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AN ASSESSMENT OF THE AIRLINE INDUSTRY IN  
LEBANON'S UNCERTAIN ENVIRONMENT

## AN ASSESSMENT OF THE AIRLINE INDUSTRY IN LEBANON'S UNCERTAIN ENVIRONMENT

by  
TAMADOR DALLAL KOUATLY

by  
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Faculty of Business

A research  
submitted in partial fulfillment of the requirements  
for the degree of Master of Arts  
to the Faculty of Business Administration  
at Haigazian University

First Reader

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Second Reader

Beirut, Lebanon

June 2008

Date of project presentation, June 27, 2008

HAIGAZIAN UNIVERSITY

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03.03.2008  
Date

AN HAIGAZIAN UNIVERSITY

Tamador Salim Dallal Kouatly for Master in Business Administration

PROJECT RELEASE FORM

Title: An assessment of the airline industry in Lebanon's uncertain environment

I, Tamador Dallal Kouatly

This research aims at examining the macro environment of the airline industry at a global, regional and domestic level to identify relevant driving forces outside a company's boundaries bearing on strategic decisions an airline company ultimately makes.

It will also observe the impact of different political and security events pertaining to

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Date

# AN ABSTRACT OF THE PROJECT OF

Tamador Salim Dallal Kouatly for Master in Business Administration  
Major: General MBA

Title: An assessment of the airline industry in Lebanon's uncertain environment

Chapter  
This research aims at examining the macro environment of the airline industry at a global, regional and domestic level to identify relevant driving forces outside a company's boundaries bearing on strategic decisions an airline company ultimately makes.

It will also observe the impact of different political and security events pertaining to Lebanon on traffic & sales variations and analyze current competitive environment of airlines, with a special focus on market attractiveness to foreign carriers considering the relevant external forces.

It aspires to cover the subject from a strategic management perspective.

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## DEDICATION

## INTRODUCTION

To my role models in life, my father, mother, husband, brothers and sisters who taught me that learning and education is a continuous process that span over a lifetime...

To my beloved daughters Rouba & Dalia who inspired me and endured my long hours being away from them...

Aviation contributes to sustainable development as it facilitates tourism and trade, providing the only transportation system which makes it essential for global business and tourism. It generates economic growth and contributes to nearly 8% of world GDP and creates directly 5.5 million direct jobs globally. At the end of 2006, the number of airlines worldwide reached 2,092 with 23,000 aircraft, 27.8 million departures per day, serving 3,754 airports<sup>1</sup>.

Aviation is a demand driven industry. The overall trend of demand has been consistently increasing on the background of GDP growth. Yet, Growth rates are not consistent in all regions, but countries with a de-regulated airline industry have more competition and greater pricing freedom. This results in lower fares and sometimes dramatic spurts in traffic growth.

The airline industry is a unique, fascinating and competition intensive industry exposed to a mix of challenges. It is also associated with risks related to strategic, financial, operational, and hazards which could result in valuable losses.

The rapid pace of change in today's environment is creating both opportunities and threats across an entire spectrum of industries. In particular, the global and regional growth forecast in the airline industry resulting from a projected increase in demand for business

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<sup>1</sup>ICAO Annual Report of the Council, 2006

# CHAPTER 1

## INTRODUCTION

### 1.1. The Topic

The Air transport sector is one of the world's most important industries. It contributes to sustainable development as it facilitates tourism and trade, providing the only transportation system which makes it essential for global business and tourism. It generates economic growth and contributes to nearly 8% of world GDP and creates directly 5.5 million direct jobs globally. At the end of 2006, the number of airlines worldwide reached 2,092 with 23,000 aircraft, 27.8 million departures per day, serving 3,754 airports<sup>1</sup>.

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The rapid pace of change in today's environment is creating both opportunities and threats across an entire spectrum of industries. In particular, the global and regional growth forecast in the airline industry resulting from a projected increase in demand for business

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<sup>1</sup> ICAO Annual Report of the Council, 2006

and commercial aviation travel both in terms of traffic and capacity is underpinning the requirement for the provision of new products and services in related industries.

- The Middle East, one of the fastest growing regions, is forecasted to record the highest average annual growth rate in terms of passengers for the 5 years to come. The region is dominated today by five major airports, with Dubai the pre-eminent hub, handling more than 22% of the regional total passengers.

Lebanon's aviation sector has been the region's biggest victim of political turmoil in the country's recent history. After decades of economic stagnation during the civil war, the country worked hard to effect an economic revival, with its tourism industry at the centre of the campaign.

A successful airline appreciates the importance of a sound understanding of the environment within which its activities take place. Macro environmental factors underpin the critical success factors of certain airlines. Political threats to the airline industry lead to uncertainties and lower the possibility of understanding the environment.

This project will research the airline's macro-environment and analyze the competitive situation of the airline industry in Lebanon's uncertain political environment.

## **1.2. Learning Objectives**

Since the start of the recent political turmoil and instability in Lebanon, I have been exposed to many strategic decision making situations where too many external uncertainties hindered the decision. Being in charge of managing the operation of Emirates Airline in Beirut has created a need for me to further understand:

- The impact of the macro-environment on the industry in general.

- The characteristics of the airline industry in the Middle East and assess Lebanon's position vis-à-vis neighboring countries.
- The impact of the political instability on traffic flows and local sales.
- The Lebanese market prospects and attractiveness to foreign airlines.

## 2.1. Overview

### 1.3. Report Structure

Chapter two consists of an evaluation of the global airline industry. It begins by an overview of the industry's importance within the global economy and describes the four major key risks for airlines. It will analyze the global macro environment, its impact on industry structure, and will discuss the industry's critical success factors.

Chapter three will describe with facts and figures the business macro environment of airlines in the Middle East, identifying major players and key success factors relevant to the region. It will also assess Lebanon's position vis-à-vis its other neighboring countries.

Chapter four is dedicated in full to an industry and competitive analysis of Lebanon, starting with a macro environmental scanning and an observation of the impact of several political and security events on traffic flow and local sales, followed by recognizing its corresponding dominant economic features. Porter's five forces of competition are studied, followed by an identification of the industry driving forces and key success factors. This chapter will end with an overall assessment of the Lebanese market prospects and attractiveness to foreign airlines.

Finally, I will summarize, consolidate and discuss the lessons learned from the previous chapters highlighting the project's key findings.

## CHAPTER 2

### THE GLOBAL AIRLINE INDUSTRY

#### 2.1. Overview

Air travel remains a large and growing industry. It facilitates economic growth, world trade, international investment and tourism, and is therefore central to the globalization taking place in many other industries<sup>2</sup>. The global Airline Industry generated over 450 billion USD in annual revenues in 2006 that were mainly derived from the fares paid by passengers, mail and cargo transportation and in-flight services. It offers transportation to around 2 billion passengers annually and handles 40 percent on interregional shipment of goods<sup>3</sup>. It is therefore considered one of the world's largest industries.

