>3.31</td>
</tr>
<tr>
<td>Freight million tonnes</td>
<td>36.2</td>
<td>51.3</td>
</tr>
<tr>
<td>Passenger load factor</td>
<td>%</td>
<td>73.5</td>
</tr>
<tr>
<td>Weight load factor</td>
<td>%</td>
<td>61.5</td>
</tr>
<tr>
<td>Net profit USD bn</td>
<td>(5.6)</td>
<td>19.9</td>
</tr>
</tbody>
</table>

Source: IATA, Al Masah Capital Research

Over the last 10 years, the passenger traffic growth rate in terms of revenue passenger kilometers (RPK) has been the highest in the Middle East. The region has also recorded higher freight traffic growth rate over the same period in terms of freight tonne kilometers (FTK) compared with other major geographies. In fact, over the last three years, the Middle East has been the only region to record double-digit growth in both passenger and freight traffic.

Going forward, forecasts suggest that the aviation industry would continue to grow at different rates across various geographies and services. The improving global economic scenario would be a key growth driver. During 2013–33, passenger air traffic is expected to grow 5.0% per annum and cargo volumes 4.7% annually. In terms of capacity\(^1\), the fleet size is expected to more than double to 42,810 during this period.

\(^1\) Boeing Current Market Outlook 2014–33
GCC Aviation – Spreading wings to the world

GCC AVIATION INDUSTRY

The GCC aviation industry has grown steadily over the past few decades and outpaced most other regional markets owing to favorable demographics and strong infrastructure. Additionally, the region capitalizes on its strategic location (between the East and the West), which connects nearly two-thirds of the global population within eight hours. The number of passengers transported by GCC-based airlines increased at a CAGR of 14% to about 150 million in 2014 from 42 million in 2004. Moreover, the global market share of GCC airlines (based on the number of passengers) increased from about 2% in 2004 to 4.6% in 2014, indicating the growing importance of the GCC aviation sector.

Exhibit 3: Number of passengers carried by and global market share of GCC airlines

Source: World Bank, IATA, Al Masah Capital Research

UAE-based airlines have particularly benefited from the growing demand and recorded the fastest growth (CAGR of 19%) in the number of passengers carried in the last 10 years, followed by Qatar-based airlines (17%) and Saudi Arabian carriers (8%). UAE-based airlines also have the highest market share (56% as of 2014) in the GCC region, based on the number of passengers transported.

Commercial airlines in the GCC region

The GCC region has 42 operating airlines (including those of the government and military). Only 11 of these are purely commercial airlines, with a focus on large-scale passenger transport. Seven full-service carriers (FSCs) and four low-cost carriers (LCCs) operate in the region.

The FSCs in the region are Emirates (UAE), Etihad Airways (UAE), Qatar Airways (Qatar), Saudia (Saudi Arabia), Gulf Air (Bahrain), Oman Air (Oman) and Kuwait Airways (Kuwait). The LCCs are Flydubai (UAE), Air Arabia (UAE), Flynas (Saudi Arabia) and Jazeera Airways (Kuwait). These airlines together serve 150 destinations across 80 countries.
GCC Aviation – Spreading wings to the world

The GCC aviation industry is largely state-owned, and most of the major airlines are owned by the government, including the big three – Emirates, Qatar Airways and Etihad Airways. Moreover, only two airlines in the region – Air Arabia and Jazeera Airways – are publicly listed (both are LCCs).

Short profiles of major airlines in the GCC region

**Emirates**

Established in 1985, Emirates is a government-owned airline based in Dubai. It is the largest airline in the Middle East in terms of fleet size, countries served and revenues. In 2014, its revenues stood at AED82.6 billion (~USD22.5 billion) and it transported more than 44 million passengers.

Emirates employs over 52,000 people and operates over 3,500 flights per week from the Dubai International Airport (DIA) to more than 145 cities across 80 countries and six continents. The airline also operates four of the world’s longest non-stop commercial flights from Dubai to Los Angeles, San Francisco, Dallas/Fort Worth and Houston. Emirates operates a mix of Airbus and Boeing wide-body aircraft, and is one of the few airlines to operate an all wide-body aircraft fleet. Emirates’ growth has been largely organic, supported by local partnerships.

**Qatar Airways**

Founded in 1993, Qatar Airways is a state-owned airline of the Qatar government. With a fleet size of 150 aircraft, Qatar Airways serves nearly 150 destinations across 76 countries. In 2014, the airline had a workforce of more than 20,000 employees and transported more than 22 million passengers.
Qatar Airways has the youngest fleet among GCC-based airlines, with an average fleet age of 5.4 years\(^3\). The airline has a good mix of Boeing and Airbus aircraft including the long-range Boeing 777, the new Boeing 787, Airbus A340 and A330. In 2013, Qatar Airways joined the Oneworld global alliance, thereby gaining access to more than 1,000 destinations.

