When the Sky is the Limit: Aviation Development in the Middle East and North Africa

Jawad Rachami

Article at a glance

• Middle East and North Africa (MENA) countries must diversify their economies in order to lay a stronger foundation for lasting growth.

• Modern aviation infrastructure is important for global competitiveness and for connecting local MENA economies to the rest of the world.

• The success of MENA countries in developing sound aviation infrastructure has not been uniform, nor has been their ability to create competitive positions in global markets.

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Introduction

Achieving sustainable economic development in the Middle East and North Africa (MENA) is a key challenge for the region. As it has become increasingly dependent on unstable oil revenues, MENA continues to struggle with redefining the basis for future growth. The recipe, in principle, is simple, but its undertaking is a tall order: Create more competitive markets that can take advantage of global trade and investment in order to create the millions of jobs needed to employ the swelling ranks of young workplace entrants. Yet, past reform efforts in most MENA countries have been incomplete and cursory at best with little in the way of effective change.

The task of building a strong competitive advantage in the global market rests on the fundamentals of productivity growth. As Michael Porter has long argued, a country’s competitive advantage includes not only inherited factors of production (e.g., geography, demography, natural resources) but also created ones, such as infrastructure, knowledge resources, and communication networks. What is more, no economic transformation can take place without institutions that allow markets to function properly. In *The Global Competitiveness Report 2008-2009*, Porter notes that institutional quality and the state of infrastructure create opportunities for higher productivity in an economy. Therefore, investments in both infrastructure modernization and institutional development are essential to achieving market integration, global competitiveness and, by extension, meaningful economic growth – this is as true for the developed economies of the West as it is for the countries of the Middle East.

In MENA, one sector where such investments are instrumental to the region’s fitness for global competitiveness is air transportation. Participation in 21st century global trade requires modern aviation infrastructure enabling just-in-time mobility and the integration of local capacity into complex cross-border supply chains. Having such advanced infrastructure can transform an economy by energizing the private sector, creating broader access to trade and investment, and turning airports themselves into major economic engines. In fact, airports in developed economies have become global multi-billion-dollar enterprises serving not only as transportation hubs, but also as large commercial and service centers.

Global air transportation has achieved remarkable progress over the years in terms of new technology, market presence, and economic relevance. In MENA, however, aviation development remains a mixed bag ranging from impressive expansion and modernization in the Gulf to a series of stumbling blocks spanning from Casablanca to Damascus. A key question, then, would be: How can MENA move forward on achieving even growth for its aviation industry and moving towards a more sustainable economic model?

MENA Aviation Traffic

To date, MENA has not fully capitalized on its potential to play an important role in the global aviation market. According to the Boeing Corporation, the region as a whole is responsible for only 5.5 percent of the world’s total revenue passenger kilometers\(^1\)

\(^1\) RPK is a measure of airline passenger traffic derived by multiplying the total number of revenue-paying passengers by the distance traveled by the vehicle in kilometers.
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This share of global passenger traffic is expected to hover at less than 6 percent in the next 20 years, and the region’s share of the world’s total number of flights is expected to remain at about 3.5 percent during the same period. This is reflective of MENA’s poor integration into the global economy and the weakness of its market and governance institutions.

Furthermore, a large portion of MENA traffic and its future growth is centered in Dubai, the region’s busiest and fastest-growing Aeropolis, which makes the story of aviation development in the region a lopsided affair (see figure 3). The MENA countries whose aviation infrastructure is lagging are finding their climb up the globalization ladder progressively steeper, while the few who have recognized the importance of this sector to their competitive standing are finding access to opportunity in global markets. This paper discusses four distinct trajectories for the air transportation sector within MENA (Leader, Flat-Liner, Disrupted, and Unplugged). It also places air service development within the context of local economic and institutional conditions, as well as global market access and competitiveness.

The Leaders

The development of the aviation sector in Dubai is an example of how this tiny Emirate has defied geopolitical odds to become a booming global destination and trade hub. Dubai’s explosive growth in air traffic has been evident in recent years (see figure 3). The emirate simply refuses to yield to its detractors on the often-stated concern that the capacity it seeks is not matched by local market demand. So far, the numbers justify Dubai’s ambitions.