The demand for air travel services depends on: business needs for cargo shipments, business passenger demand, leisure passenger demand, all influenced by economic activity.<sup>4</sup>

In the past decade, travel for both business and leisure purposes grew strongly worldwide. In the leisure market, the availability of large aircrafts made it convenient and affordable for people to travel further to new and exotic destinations. Realizing the benefits of tourism to their national economies, governments in developing countries spurred the

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<sup>2</sup> <http://adg.stanford.edu/aa241/intro/airlineindustry>.

<sup>3</sup> ICAO Annual Report of the Council, 2006.

<sup>4</sup> [www.en.wikipedia.org/wiki/Airline](http://www.en.wikipedia.org/wiki/Airline).

development of resorts and infrastructure to lure tourists from the prosperous countries in Western Europe and North America. As the economies of developing countries grow, their own citizens become the new international tourists of the future. IATA believes in

Business travel has also grown as companies became increasingly international in terms of their investments, their supply and production chains and their customers. The rapid growth of world trade in goods and services and international direct investment has also contributed to growth in business travel.

Airlines' profitability is closely tied to economic growth and trade. In the 1950s and 1960s, annual growth rates of 15% or more were common. Annual growth of 5-6% persisted through the 1980s and 1990s<sup>5</sup>. Yet, growth rates are not consistent in all regions. Countries with a de-regulated airline industry have more competition and greater pricing freedom. This results in lower fares and sometimes dramatic spurts in traffic growth. The industry is also cyclical. Four or five years of poor performance precede five or six years of improved performance. During the first half of the 1990s, the industry suffered not only from world recession but travel was further depressed by the Gulf War. In 1991 the number of international passengers dropped for the first time. The financial difficulties were exacerbated by airlines over-ordering aircraft in the boom years of the late 1980s, leading to significant excess capacity in the market. IATA's member airlines suffered cumulative net losses of \$20.4bn in the years from 1990 to 1994<sup>6</sup>. an average annual growth of 3.2% a

Since then, airlines have had to recognize the need for radical change to ensure their survival and prosperity. Many have tried to cut costs aggressively, to reduce capacity

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<sup>5</sup> [www.en.wikipedia.org/wiki/Airline](http://www.en.wikipedia.org/wiki/Airline).

<sup>6</sup> Airlines International Magazine, IATA, October – November 2005 issue.

growth and to increase load factors. At a time of renewed economic growth, such actions have returned the industry as a whole to profitability: IATA airlines' profits were \$5bn in 1996, less than 2% of total revenues<sup>7</sup>. This is below the level that IATA believes is necessary for airlines to reduce their debt, build reserves and sustain investment levels. In addition, many airlines remain unprofitable. Figure 1 shows the level of global airline operating profit trends over the period from 2000 to 2007.

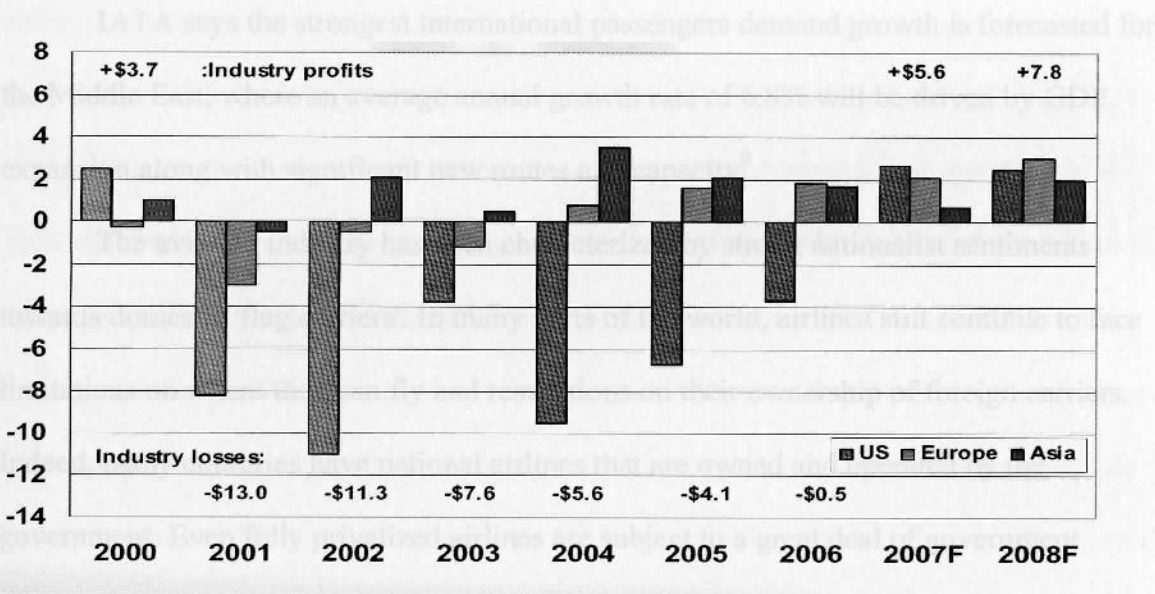


Figure 1 - The Global Airline Industry Profitability Trends in Billions  
Source: IATA September, 2007

Worldwide, IATA, International Air Transport Association, forecasts that there will be 2.7 billion air seats sold in 2011, which would mean an average annual growth of 5.2% a year from 2006 to 2011<sup>8</sup>. These rates are similar to those of the past 15 years.

<sup>7</sup> <http://adg.stanford.edu/aa241/intro/airlineindustry>.  
<sup>8</sup> Middle East Travel Magazine, issue 211, January/February 2008, page 21.

Slower growth of 4% is expected in Europe and North America, where the air travel market is already highly developed. The most dynamic growth is centered on the Asia/Pacific region and the Middle East, where fast-growing trade and investment are coupled with rising domestic prosperity. In terms of total passenger trips, however, the main air travel markets of the future will continue to be in and between Asia, North America and Europe.

IATA says the strongest international passengers demand growth is forecasted for the Middle East, where an average annual growth rate of 6.8% will be driven by GDP expansion along with significant new routes and capacity<sup>9</sup>.

The aviation industry has been characterized by strong nationalist sentiments towards domestic 'flag carriers'. In many parts of the world, airlines still continue to face limitations on where they can fly and restrictions on their ownership of foreign carriers. Indeed, many countries have national airlines that are owned and operated by the government. Even fully privatized airlines are subject to a great deal of government regulation for economic, political, and safety concerns. Airline labor actions, for instance, are often halted by government intervention in order to protect the free flow of people, communications, and goods between different regions without compromising safety<sup>10</sup>.

A number of factors are forcing airlines to become more efficient both on the public as well as business levels. In Europe, the European Union (EU) has ruled that governments should not be allowed to subsidize their loss-making airlines. Elsewhere too, governments'

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<sup>9</sup> Middle East Travel Magazine, issue 211, January/February 2008, page 21.

<sup>10</sup> [www.en.wikipedia.org/wiki/Airline](http://www.en.wikipedia.org/wiki/Airline).

concerns over their own finances and a as recognition of the benefits of privatization have led to a gradual transfer of ownership of airlines from the state to the private sector.