**Etihad Airways**

Established in 2003, Etihad Airways is a government-owned airline based in Abu Dhabi. With an employee base of more than 13,000 and a fleet size of 112 aircraft, it serves more than 100 destinations across 60 countries. Etihad Airways has a mix of the latest Boeing and Airbus aircraft in its fleet. In 2013, the airline transported almost 11.5 million passengers and recorded revenues of USD6.1 billion.

One of the pillars of Etihad’s growth is its equity alliance with other global carriers. Etihad has investments in Air Berlin, Air Serbia, Darwin Airline, Jet Airways, Virgin Australia, etc.

**Saudi Arabian Airlines (Saudia)**

Founded in 1945, Saudia is a government-owned airline based in Jeddah, Saudi Arabia. With a fleet size of 156 aircraft, it serves more than 110 destinations across 40 countries. Its fleet includes Airbus A330-300 and Boeing 777-300, which are equipped with Wi-Fi and mobile network portability.

Saudia became a member of the Skyteam alliance in 2012. Saudia has code-sharing agreements with airlines such as Air Europa, Air France, Gulf Air, Kenya Airways and SriLankan Airlines.

**Fleet profile**

GCC-based airlines have the youngest fleet in the world, with a total fleet size of almost 1,000 aircraft. Within the GCC region, the UAE has the largest fleet size of 489, followed by Saudi Arabia (209) and Qatar (164)\(^4\). The three countries account for more than 85% of the regional airlines’ fleet size.

Among the commercial airlines in the region, Emirates has the largest fleet size of 234 aircraft, followed by Qatar Airways (151), Saudia (138) and Etihad Airways (109). The big three – Emirates, Qatar Airways and Etihad Airways – together account for 50% of GCC-based airlines’ fleet size.

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\(^3\) Airfleets.net  
\(^4\) Airfleets.net
Aircraft manufacturers Airbus and Boeing have almost an equal share in GCC-based airlines’ fleet. The common Airbus models used by these airlines are A380, A320 and A330-200, while the common Boeing models are B777-300ER, B737-800 and B787-8.

In terms of aircraft type, wide-body aircraft account for nearly 65% of the 11 commercial airlines’ fleet. The extensive use of wide-body aircraft, mainly by FSCs, has helped GCC-based airlines to operate long-haul flights across the globe. In fact, over the last 15 years, almost 80% of aircraft orders placed by these airlines with Boeing have been for wide-body aircraft.

**GCC-based airlines have a relatively young fleet**

The average age of the fleet owned/operated by GCC-based airlines is lower than that of their international competitors. Most GCC-based carriers have an average fleet age of five to six years, compared with other major global airlines’ average fleet age of more than 10 years.

New aircraft with the latest technology improve fuel efficiency and safety standards, and reduce maintenance costs. This provides GCC-based airlines an advantage over their global competitors.

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5 Airfleets.net
GCC Aviation – Spreading wings to the world

Exhibit 7: Average fleet age of GCC-based airlines is relatively lower

Source: Airfleets.net, Al Masah Capital Research

GCC aviation infrastructure

The aviation infrastructure in the GCC region has kept pace with the increasing demand for air travel. The region currently has 58 airports. Saudi Arabia has the highest number of airports at 33, followed by Oman (10); the UAE (9); and Qatar, Bahrain and Kuwait (two each). In terms of passenger traffic, DIA is the busiest airport in the region, handling close to 70 million passengers in 2014, followed by the Doha International Airport (26 million) and the Abu Dhabi international Airport (20 million).

In 2014, DIA beat London’s Heathrow airport to become the world’s busiest airport for international passengers.

Exhibit 8: Number of airports in the GCC region and passenger traffic at major airports

Source: The Airport Authority, ACI, websites of airports, Al Masah Capital Research
Expansion plans for major airports in the GCC region

Considering the GCC aviation industry’s growth potential, airports in the region have formulated major expansion plans.

- **Al Maktoum International Airport (Dubai):** The airport is set for large expansion, with investments of more than USD30 billion over the next six to eight years. Located in Dubai World Central, a purpose-built airport city, the 54 sq. mile airport metropolis would have new commercial and residential units, and state-of-the-art passenger and cargo facilities. By 2020, the airport is expected to handle more than 120 million passengers annually, becoming the busiest airport in the world, and would be capable of accommodating up to 100 Airbus 380 Superjumbos.