In 2007, Dubai International Airport (DXB) recorded 19 percent growth in passenger traffic and is now rivaling some of the world’s biggest hubs in terms of both passenger traffic and freight. In 2006, Dubai surpassed Miami and Munich to become the 27th busiest airport in the world in terms of passenger traffic, and it surpassed a number of giants such as Amsterdam-Schiphol, Chicago O’Hare, and New York JFK airports to become the 13th biggest cargo hub in the world (see figures 4 and 5). Dubai International is now undertaking an expansion that will bring its facilities to accommodate over 70 million passengers annually. But that is not all. In Jebel Ali, a colossal new airport city, Dubai World Central International Airport is being built with a capacity of over 120 million passengers.

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2 Regional forecast data was derived from both the 2007 Boeing Market Outlook and International Civil Aviation Organization (ICAO) forecast database.

3 A term designated for major airport cities with multimodal access and diversified revenue base and land use.

4 Airports Council International (ACI) reports that DXB handled nearly 35 million passengers and more than 1.6 million tons of cargo in 2006.

5 Jebel Ali is located approximately 35 km southwest of the city of Dubai. Information about the Dubai World Central International Airport project is available at www.dwc.ae.
Dubai’s success is inspiring some of its neighbors, including Abu Dhabi, Qatar, and Bahrain, to develop state-of-the-art airport facilities and incorporate them into a national strategy aiming to make their respective economies more globally competitive. For instance, Abu Dhabi’s airport is pursuing a bold and innovative project by master-planning the first carbon neutral airport city in the world.\(^6\)

Although an important consideration, the oil boom alone does not explain it all. These pioneers of aviation development in MENA are demonstrating that embracing globalization and creating enablers for competitive advantage can pay big dividends even in the presence of institutional deficits and regional unrest. The interdependence between air service development and economic activity (goods, services, and investment) is the sort of chicken-and-egg conundrum that Dubai has been able to address largely through a combination of:

- Concerted government investment in modern infrastructure;
- Market-based incentives for hub commercial and financial services; and
- Development of sovereign-led positions\(^8\) in global capital markets.

It is, however, an inevitable fact that Dubai and others in the Gulf face a serious challenge with respect to labor force integration and all its socioeconomic implications, given the Gulf’s heavy reliance on foreign labor. Furthermore, recent turmoil in global financial markets and current oil price volatility are likely to undermine the Gulf’s ability to sustain the pace of its current strategy. Resolving these challenges while riding an upward growth trajectory will require the same imaginative power to reform national and local institutions as it has taken to develop the Gulf’s impressive infrastructure.

### The Flat-Liners

With respect to aviation infrastructure development, the performance of Maghreb countries has been rather flat despite their considerable potential. Indeed, they are failing on two fronts: (a) understanding the constraints facing air transportation growth north of their borders; and (b) charting new opportunities in global markets by offering alternative solutions to expanding regional air transportation systems. The busiest airport in the Maghreb today is Casablanca’s Mohammed V Airport, which – despite a new terminal and a new runway, albeit poorly planned\(^9\) – sees only a fraction of the traffic (passenger

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\(^6\) Abu Dhabi is investing $6.8 billion in its airport master plan expansion. Current UAE investments in aviation infrastructure are estimated at about $21 billion.

\(^7\) This is a reference to the Masdar City development project. Abu Dhabi has also recently announced several key investments in solar energy.

\(^8\) Sovereign investment funds controlled by Dubai and Abu Dhabi have made key acquisitions in international equity markets including stakes in Nasdaq, London Exchange, Carlyle Group, and Citigroup.

\(^9\) Casablanca Mohammed V airport’s two parallel runways are closely spaced, which does not allow for simultaneous arrival
and freight) handled by hub airports north of the Mediterranean.