Deregulation is stimulating competition and lowering barriers to entry, such as that from small, low-cost carriers. In the past, governments dictated airfares, route networks, and other operational requirements for each airline. Since deregulation, airlines have been largely free to negotiate their own operating arrangements with different airports, enter and exit routes easily, and to levy airfares and supply flights according to market demand.

The US led the way in 1978 and Europe followed suit. The EU's final stage of deregulation took effect in April 1997, allowing an airline from one member state to fly passengers within another member's domestic market. Beyond Europe too, 'open skies' agreements are beginning to dismantle some of the regulations governing which carriers can fly on certain routes. In many ways, the biggest winner in the deregulated environment was the air passenger. Indeed, the U.S. witnessed an explosive growth in demand for air travel, as many millions who had never or rarely flown before became regular fliers, even joining frequent flyer loyalty programs and receiving free flights and other benefits from their flying. New services and higher number of scheduled flights have meant that business fliers could fly to another city, do business, and return the same day, for almost any point in the country<sup>11</sup>. Since the entry barriers for new airlines are lower in a deregulated market, this has produced far greater competition than before deregulation in most markets, and resulted in an average 20% drop in fares<sup>12</sup>.

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<sup>11</sup> [www.en.wikipedia.org/wiki/Airline](http://www.en.wikipedia.org/wiki/Airline).

<sup>12</sup> [www.en.wikipedia.org/wiki/Airline](http://www.en.wikipedia.org/wiki/Airline).

The added competition, together with pricing freedom, means that new entrants often take market share with highly reduced rates that, to a limited degree, full service airlines must match. This is a major constraint on profitability for established carriers, which tend to have a higher cost base.

As a result, profitability in a deregulated market is uneven for most airlines. These forces have caused some major airlines to go out of business, as did most of the poorly established new entrants.

The airline industry has proceeded further along the path towards globalization and consolidation, characteristics associated with the normal development of many other industries. It has done this through the establishment of alliances and partnerships between airlines, linking their networks to expand access to their customers. Hundreds of airlines have entered into alliances, ranging from marketing agreements and code-shares to franchises and equity transfers. Since governments often restrict ownership and merger between companies in different countries, most consolidations take place within a country. In the U.S., over 200 airlines have merged, were taken over, or gone out of business since deregulation in 1978. Many international airline managers are lobbying their governments to permit greater consolidation to achieve higher economy and efficiency<sup>13</sup>.

### **2.1.1. Industry Development:**

The last 50 years of the airline industry have varied from reasonably profitable, to devastatingly depressed. As the first major market to deregulate the industry in 1978, U.S. airlines have experienced more turbulence than almost any other country or region. Today,

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<sup>13</sup> [www.en.wikipedia.org/wiki/Airline](http://www.en.wikipedia.org/wiki/Airline).

airlines representing approximately one-half of total U.S. seat capacity are operating under Chapter 11 bankruptcy provisions<sup>14</sup>.

Toward the end of the century, a new style of low cost airline emerged, offering a no-frills product at a lower price. Southwest Airlines, JetBlue, AirTran Airways, Air Arabia and other low-cost carriers represent a serious challenge to today's legacy airlines, as do their low-cost counterparts in Europe, Canada, and Asia. Their commercial viability represents a serious competitive threat to the legacy full cost carriers.

2.1.2 To meet the requirements of their increasingly discerning customers, many airlines are being compelled to invest heavily in the quality of service that they offer, both on the ground and in the air. Ticket-less travel, new interactive entertainment systems, and more comfortable seating are just some of the product enhancements being introduced to attract and retain customers.

A more recent development is the airline alliance, which became prevalent in the 1990s. These alliances can act as virtual mergers to get around government restrictions. Groups of airlines such as the Star Alliance, Oneworld, and SkyTeam coordinate their passenger service programs (such as lounges and frequent flyer programs), offer special interline tickets, and often engage in extensive code-sharing (sometimes system-wide). These are increasingly integrated business combinations sometimes including cross-equity arrangements in which products, service standards, schedules, and airport facilities are standardized and combined for higher efficiency. One of the first airlines to start an alliance

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<sup>14</sup> <http://en.wikipedia.org/wiki/Airline>.

with another airline was KLM, who partnered with Northwest Airlines. Both airlines later entered the SkyTeam alliance after the fusion of KLM and Air France in 2004<sup>15</sup>.

Nevertheless, the outlook for the air travel industry is one of strong growth. For airlines, the future will hold many challenges. Successful airlines will be those that continue to tackle their costs and improve their products, thereby securing a strong presence in the key world aviation markets<sup>16</sup>.

### **2.1.2. Industry Classification**

The airline industry is classified into 3 main categories:

- Full Service Carriers referred to in the industry as legacy carriers. They are categorized into subcategories as follows:
  - International: 130+ seat planes that have the ability to take passengers just about anywhere in the world. Companies in this category typically have annual revenue of \$1 Billion or more.
  - National: usually these airlines seat 100-150 people and have revenues between \$100 million and \$1 billion.
  - Regional: companies with revenues less than \$100 million that focus on short-haul flights.
- Low Cost Carriers: Airlines which offers exceptionally low fares in exchange for eliminating traditional passenger service offering. They usually operate

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<sup>15</sup> <http://en.wikipedia.org/wiki/Airline>

<sup>16</sup> [www.adg.stanford.edu/aa241/intro/airlineindustry](http://www.adg.stanford.edu/aa241/intro/airlineindustry).

domestic or regional routes. Low Cost Carriers' business model and operations are characterized by the following:

- Single passenger class
  - Single type of aircrafts
  - Simple fare scheme rewarding early reservation
  - Unreserved seating (encourages quick & early boarding)
  - Flying to secondary cheaper and less congested airports or avoid peak slots at primary airports
  - Short flights and fast turnaround times
  - Simplified point to point routes
  - Eliminates disruptions due to delayed passengers or luggage to connecting flights
  - Use Internet as primary sales channel
  - Employees working in multiple roles (limiting manpower cost)
  - Paid for in-flight food & drinks generating additional revenue
  - Unbundling of ancillary charges to make the headline fare appear lower
- Cargo: these are airlines whose main purpose is to transport goods.

### **2.1.3. Financing Considerations**

Airline financing is quite complex, since airlines are highly leveraged operations. Not only must they purchase (or lease) new airline bodies and engines regularly, they must make major long-term fleet decisions with the goal of meeting the demands of their markets while producing a fleet that is relatively economical to operate and maintain. For Example,

in the U.S. Southwest Airlines rely on a single airplane type (the Boeing 737 and derivatives), while Eastern Air Lines operated 17 different aircraft types, each with varying pilot, engine, maintenance, and support needs<sup>17</sup>.

A second financial issue is that of hedging oil and fuel purchases, usually second only to labor in its relative cost to the company but with the current high fuel prices, it has become the biggest part of total airlines expenses. While hedging instruments can be expensive, they can easily pay for themselves many times over in periods of increasing fuel costs, such as in the 2000-2007 periods.

#### **2.1.4. *Operating Costs Considerations***

Full-service airlines have a high level of fixed and operating costs in order to establish and maintain air services: labor, fuel, airplanes, engines, spares and parts, IT services and networks, airport equipment, airport handling services, sales distribution, catering, training, aviation insurance and other costs. Thus all but a small percentage of the income from ticket sales is paid out to a wide variety of external providers or internal cost centers. Figure 2 illustrates the operating cost decomposition of a full-service carrier; Emirates Airlines.