- **Hamad International Airport (Qatar):** The recently opened airport in Doha, which replaces the Doha International Airport, was built at a cost of USD16 billion. The airport has facilities such as a shopping emporium with 70 retail outlets, 30 cafes and restaurants, a spa, two hotels, squash courts and a public mosque. Following further expansion, it is expected to handle 50 million passengers per year and handle two million tonnes of cargo.

- **Kuwait International Airport (Kuwait):** The airport is set for a USD4.8 billion expansion program. As part of the expansion plan, a terminal and a runway would be constructed to increase the annual passenger handling capacity from the current 7 million to 25 million by 2025.

- **Abu Dhabi International Airport (Abu Dhabi):** The airport is set for major expansion, with the construction of the new Midfield Terminal at a cost of around AED11 billion (~USD3 billion). The new terminal, scheduled to open in 2017, is expected to increase the passenger handling capacity from 17 million per year to around 55 million per year. Other expansion plans include the construction of a third runway with a length of 4,100 m, enhanced cargo and maintenance facilities, and other commercial developments.

- **Muscat International Airport (Oman):** A USD1.8 billion expansion plan is being currently implemented at the airport to increase its passenger handling capacity. The existing terminal is being expanded in four phases to accommodate up to 48 million passengers per year, while the new terminal (area of ~335,000 sq. m) would handle about 12 million passengers annually. The new terminal would feature shopping centers, restaurants, cafes, lounges and a 90-bed, four-star airside hotel. It would also host a cargo terminal with a capacity of 260,000 tons per year.

- **King Abdulaziz International Airport (Saudi Arabia):** The airport in Jeddah is being expanded. It includes a twin crescent-shaped 670,000 sq. m passenger terminal complex, 46 contact gates, 94 boarding bridges, double-deck A380 access, lounges, an airside hotel, and catering and retail facilities. Phase 1 of the expansion plan costing USD1.5 billion is expected to increase the passenger handling capacity to 30 million per year from 13 million per year. On completion in 2035, the airport’s passenger handling capacity would reach 80 million per year.

Additionally, the King Khaled International Airport and the Bahrain International Airport are being expanded. Riyadh’s King Khaled International Airport, where expansion would be completed in 2017, is increasing its passenger handling capacity to 35 million annually in the first phase and to 47 million in the second phase. The Bahrain International
Airport is implementing a USD2 billion upgrade plan. The upgrade would increase the airport’s passenger handling capacity to 13.5 million per year in five years. Its cargo carrying capacity is being increased to 60,000 tonnes per year from the current 38,000 tonnes per year.

**Aviation authorities**

Each GCC nation has its own aviation authority. The UAE has separate authorities for Dubai and Abu Dhabi. These aviation authorities are regulators for operating airlines registered in the GCC region. All operating airlines are required to adhere to the norms and standards prescribed by these aviation authorities.

### Exhibit 9: Aviation authorities in the GCC region

<table>
<thead>
<tr>
<th>Region</th>
<th>Aviation Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>General Authority of Civil Aviation (Saudi Arabia)</td>
</tr>
<tr>
<td>Dubai (UAE)</td>
<td>Dubai Civil Aviation Authority</td>
</tr>
<tr>
<td>Abu Dhabi (UAE)</td>
<td>General Civil Aviation Authority (Abu Dhabi)</td>
</tr>
<tr>
<td>Kuwait</td>
<td>Civil Aviation Authority (Kuwait)</td>
</tr>
<tr>
<td>Qatar</td>
<td>Civil Aviation Authority (Qatar)</td>
</tr>
<tr>
<td>Oman</td>
<td>Public Authority for Civil Aviation (Oman)</td>
</tr>
</tbody>
</table>

Source: Al Masah Capital Research

These authorities have played a major role in supporting the aviation sector by providing/building infrastructure and through timely policy introduction. In addition to implementing individual policies, the UAE’s General Civil Aviation Authority (GCAA) has urged GCC agencies to collaborate to address the common issue of traffic congestion in the region and effectively manage the expected rise in traffic in the coming years. GCAA aims to build a unified aviation traffic monitoring system in line with the European countries’ EUROCONTROL.

**EUROCONTROL**

Launched in 1999, EUROCONTROL, the European Intergovernmental Organization for the Safety of Air Navigation, is an integrated air traffic management system catering to 41 member states in Europe. It supports its member states to enhance safety and efficiency, and ensure eco-friendly air traffic operations.