Yet, the Maghreb could be at the forefront of aviation development in MENA, tapping into its proximity to European markets to develop alternative transportation hubs for transatlantic trade, for example. This window of opportunity exists because, as attested by the European Organization for the Safety of Air Navigation, also known as Eurocontrol, Europe is facing a range of congestion and environmental challenges that are putting a strain on its ability to accommodate forecast growth in air transportation.10

So, the case for a modern airport-city, or Aeropolis, in the Maghreb remains unmistakable, yet unfulfilled. Morocco is well positioned to pursue such a vision because: (a) it is favorably situated for multimodal access, (b) it has already concluded key free trade agreements with the U.S. and the EU, and (c) it can realize important synergies between air transport and new port facilities and trade zones on its northern tip.

For that to be possible, however, Morocco should do away with government control over airport ownership and management by abolishing its National Directorate of Airports and instead pursuing decentralized approaches and public-private partnerships in order to foster competition and innovation in airport development.

Egypt is also conceptually in a promising position to develop a successful air transportation sector, although it must now compete for traffic with nearby hubs in the Gulf. The country, to its credit, has recently invited private sector participation into the management and modernization of its airports. Yet, for these efforts to yield measurable results in the future, Egypt must deepen its institutional development, hasten the aviation liberalization agenda, and lift the regulatory constraints that limit the airport concession agreements it concluded with its European partners.11

The Disrupted

Needless to say, it is far easier to plead for imaginative power in a nation that is in relative peace than in one where artillery shells continue to shatter the development aspirations of its people. After decades of violence and destruction, Lebanon, for instance, was starting to show new signs of economic awakening at the turn of the millennium, only to relapse again into renewed regional hostilities and internal strife in the past two years.

Starting in 1994, Beirut’s Rafic Hariri International Airport underwent a 10-year reconstruction program, which included a new terminal, two new runways, new parking facilities, and new ground-based air traffic control systems. During that period, the airport saw its passenger traffic more than double to over 3.5 million passengers per year. But, after armed conflict returned to the country, the airport has been shut down several times.

In the absence of conflict, Beirut is capable of being a successful regional reliever hub serving the tourism industry, the world’s large and successful Lebanese diaspora, and business interests throughout the Middle East. Under the current conditions of political instability, however, Lebanon’s progress toward developing a modern air transportation sector remains a disrupted venture. Iraq is the other conflict zone where meaningful aviation development is practically impossible in the near future. When the country finally starts to recover from its woes, the government should put aviation sector development at the top of its list and move expeditiously to connect the Iraqi economy to the rest of the world.

The Unplugged

Unlike the Gulf States, other resource-rich countries in MENA (e.g., Libya, Iran) have made different decisions regarding their development trajectory, which produced either idle potential or economies that are altogether unplugged from the rest of the world. Their negative political standing in the world has resulted in the imposition of hefty constraints on their economies. Syria and Iran are under international operations, hence limiting the airport’s capacity potential.

10 See Eurocontrol, 2008.

11 Egypt has concluded agreements in 2004 with Fraport of Germany and ADL of France to operate several airports including Cairo International.
scrutiny, with a series of embargoes levied against the latter by the international community. Such isolated political environments cannot produce the market incentives and economic activity that supports aviation sector modernization and development.

Iran is a case in point. Construction of Tehran’s new airport (Imam Khomeini International Airport) was delayed more than 20 years. Since it finally opened in 2004, the airport has experienced significant setbacks and protests due to safety concerns stemming from faulty facility designs and lack of adequate technical and commercial resources to manage the operations.

Libya is another example. The country is finally emerging from an international embargo that has stunted its development potential for over two decades. The country’s leaders have announced their intention to accelerate infrastructure modernization and technology adoption. Tripoli International Airport is now adding two new terminals with a total capacity of 20 million passengers per year. But after years of isolation, Libya has farther to go than its North African neighbors in terms of bringing its institutions and infrastructure up to standards that are conducive to meaningful development.

These are countries whose only advantage lies in basic (inherited) factors of production. Their ability to develop creative factors of production remains low, even though these factors are essential to building a competitive advantage in the global economy. Therefore, economic enablers such as trade and investment that generate air traffic are severely weakened by these countries’ competitive deficits and global isolation. Except for limited trade flows, mostly in hydrocarbons, they lack the essential institutions and infrastructure needed for global integration and market-led economic growth and development.