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<sup>17</sup> <http://en.wikipedia.org/wiki/Airline>

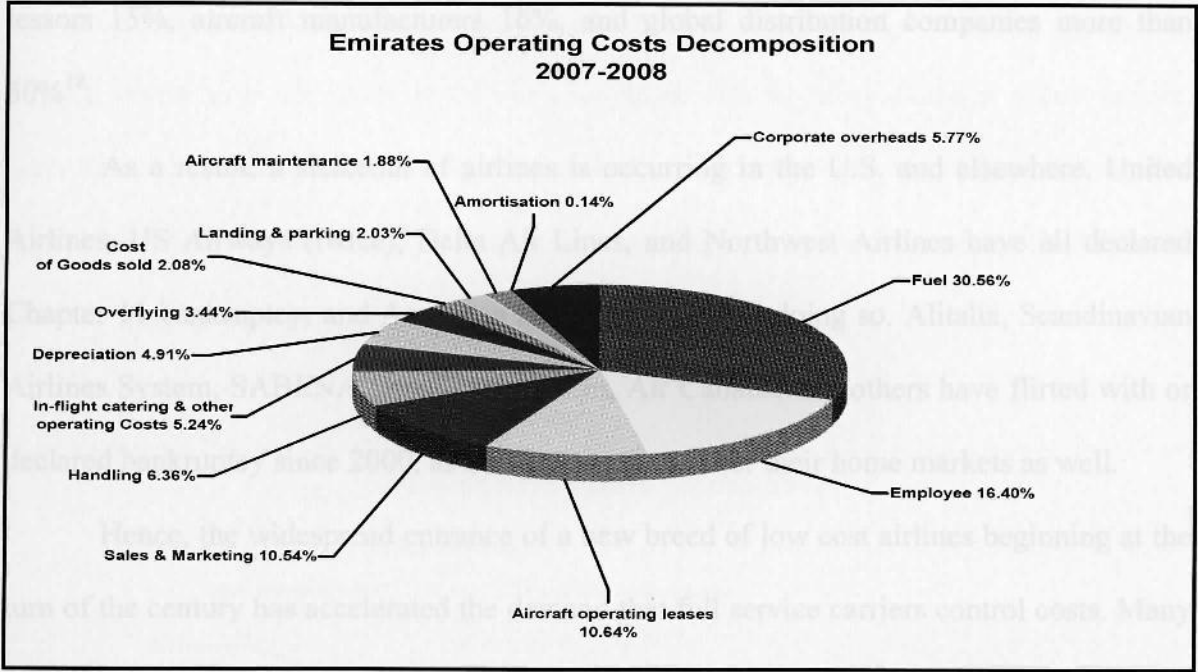


Figure 2 – Operating Cost Decomposition of Emirates Airlines  
*Source: Based on Emirates Group Annual Report, 2008*

Moreover, the industry is structured so that airlines often act as tax collectors. Airline fuel is untaxed however due to a series of treaties existing between countries. Ticket prices include a number of fees, taxes, and surcharges they have little or no control over, and these are passed through to various providers. Airlines are also responsible for enforcing government regulations. If airlines carry passengers without proper documentation on an international flight, they are responsible for returning them back to the originating country.

Analysis of the 1992-1996 period shows that every player in the air transport chain is far more profitable than the airlines, which collect and pass through fees and revenues to them from ticket sales. While airlines as a whole earned 6% return on capital employed, airports earned 10%, catering companies 10-13%, handling companies 11-14%, aircraft

lessors 15%, aircraft manufacturers 16%, and global distribution companies more than 30%<sup>18</sup>.

As a result, a shakeout of airlines is occurring in the U.S. and elsewhere. United Airlines, US Airways (twice), Delta Air Lines, and Northwest Airlines have all declared Chapter 11 bankruptcy, and American has barely avoided doing so. Alitalia, Scandinavian Airlines System, SABENA, Japan Air System, Air Canada, and others have flirted with or declared bankruptcy since 2000, as low cost entrants enter their home markets as well.

Hence, the widespread entrance of a new breed of low cost airlines beginning at the turn of the century has accelerated the demand that full service carriers control costs. Many of these low cost companies emulate Southwest Airlines in various respects, and like Southwest, they are able to secure out a consistent profit throughout all phases of the business cycle. Figure 3 illustrates the operating cost decomposition of a low cost airline, Air Arabia.

Where an airline has established an engineering base at an airport then there may be considerable economic advantages in using that same airport as a preferred focus (or "hub") for its scheduled flights.

In view of the congestion apparent at many international airports, the ownership of slots at certain airports (the right to take-off or land an aircraft at a particular time of day or night) has become a significant tradable asset for many airlines. Clearly take-off slots at popular times of the day can be critical in attracting the more profitable business traveler to a given airline's flight and in establishing a competitive advantage against a competing airline. If a particular city has two or more airports, market forces will tend to attract the

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<sup>18</sup> <http://en.wikipedia.org/wiki/Airline>

less profitable routes, or those on which competition is weakest, to the less congested airport, where slots are likely to be more available and therefore cheaper. Other factors, such as surface transport facilities and onward connections, will also affect the relative appeal of different airports and some long distance flights may need to operate from the one with the longest runway.