The long-term umbrella plan being considered would lead to a fully unified regulatory body or virtual airspace in the region. Once implemented, this platform is likely to help in addressing issues related to air traffic congestion in GCC countries.
GROWTH DRIVERS FOR THE GCC AVIATION INDUSTRY

The GCC aviation industry has significantly contributed to the region’s economic growth. The industry has played a major role in economic diversification in the region, as the GCC nations attempt to reduce their dependence on oil revenues to drive growth. Growth of the aviation sector in the region is supported by the increasing population with high disposable income, government support, the large expatriate population, the favorable geographic location (the GCC region serves as a transit hub to connect the Western world with Asia-Pacific) and the growing tourism sector.

Favorable demographics

The GCC region has a young, growing population and a large expatriate population. The relatively high standard of living, job opportunities, medical facilities and ease of connectivity with the rest of the world have led to strong economic growth in recent years. The GCC region’s population has grown at around 3.5% annually over the last five years, higher than the global average population growth of around 1.2%. The region’s growing population is characterized by high levels of urbanization, with more than three-fourths of the population living in urban areas. Urbanization has significantly contributed to growth in air travel.

Exhibit 10: GCC region has large urban population

The large expatriate population in the GCC has supported growth of the region’s aviation industry

The large expatriate population in the GCC region has contributed to growth in the aviation industry. Nearly 20 million expatriates are estimated to live in the GCC region, accounting for more than 40% of the population. In countries such as the UAE and Qatar, expatriates account for over 80% of the population. The large expatriate community’s travel requirements have contributed to the aviation industry’s growth. Additionally, the large working-age population (70% of the population) has increased the demand for air travel in the GCC region.
South Asians (particularly from India, Pakistan, Bangladesh, Sri Lanka and Nepal) constitute the largest expatriate community, followed by immigrants from Southeast Asia, Africa and Europe.

Exhibit 11: Expatriates in the GCC region are from diverse geographies

Source: Al Masah Capital Research

High per capita income

The relatively high income level of the population has been a major driver of the aviation industry. As of 2013, the GCC region had an average per capita income of around USD33,000, higher than the global average of around USD10,000.

Exhibit 12: GCC has relatively high per capita income

Source: World Bank, Al Masah Capital Research

Countries, such as Qatar and the UAE, have per capita income of over USD100,000 and USD40,000, respectively, which are comparable to that of developed countries. High
income level in the region has made air travel affordable for a large part of the population.

**Significant government spending**

GCC governments have played a key role in promoting the regional aviation industry and reducing the region’s dependence on hydrocarbons by developing other sectors of the economy of the region. In fact, it was the governments’ focus on building modern infrastructure that supported growth during the economic crisis. The region’s major airlines, which are largely owned by the respective governments, have invested around USD313 billion in developing airports (to cater to growing passenger volumes). In 2014, USD45 billion worth of infrastructure contracts, including those for airports, were estimated to have been awarded. Among the six GCC countries, the UAE is the leading investor, with nearly USD136.1 billion of investment planned for the aviation industry over 2011–21.

**Influx of tourists**

The GCC region has become a global tourist hub. Tourism contributes about 7% to the region’s economy. World-class shopping malls; shopping festivals, such as the Dubai Shopping Festival, Dubai Summer Surprises, Abu Dhabi Shopping Festival and Doha Trade Fair; and places of tourist interest, such as the Burj Khalifa and the Palm Jumeirah Island, have been some of the major tourist attractions. Saudi Arabia is already a major center for religious tourism for Muslim pilgrims. Additionally, growth of businesses, and improved quality of health care and education have contributed to growth in tourism.

The World EXPO 2020 in Dubai and the FIFA World Cup 2022 in Qatar are expected to provide a major boost to tourism, driving demand for air travel. Dubai is expecting the influx of 20 million tourists per year until 2020. The World EXPO 2020 would attract more than 25 million visitors, with 70% of them expected from outside the UAE. Qatar is expected to host more than 3.5 million tourists for the FIFA World Cup 2022. The hospitality segment’s capacity in the UAE and Qatar would increase significantly over the next decade to meet the growing demand from tourists.

**Access to cheap aviation fuel**

The GCC region has the largest proven oil reserves in the world. It has almost 500 billion barrels (bbl) of crude oil, representing more than one-third of the world’s crude oil reserves. The vast oil reserves ensure a stable supply of aviation turbine fuel for the region’s carriers at costs lower than that for their global competitors.

As of March 20, 2015, the average aviation jet fuel price for operators in the Middle East and Africa stood at USD65.5 per bbl, 4–5% lower than the global average of USD68.4 per bbl. This implies significant savings. As per Boeing, fuel costs account for approximately 34% of airlines’ costs.