### Conclusion

Air transportation flows are a function of a local economy’s competitive potential in relation to global markets and the characteristics of the country’s air transportation system. An assessment of the interactions between air transportation and economic activity for the four categories of countries identified in this paper provides an understanding of both the air transportation flow enablers and local effects of aviation development in the region. Figures 6 and 7 provide a qualitative matrix for those enablers and effects on local economies based on an overall analysis of traffic flow components and route networks to and from the region.

The economic flows that are driving air transportation for the ‘Leader’ category are both capital- and labor-intensive, acting as a gateway for a large foreign workforce and a global investment community. Through increased trade, investment, and infrastructure development, the Leader countries receive a set of strategic gains from air transportation, including access to global markets, international talent, capital resources, and technology transfer. It is, however, still unclear how these countries will respond to the current global financial crisis and to the prospects of lower hydrocarbon revenues – at least in the short

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term. It is also unclear how local productivity gains in these countries can be maintained in the absence of further institutional reforms and the full integration of their foreign-born workforce.

The ‘Flat-liner’ countries tend to exhibit an aversion to risk, favoring incremental development steps over bold political and economic realignment. This flawed logic leads these countries to trade future prosperity for a false sense of stability.13 As a result, the flow enablers for air transportation in these countries are mostly limited to trade in commodities and perishables, tourism, and travel by the expatriate labor force. They derive a moderate benefit from air transport in terms of tourism-related employment and labor remittances. However, these economies lack the competitive advantage rooted in creative factors of production that could spur major demand for the growth of the air transportation sector.

The ‘Disrupted’ MENA countries are coping with the absence of a fundamental requisite for development: Security. The potential to build up their economies and develop their aviation sector is a function of their ability to resolve ongoing conflicts and heal internal divisions. Under peaceful circumstances, the air transportation flow enablers for these countries are most likely to resemble those of the Flat-liner category14 – at least until they manage to develop game-changing factors to improve the competitiveness of their economies.

Finally, the ‘Unplugged’ countries of the region are paying a hefty price for their global isolation. Their air transport flows are severely restricted due to economic and trade sanctions and closed authoritarian institutions. Their air service sector essentially serves limited trade flows and constrained personal travel. The sanctions imposed on these countries are not only curbing their ability to generate economic activity, but also endangering the safety of their aviation systems, since they have limited access to upgrades and replacement parts for their aircraft, airports, and air traffic control systems. As a result, the local impact of air transportation on these economies is no better than their war-torn neighbors.

While a modern, competitive aviation sector can produce opportunities for economic growth in MENA countries, so far only a few of them have taken meaningful steps in that direction. Those few countries that have moved decisively to modernize and expand their aviation infrastructure are gaining economic opportunity and international prominence. However, simply building new infrastructure is not enough to reap the benefits of globalization. Sustainable economic development must rest on the strong fundamentals of local productivity and global competitiveness. That is why countries of the region should not only make their markets more accessible, but also make them more transparent and more responsive to global demand.

The windows of opportunity are now open to those MENA countries that link their future development prospects to global competitiveness and international relevance. Like other waves of global transformation before it, this one too will punish those who lag behind and reward those who have the courage to change.

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13 This so-called ‘stable’ status quo is increasingly threatened by demographic imbalances, low productivity, and weak global competitiveness.

14 The air transport flows for Lebanon for example would essentially mirror those of Morocco with heavy reliance on tourism, expatriate labor flows, and limited trade.
Jawad Rachami is a senior manager at an aerospace firm in the United States. He holds two master’s degrees: one in aeronautical science and another in international commerce and policy. He is the recipient of a certificate of appreciation from the National Aeronautics and Space Administration (NASA) and a letter of commendation from the U.S. Department of Defense. Rachami is an active member of the industry team charged with the development of the Next Generation Air Transportation System (NextGen). He is a frequent presenter at international aviation events and an occasional commentator on international policy issues.

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