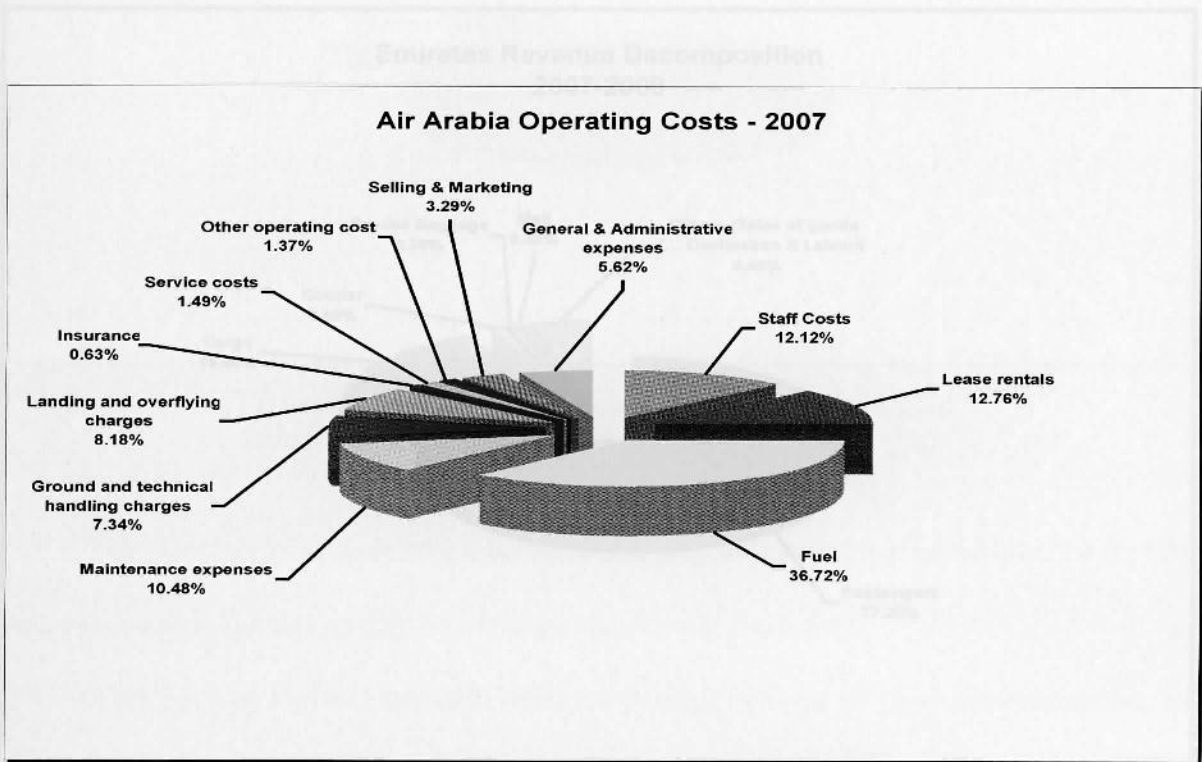


Figure 3 – Operating Cost Decomposition of Air Arabia  
Source: Based on Air Arabia Report & Accounts, 2007

2.1.5. Industry Revenues

Airlines earn revenue from transporting cargo, selling frequent flier miles to other companies, and 'up-selling' in flight services. But by far, the largest proportion of revenue is derived from regular and business passengers. For this reason, it is important to take

consumer and business confidence into account on top of the regular factors that one should consider like earnings growth, debt load, etc.

Figures 4 and 5 illustrate the revenue decomposition of two business models, Emirates Airlines, a full-service carrier, and Air Arabia, a low cost carrier.

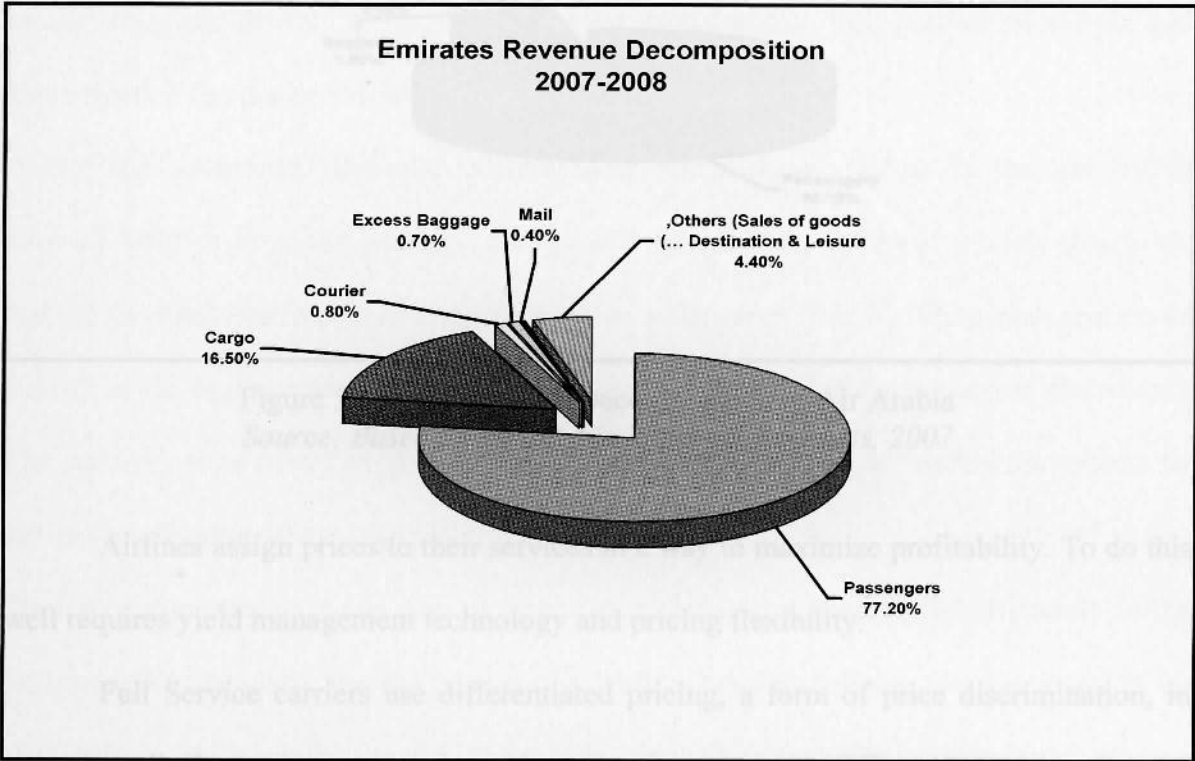


Figure 4 – Revenue Decomposition of Emirates Airlines  
Source: Based on Emirates Group Annual Report, 2008

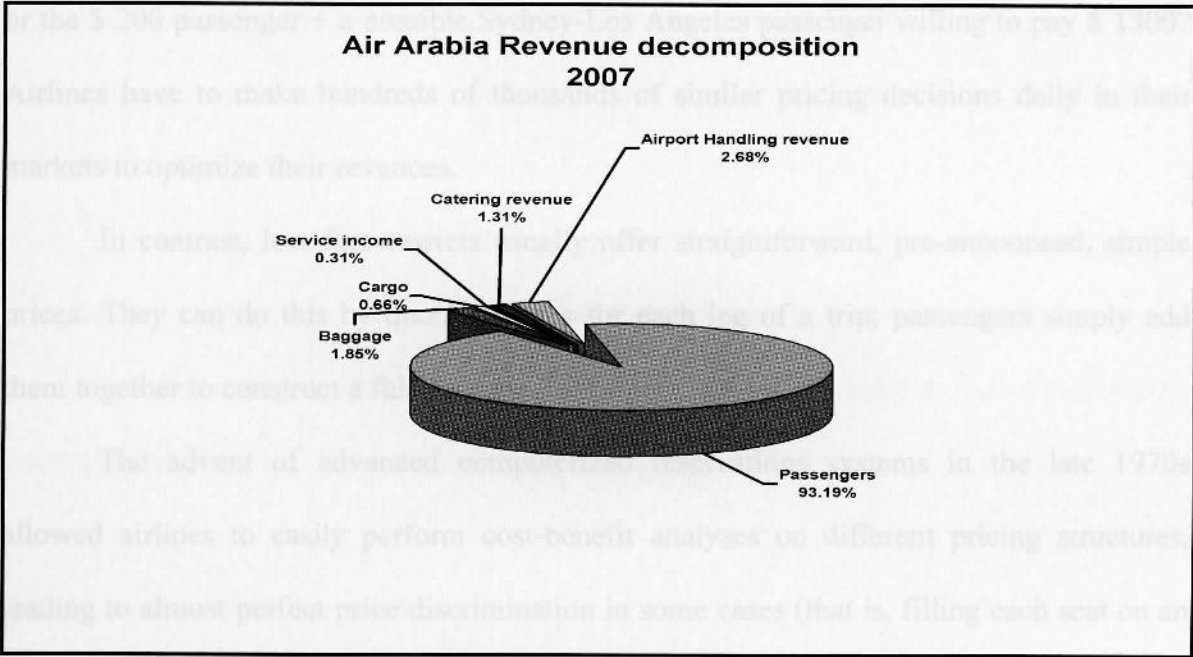


Figure 5 - Operating Cost Decomposition of Air Arabia  
Source: Based on Air Arabia Report & Accounts, 2007

Airlines assign prices to their services in a way to maximize profitability. To do this well requires yield management technology and pricing flexibility.