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6 IATA  
7 GCC Infrastructure Market 2014, Ventures Middle East  
8 UAE Minister of Economy  
9 IATA Fuel Price Analysis
GCC Aviation – Spreading wings to the world

Exhibit 13: GCC-based airlines’ fuel cost advantage over operators in other regions

Source: IATA (accessed on March 20, 2015), Al Masah Capital Research

Bridging point for intercontinental traffic

The GCC region capitalizes on the hub-and-spoke model. It has a geographic advantage in terms of connecting the Western world with Asia-Pacific. The GCC serves as an ideal hub for long-haul flights and for air freight transported to and from manufacturing hubs in Asia-Pacific. Travelers across the globe prefer to break their journey in the GCC region and, therefore, the region is a major transit point for intercontinental air traffic.

The big GCC carriers rely on the ‘Fifth Freedom’ routes. This way, airlines can cater to several unserved routes. A good example is Emirates Airways flying from Dubai to Sydney and onward to Auckland.

Limited rail and road network

The relatively poor rail and road network in the GCC region has led to increased dependence on air transport for both passenger and cargo traffic. The GCC region has a road density of about 12 per 100 sq. km, which is far below the global average road density of about 33 per 100 sq. km. Apart from Qatar and Kuwait, all GCC countries have road densities below 20 per 100 sq. km.

Although Dubai has a fully automated metro rail network, railways are virtually non-existent in Kuwait, Oman, Qatar and the UAE. Given these limitations in land transport, air transport has gained importance (also considering the higher comfort level offered and the shorter time involved).
The GCC has liberalized its aviation industry over the last few years to improve efficiency and competitiveness.

Liberalized aviation policies

Over the years, GCC countries have introduced liberalized and progressive aviation policies to enhance transparency and competitiveness in the aviation sector. Although the aviation industry is largely government-controlled, GCC countries have taken steps to involve the private sector.

The UAE has been at the forefront of promoting liberal aviation policies to enhance competition in the industry. The Open Skies Policy is one such effort aimed at establishing a liberal operating environment. The UAE has signed Open Sky agreements with more than 100 countries. Moreover, Kuwaiti authorities liberalized the aviation industry by granting three new licenses to airline companies in 2003. In 2011, Saudi Arabia’s General Authority for Civil Aviation opened up the aviation sector to foreign airline operators. Following this, Qatar Airways and Gulf Air were granted licenses and set up two new airlines – Al Maha and Saudi Gulf Airlines, respectively – in the country in 2014. The Oman government plans to open up the industry to private sector’s involvement. Regional governments’ steps to increase competition and create a level playing field would attract significant investment in the aviation industry.

Source: World Bank, CIA, DB Schenker, Al Masah Capital Research
CHALLENGES FOR THE GCC AVIATION INDUSTRY

Although several factors support the GCC aviation industry’s growth, there are certain issues that need to be addressed. One of the key challenges for the industry is weak air traffic management and regulation in the region. Moreover, there is a lack of skilled personnel and flexibility in airspace usage.

Air traffic congestion

Increasing demand for domestic air travel in the region and the fact that GCC is a major air transit point for intercontinental traffic have led to traffic congestion. This results in high operating costs, flight delays and low operating efficiencies. Additionally, only 50% of the GCC airspace is available for commercial aircraft (the remaining airspace is largely controlled by the military), leading to the use of inefficient flight corridors and higher costs for airlines. The lack of coordination between commercial and military air traffic management has resulted in large operational inefficiencies (owing to underutilization of the available airspace). With air traffic for GCC airlines estimated to grow faster than the world average over the next decade and more players expected to enter the industry, it is imperative that GCC governments increase coordination to improve air traffic management.

Over the last few years, industry stakeholders have been demanding a single regional air traffic management system, similar to Europe’s EUROCONTROL, to be implemented in the Gulf region and rolled out to cover other countries in the Middle East. GCC countries are expected to handle more than 400 million passengers annually by 2020. The UAE expects aircraft movement to increase to about 1.4 million per year by 2020. With air traffic congestion at very high levels in the Gulf air space, a unified air traffic management system can help GCC-based carriers operate without commercial restrictions and help in addressing issues related to routes, fares and frequencies.

Shortage of skilled labor

GCC-based airlines have major expansion plans to meet the growing demand for air travel. A key requirement for implementing these plans, is a proportional increase in skilled labor in the form of pilots, cabin crew and maintenance personnel. However, the region is likely to face a shortage of labor in the coming years.

The regional aviation industry\textsuperscript{10} would require more than 35,000 new pilots and 50,000 new technical personnel over the next two decades.