Full Service carriers use differentiated pricing, a form of price discrimination, in order to sell air services at varying prices simultaneously to different segments. Factors influencing the price include the days remaining until departure, the current booked load factor, the forecast of total demand by price point, competitive pricing in force, and variations by day of week of departure and by time of day.

A complicating factor is that of origin-destination control ("O&D control"). Someone purchasing a ticket from say, Melbourne to Sydney for \$ 200 is competing with someone else who wants to fly Melbourne to Los Angeles through Sydney on the same

airplane, and who is willing to pay \$ 1400. Should the airline prefer the \$1400 passenger, or the \$ 200 passenger + a possible Sydney-Los Angeles passenger willing to pay \$ 1300? Airlines have to make hundreds of thousands of similar pricing decisions daily in their markets to optimize their revenues.

In contrast, low fare carriers usually offer straightforward, pre-announced, simple prices. They can do this by quoting prices for each leg of a trip; passengers simply add them together to construct a full journey.

The advent of advanced computerized reservations systems in the late 1970s allowed airlines to easily perform cost-benefit analyses on different pricing structures, leading to almost perfect price discrimination in some cases (that is, filling each seat on an aircraft at the highest price that can be charged without driving the consumer elsewhere). The intense nature of airfare pricing has led to the term "price war" to describe efforts by airlines to undercut other airlines on competitive routes.

Therefore it is important that new airfares can be published quickly and efficiently to the airlines' sales channels. The airlines use the Airline Tariff Publishing Company (ATPCO) to distribute information for the latest fares for more than 500 airlines to Computer Reservation Systems across the world.

Computers also allow airlines to predict, with some accuracy, how many passengers will actually fly after making a reservation to fly. This allows airlines to overbook their flights enough to fill the aircraft while accounting for "no-shows," but not enough (in most cases) to force paying passengers off the aircraft for lack of seats.

Business travelers are important to airlines because they are more likely to travel several times throughout the year, and they tend to purchase the upgraded services that

have higher margins for the airline. On the other hand, leisure travelers are less likely to purchase these premium services and are typically very price sensitive. In times of economic uncertainty or sharp decline in consumer confidence the amount of the leisure Travelers is expected to decline.

**Example** It is also important to look at the geographic areas that an airline targets. Obviously, more market share is better for a particular market, but it is also important to stay diversified. For example, an airline that sends a high number of flights to Beirut might see a dramatic drop in profits if the outlook for leisure travelers looks poor.

## **2.2. Key Risks for Airlines**

**2.2.1.** Airlines are doing their utmost to reduce costs and conserve cash in today's environment of economic uncertainty. While the lingering effects of September 11 have certainly worsened the situation for airlines, even prior to this date, airlines were five times more likely to lose a quarter of their value in one month than the Fortune 1000 average.

There are four categories identified as primary risks facing the airline industry: strategic, financial, operational, and hazard.

### **2.2.1. Strategic Risk**

Strategic risks are defined as business design alternatives and choices and their interaction with various external factors such as new competition, changes in customer preferences, Customers' Relationship Management attack and industry consolidation. Many of the strategic risks may be alleviated through traditional responses such as developing a rigorous

strategic planning process, and many others can be lessened in the first place through the selection of business design itself.

#### **2.2.2. Financial Risks**

Financial risks include the management of capital, revenues and cash flows. Examples of such risks are fuel prices, interest rates and foreign currency exchange rate. Outside the hazard risk, solutions to mitigate financial risks are the most advanced, primary because there is a large third party market dedicated to the efforts such as banks, credit specialist and derivative markets, etc... Examples of financial solutions may include insurance, contingent financing, debt/equity offerings and fuel hedging.

#### **2.2.3. Operational Risks**

Operational risks arise from the more technical aspects of running the day-to-day business such as flight crew and aircraft scheduling, e-commerce activities, business interruptions, accounting and information systems. Many airlines have processes in place to avoid most of the operational risks through contingency planning, improved communication, process reengineering and redesign, performance management and reward systems.

#### **2.2.4. Hazard Risks**

Hazard risks are associated with unexpected events that have an adverse impact on the industry such as natural disasters (earthquakes, hurricanes, volcano...), political risks, war, terrorism, sabotage property or aircraft damage. In general, airline risk management

has been limited to hazard risk, such as the protection of physical assets, and a significant attention has been given lately to safety and security issues.

Mercer analyzed aviation industry risks for the 10-year period from April 1991 to April 2001. Interestingly, hazard events, including safety, liability, and war, were the least likely to result in value loss. Strategic and financial risks accounted for nearly three-fourth of value loss events during the period (Figure 6).