The GCC aviation industry is heavily dependent on expatriates for skilled labor. In fact, almost 90% of pilots of major airlines, such as Etihad Airways and Qatar Airways, are expatriates. In addition to skilled expatriates, there is a need for skilled local people to increase their participation in the aviation sector to address recruitment-related challenges in the long term.

\textsuperscript{10} arabiansupplychain.com
Concerns of overcapacity

Major GCC-based airlines have outstanding orders for more than 850 aircraft for delivery over the next decade or so. However, this may lead to excess capacity in the aviation industry, as nearly two-thirds of new aircraft deliveries would cater to fleet expansion and the remaining would replace existing fleet. This may result in airlines reducing fares to increase passenger load factors, which would trigger a price war in the industry. This can hurt the profitability of airlines.

Exhibit 15: GCC-based airlines have major fleet expansion plans

Securing landing slots at international airports

GCC-based airlines have expanded their global footprint by operating flights across the world. Securing international landing slots is critical for their future expansion plans. In the recent past, airlines based in Europe and North America have lobbied with their governments to limit the number of landing slots for GCC carriers. For example, Germany and Canada have decided to not allocate additional landing slots to Emirates, Etihad and Qatar Airways at their airports.

The big three airlines in the Middle East – Emirates, Qatar Airways and Etihad Airways – have entered the US, the world’s largest aviation market, in a big way. In the last two years, these carriers together have increased their number of flights to the US by almost 50% to serve 11 cities. These carriers are also making significant investments in building brand awareness in the US. In response to the growing presence of these carriers in the US, the big three US airlines – American, Delta and United Airlines – have lobbied with the US Congress to modify the Open Skies agreements with Qatar and the UAE to restrict the expansion of Gulf region-based airlines in the US.

The big three US airlines have stated that Gulf region-based carriers have a pricing advantage, as they receive large subsidies and other benefits, and are able to undercut their global competitors, thereby eating into their market share. They allege that Emirates is able to transport more passengers from New York to Dubai than major airlines in the US. The three Gulf region-based major airlines operate about 25 daily flights to New York.
flights to the US. Moreover, since 2008, these Middle-Eastern carriers have more than tripled their share in US-to-India bookings to about 40%, resulting in a drop in the market share of US airlines and their European partners. In view of these issues, imposition of the proposed restrictions on GCC-based airlines’ expansion in the US could adversely affect their global expansion plans.

Lack of secondary airports

Secondary airports offer an opportunity to airlines to reduce their cost base, as landing and aircraft handling charges are lower at these airports. This is very important for LCCs, which require a lower cost base to ensure low air fares and profitability. However, the lack of secondary airports in the GCC region is forcing LCCs to operate from major airports (Flydubai operates from DIA and Jazeera Airways operates from the Kuwait International Airport). This compels LCCs to compete with FSCs, which not only limits the former’s ability to reduce operating costs, but also leads to traffic congestion at airports.
TRENDS IN GCC AVIATION INDUSTRY

The GCC aviation industry has witnessed major changes over the last decade. The following are the key trends related to these changes:

Growing popularity of low-cost carriers

Since the introduction of the LCC business model in the region in 2003, LCCs have gained popularity due to lower air fares, point-to-point services and rapid turnaround. This is evident from the fact that the majority of new orders are primarily for single-aisle and small twin-aisle aircraft. Nearly two-thirds of the 2,950 deliveries expected in the Middle East until 2033 are for small aircraft.\(^{11}\)

These carriers help in addressing the issue of space crunch at airports and increasing aircraft movement across airports. According to the Official Airline Guide (OAG), the LCC segment has expanded at an annual rate of more than 50% in the last decade, compared with FSCs’ 7% growth. LCCs have over 25% market share (based on seats) on major regional routes in the GCC region. The region’s four major LCCs – Flydubai, Air Arabia, Flynas and Jazeera Airways – together serve more than 90 destinations.

LCCs in the GCC region are beginning to offer superior travel experience by providing additional value-added services. These airlines are offering comprehensive in-flight entertainment services including music, movies, television programs and games. In 2010, Flydubai became the first LCC in the region to introduce on-demand, in-flight entertainment for passengers. Air Arabia’s ‘Fun Onboard’ program is a unique initiative, which encourages passengers to sing, dance, etc. while flying with the airline.

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\(^{11}\) Boeing Current Market Outlook 2014–33
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Growing regional MRO market

With steady growth in the GCC aviation market, a market for maintenance, repair and overhaul (MRO) of aircraft and related components has developed in the region. The MRO segment has developed from the presence of a few stand-alone service providers catering to simple maintenance requirements to the availability of end-to-end service providers. In the past, most of the MRO activities of GCC-based airlines were outsourced to other geographies. Today, most GCC airlines are investing in in-house MRO and relying on independent MRO service providers based in the region. Nearly three-fourths of heavy-frame MRO works are done within the region, of which 81% are undertaken by in-house maintenance teams of the airlines\textsuperscript{12}.

The transformation in the MRO space has attracted several international companies to the GCC MRO market. Currently, there are three main categories of service providers in the MRO market – airlines offering third-party services (for example, Saudia provides services through Saudia Aerospace Engineering Industries and Emirates provides services through Emirates Engineering); original equipment manufacturers such as UTC Aerospace Systems, Rolls-Royce, Snecma, Panasonic, GE and Thales; and independent MROs such as Abu Dhabi Aircraft Technologies and Dubai Aerospace Enterprise.

Exhibit 17: MRO spending by category and airline

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>USD 3.13 bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Overhaul</td>
<td>21%</td>
<td>36%</td>
</tr>
<tr>
<td>Airframe maintenance</td>
<td>4%</td>
<td>17%</td>
</tr>
<tr>
<td>Component Overhaul</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Line Maintenance</td>
<td>18%</td>
<td>4%</td>
</tr>
<tr>
<td>Others</td>
<td>23%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: ICF SH&E, Al Masah Capital Research

 GCC-based airlines spend about USD3.1 billion on MRO (~5% of global spending), of which more than 60% involves expenditure on engine overhaul and aircraft heavy maintenance. Going forward, strong fleet expansion plans of GCC-based carriers would drive demand for MRO players operating in the region. The Middle East MRO market is expected to reach USD8.8 billion over the next 10 years, registering annual growth of 6.7% over 2014–25\textsuperscript{13}.

\textsuperscript{12} ICF International
\textsuperscript{13} ICF International
Increasing preference for Islamic finance among GCC airlines

Raising funds through Islamic finance-based products is a common practice among GCC-based airlines. One of the main benefits of Islamic financing for airlines and lessors is diversification of funding sources. The design of the product is an Islamic lease, wherein the return is in the form of rent rather than interest. In fact, Emirates has been raising funds through Islamic financing. It plans to issue USD1 billion worth of Shariah-compliant notes during this quarter. Going forward, Islamic finance could emerge as an important source of funding (when the traditional loan market faces challenges).
M&A IN THE GCC AVIATION INDUSTRY

Major acquisitions have been reported in the GCC aviation industry over the last 10 years. As many as 20 deals worth more than USD1.4 billion were signed by GCC-based airlines during this period, with the majority of them signed in the last four years. UAE-based Etihad Airways was the most active airline in terms of acquisitions, accounting for 80% of deals worth more than USD1.3 billion.