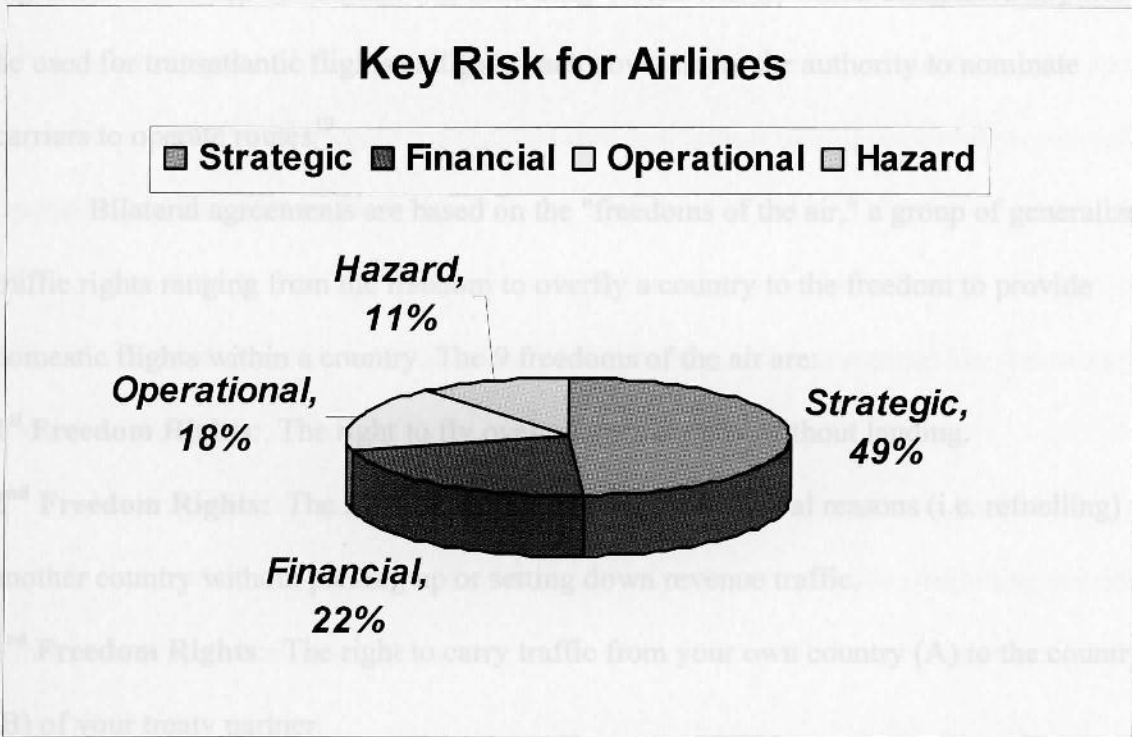


Figure 6 -Key Risk for Airlines  
Source: *Is Airline Industry Risk Unmanageable?* , Michael Zea, 2001

## 2.3. Global Macro-environmental Analysis

### 2.3.1. Deregulation and Liberalization

International Agencies such as the International Civil Aviation Organization establish worldwide standards for safety and other vital concerns. Most international air traffic is regulated by bilateral agreements between countries, which designate specific carriers to operate on specific routes. The model of such an agreement was the Bermuda Agreement between the US and UK following World War II, which designated airports to be used for transatlantic flights and gave each government the authority to nominate carriers to operate routes<sup>19</sup>.

Bilateral agreements are based on the "freedoms of the air," a group of generalized traffic rights ranging from the freedom to overfly a country to the freedom to provide domestic flights within a country. The 9 freedoms of the air are:

**1<sup>st</sup> Freedom Rights:** The right to fly over another country without landing.

**2<sup>nd</sup> Freedom Rights:** The right to make a landing for technical reasons (i.e. refuelling) in another country without picking up or setting down revenue traffic.

**3<sup>rd</sup> Freedom Rights:** The right to carry traffic from your own country (A) to the country (B) of your treaty partner.

**4<sup>th</sup> Freedom Rights:** The right to carry traffic from country (B) back to your own country (A).

**5<sup>th</sup> Freedom Rights:** The right of an airline from country (A) to carry revenue traffic between country (B) and other countries such as (C) and (D) on services starting or ending

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<sup>19</sup> [www.en.wikipedia.org/wiki/Airline](http://www.en.wikipedia.org/wiki/Airline).

in its home country (A). (The freedom cannot be used unless countries (C) or (D) also agree).

**6<sup>th</sup> Freedom Rights:** The use by an airline of country (A) of two sets of third and fourth freedom rights to carry traffic between two other countries but using its base at (A) as a transit point.

**7<sup>th</sup> Freedom Rights:** The right of an airline to carry revenue traffic between points in two countries on services which lie entirely outside its own home country.

**8<sup>th</sup> Freedom Rights:** Also known as cabotage rights. The right of an airline to pick up and set down passengers or freight between two domestic points in another country on a service originating in its own home country.

**9<sup>th</sup> Freedom Rights:** The right to carry passengers or cargo within a foreign country without continuing service to or from one's own country. It is sometimes also known as standalone cabotage.

Most agreements permit airlines to fly from their home country to designated airports in the other country: some also extend the freedom to provide continuing service to a third country, or to another destination in the other country while carrying passengers from overseas.

Traditionally, the airline industry carried with it historical and political legacies that have constrained its natural development at par with other industries. The strategic importance of aviation during the cold war era and the ambassadorial role that national and scheduled airlines are perceived to carry (like MEA's flying cedar image), have prompted governments, to various degrees, in controlling, meddling and interfering with the natural evolution and development of the national and international airline industry.

A testimony of the above fact lies in the difficulties encountered while negotiating bilateral air traffic agreements between two or more countries. Governments for various political and economic reasons closely control the aerospace of their respective country. The process is continuously subjected to a scrutiny by the corresponding country regulators for the sake of protecting their own national interest.

However, there are continuous pressures on governments in developed and developing nations from deregulation advocate groups to remove air travel restrictions. Deregulation is by definition a process by which governments remove, reduce, or simplify restrictions on business and individuals with the intent of encouraging the efficient operations of markets. In the aviation sector, this is commonly referred to as “open skies” policy. This declaration states that there shall be no limit on the number of frequencies and capacity offered on air services linking any city pair combination between state parties concerned. Each designated airline will be allowed to mount and operate such capacity and frequency as such airline deems appropriate. Consistent with this right, no State Party shall unilaterally limit the volume of traffic, the type of aircraft to be operated or the number of flights, except for environmental, safety, technical or other special consideration.

The current globalization trend, the relative free flow of products and services between nations, World Trade Organization (WTO) pressure, increase in world trade, growth in passenger demand, cost conscientiousness and the continuous quest for efficiency and effectiveness are perpetually applying pressure on such nationalistic trends to yield a more relaxed image in an attempt to create an even playing competitive field to all industry players.

Further deregulation trends are being witnessed around the globe. Multilateral open skies agreements are moving to a broader global level and are aimed to remove restrictions on air services among participating countries. This allows involved carriers to operate unrestrictive services between countries, enjoy beyond rights (commonly referred to as fifth freedom rights), and have some control on the fares they charge. The multilateral agreement is far more liberal than the bilateral in terms of national ownership requirements, so foreign carriers without access to domestic capital markets would be better able to attract outside investment.

Market forces from myriad of environmental sources are emphasising the need for more deregulation. This will further allow for increased global competition, hence impacting the bottom line and profitability of airlines. **Survival in the airline industry will be linked to the effectiveness and success of the adopted strategy.**

### 2.3.2. *Economic Trends*

The profitability of the airline industry is closely linked to regional and international economic growth. A favorable or adverse economic condition will either boost or jeopardize the bottom line associated with the industry. The cyclical nature of the industry exposes it to higher levels of risk. As GDP growth is a reflection of business activity, the high profit margin associated with the business traveler segment is at risk due to reduction in business activities during economic slowdown. (Figure 7)

The phenomenal global growth rate experienced in late 90's and early 2000 subsided to a less than lackluster performance in 2001. This was led by a slowdown in growth of the world's economic benchmark and key indicator: the US economy. The global

economic slowdown resulted in a sharp drop in growth rates for developed, developing and emerging countries alike. The GDP growth in the US was forecast to be only 1.5 percent in 2001 compared to 5 percent in 2000. In Europe, growth was not expected to exceed 2.4 percent, and a meager 0.5 percent was expected for Japan<sup>20</sup>.

In emerging market economies, growth forecast has been substantially reduced for Asia and Latin America while expectations remained fairly reasonable for India and China. Even though the latter has weathered the Asian crisis well (8% GDP growth in 1998), it nonetheless felt the impact of the regional slump, as foreign direct investments and exports dropped noticeably<sup>21</sup>.