Exhibit 18: M&A deals involving GCC-based airlines

<table>
<thead>
<tr>
<th>Year</th>
<th>Target Name</th>
<th>Target Nation</th>
<th>Acquirer Name</th>
<th>Acquirer Nation</th>
<th>% Shares Acquired</th>
<th>Deal Value (USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Amadeus Gulf</td>
<td>UAE</td>
<td>Etihad</td>
<td>UAE</td>
<td>51%</td>
<td>5.0</td>
</tr>
<tr>
<td>2005</td>
<td>Cargolux Airlines</td>
<td>Luxembourg</td>
<td>Etihad</td>
<td>UAE</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2005</td>
<td>GAMCO</td>
<td>UAE</td>
<td>Etihad</td>
<td>UAE</td>
<td>40%</td>
<td>NA</td>
</tr>
<tr>
<td>2010</td>
<td>Sahaab Aircraft Leasing Co</td>
<td>Kuwait</td>
<td>Jazeera Airways</td>
<td>Kuwait</td>
<td>100%</td>
<td>89.5</td>
</tr>
<tr>
<td>2011</td>
<td>Air Berlin</td>
<td>Germany</td>
<td>Etihad</td>
<td>UAE</td>
<td>27%</td>
<td>94.8</td>
</tr>
<tr>
<td>2011</td>
<td>Cargolux Airlines</td>
<td>Luxembourg</td>
<td>Qatar Airways</td>
<td>Qatar</td>
<td>35%</td>
<td>NA</td>
</tr>
<tr>
<td>2012</td>
<td>Virgin Australia</td>
<td>Australia</td>
<td>Etihad</td>
<td>UAE</td>
<td>4%</td>
<td>36.2</td>
</tr>
<tr>
<td>2012</td>
<td>Virgin Australia</td>
<td>Australia</td>
<td>Etihad</td>
<td>UAE</td>
<td>6%</td>
<td>NA</td>
</tr>
<tr>
<td>2012</td>
<td>Air Seychelles</td>
<td>Seychelles</td>
<td>Etihad</td>
<td>UAE</td>
<td>NA</td>
<td>20.0</td>
</tr>
<tr>
<td>2013</td>
<td>Darwin Airline</td>
<td>Switzerland</td>
<td>Etihad</td>
<td>UAE</td>
<td>33%</td>
<td>NA</td>
</tr>
<tr>
<td>2013</td>
<td>Jet Airways India</td>
<td>India</td>
<td>Etihad</td>
<td>UAE</td>
<td>24%</td>
<td>379.2</td>
</tr>
<tr>
<td>2013</td>
<td>Virgin Australia</td>
<td>Australia</td>
<td>Etihad</td>
<td>UAE</td>
<td>10%</td>
<td>NA</td>
</tr>
<tr>
<td>2013</td>
<td>Jat Airways</td>
<td>Serbia</td>
<td>Etihad</td>
<td>UAE</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2013</td>
<td>Jet Privilege India</td>
<td>India</td>
<td>Etihad</td>
<td>UAE</td>
<td>NA</td>
<td>150.0</td>
</tr>
<tr>
<td>2014</td>
<td>Petra Airlines</td>
<td>Jordan</td>
<td>Air Arabia</td>
<td>UAE</td>
<td>49%</td>
<td>NA</td>
</tr>
<tr>
<td>2014</td>
<td>Alitalia Linee Aeree Italiane</td>
<td>Italy</td>
<td>Etihad</td>
<td>UAE</td>
<td>49%</td>
<td>519.7</td>
</tr>
<tr>
<td>2014</td>
<td>Alitalia Loyalty</td>
<td>Italy</td>
<td>Etihad</td>
<td>UAE</td>
<td>75%</td>
<td>150.9</td>
</tr>
<tr>
<td>2014</td>
<td>Air Berlin</td>
<td>Germany</td>
<td>Etihad</td>
<td>UAE</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2014</td>
<td>Darwin Airline</td>
<td>Switzerland</td>
<td>Etihad</td>
<td>UAE</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2015</td>
<td>IAG</td>
<td>UK</td>
<td>Qatar Airways</td>
<td>Qatar</td>
<td>10%</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: Thomson Banker, Al Masah Capital Research

The increase in the number of M&A deals in the aviation industry is driven by GCC-based airlines’ expansion plans for new markets (to enhance scale and gain a bigger market share). For instance, the recent acquisition of International Consolidated Airlines Group by Qatar Airways was in line with the latter’s objective to gain a presence in key European hubs and establish transatlantic networks. Apart from global expansion, growing the consumer base has been a key objective behind acquisitions. For example, the Etihad-Alitalia Loyalty SpA deal was aimed at gaining access to high-net-worth customers under Alitalia’s MilleMiglia Loyalty program.

A detailed analysis shows that the deals have been well distributed across geographies. GCC-based airlines have made acquisitions in Australia, Germany, India, Italy, Luxembourg, Serbia, Seychelles and Switzerland. Moreover, very few deals were signed within the GCC region. Since most carriers in the GCC region are state-owned, consolidation within the region is unlikely (and difficult) and, therefore, large airlines in the region are looking at expansion opportunities outside GCC. Most of the signed deals involve the acquisition of less than 50% stakes owing to the highly regulated nature of most global aviation markets in terms of foreign ownership.
The GCC aviation industry is expected to get a further boost from the World EXPO 2020 and the FIFA World Cup 2022.

As there is a long way to go in terms of full-scale deregulation in the GCC region, most deals are likely to be signed outside the region.

**CONCLUSION/OUTLOOK**

Driven by the large expatriate population, high per capita income, growing influx of tourists and geographic advantages, the GCC region has become the global aviation hub. Moreover, favorable and liberalized aviation policies support growth in the sector. Meanwhile, the industry has witnessed interesting trends, such as the rise of LCCs and a growing MRO market, amid challenges including air traffic congestion and a shortage of skilled labor.

The GCC aviation industry is poised for growth, though at a slower pace. The large urban population with high income levels, limited road and rail connectivity in the region, and a growing preference for faster and more comfortable travel would drive growth. With the World EXPO 2020 and the FIFA World Cup 2022 expected to attract millions of tourists from across the world, the demand for air travel in the region would increase further. Additionally, with prospects of the aviation industry being deregulated, we expect increased private sector participation and investments.
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