The tragic events of September 11 came at a time when, with all major regions already slowing, the global economy was particularly vulnerable to adverse shocks<sup>22</sup>. Indeed, recent data suggests that the world economy was weaker than earlier thought even before the attacks. Furthermore, these attacks while affecting the United States most directly can clearly be seen as a shock with global reach, given the worldwide impact on confidence, financial markets, and growth prospects<sup>23</sup>.

Several sectors, particularly travel and entertainment, have faced particularly severe financial difficulties since September 11. Some airlines have gone bust. Sabena and Ansett

Figure 7 - Global Airline Revenue Growth versus Global Economic Growth  
Source: IATA Industry Outlook, 2006

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<sup>20</sup> Review and analysis of the possible strategic options of Emirates pertaining to its flight crew training program, Roland M. Madi, 2002.

<sup>21</sup> Review and analysis of the possible strategic options of Emirates pertaining to its flight crew training program, Roland M. Madi, 2002.

<sup>22</sup> Review and analysis of the possible strategic options of Emirates pertaining to its flight crew training program, Roland M. Madi, 2002.

<sup>23</sup> Lehman, C. (2002), "The Year in Review"; *CAT Annual Training Sourcebook*, 2001-2002, pp 21-28;

are examples of such corporate casualties<sup>24</sup>. Nevertheless, various forces contributed to a strengthening recovery in 2002. These forces include the reduction in energy prices, the ending of the inventory cycle downturn, the recovery in equity prices, and somewhat stronger levels of consumer and business sentiment about the future compared to the present. Most important, there was significant macroeconomic stimulus in the pipeline.

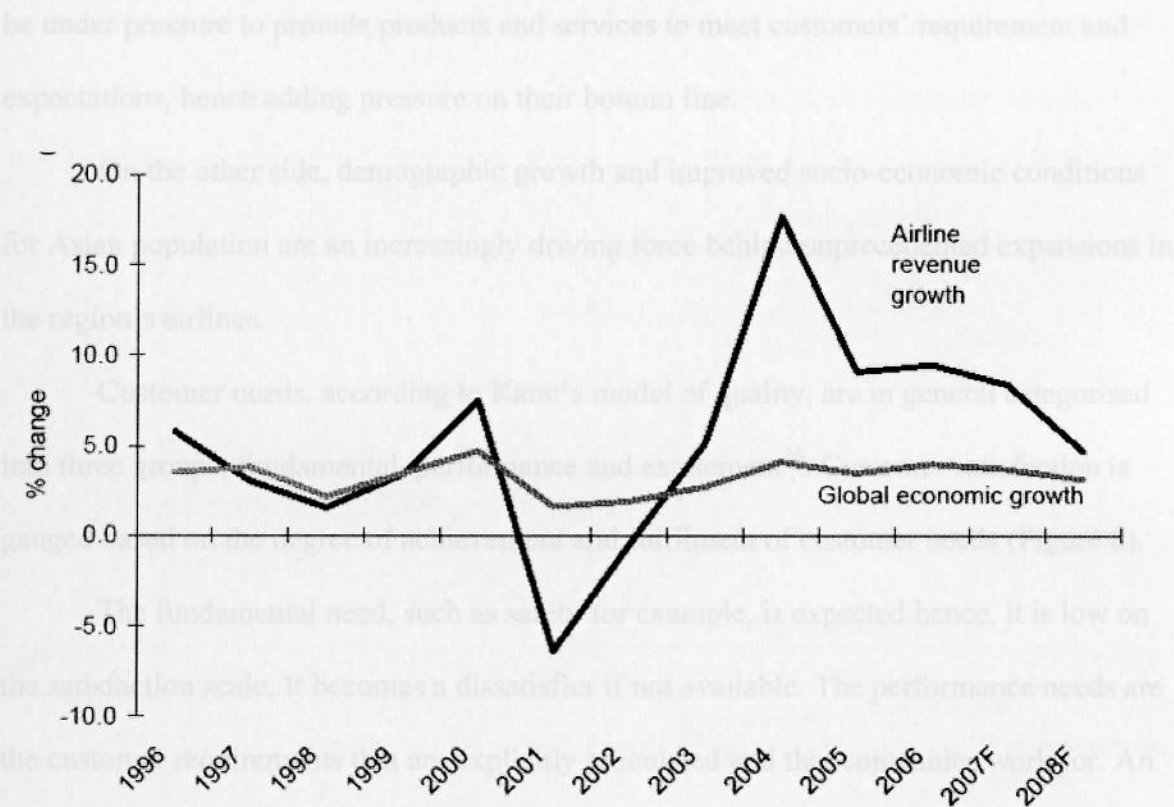


Figure 7 - Global Airline Revenue Growth versus Global Economic Growth  
Source: IATA Industry Outlook, 2006

<sup>23</sup> Davies Owen et al. (2001), "Travel now challenging the world: Economics and society, values and concepts, energy and environment", *The Economist*, 2001

<sup>24</sup> Gustafson A. et al (1998), "Customer focused service development in practice: A Case Study at Volvo", *International Journal of Service Industry Management*, Vol. 18, No. 4

<sup>24</sup> Lehman, C. (2002), "The Year in Review"; *CAT Annual Training Sourcebook*, 2001-2002, pp 21-28

### 2.3.3. *Social and Demographic Trends*

Recent social trend studies have highlighted that the elderly population percentage is increasing in developed nations such as the US, Europe and Japan. This category represents also the wealthiest, with more money and propensity to spend<sup>25</sup>. This demanding social class will make-up an ever-larger part of travel. The airline industry will be under pressure to provide products and services to meet customers' requirement and expectations, hence adding pressure on their bottom line.

On the other side, demographic growth and improved socio-economic conditions for Asian population are an increasingly driving force behind unprecedented expansions in the region's airlines.

Customer needs, according to Kano's model of quality, are in general categorised into three groups: fundamental, performance and excitement<sup>26</sup>. Customer satisfaction is gauged based on the degree of achievement and fulfilment of customer needs (Figure 8).

The fundamental need, such as safety for example, is expected hence, it is low on the satisfaction scale. It becomes a dissatisfier if not available. The performance needs are the customer requirements that are explicitly articulated and that companies work for. An example can be frequency and variety of flight destinations. This brings satisfaction to customers. The excitement needs come from the introduction of innovative products or services that customers are unaware of. These can only be satisfiers since they were not expected with the initial product/service. However, over time, these innovations that extend

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<sup>25</sup> Davies Owen *et al.* (2001), "Trends now challenging the world: Economics and society, values and concerns, energy and environment", *The Futurist*, 2001.

<sup>26</sup> Gustafsson A. *et al* (1998), "Customer focused service development in practice. A Case Study at Scandinavian Airlines System (SAS)", *International Journal of Service Industry Management*, Vol. 10, No. 4, pp. 344-358; URL:<http://www.emerald-library.com>.

the product attributes will become basic as they are taken for granted and do not exceed customers' expectations.

The transition from excitement to basic needs is an important factor that has implications on the competitive advantage and position of a company. From an airline's perspective, the rapid pace of technological advancements is shortening the transition time period. This is pressuring the airline companies to continuously seek innovative products and services to differentiate their service offering in order to meet customers' needs.

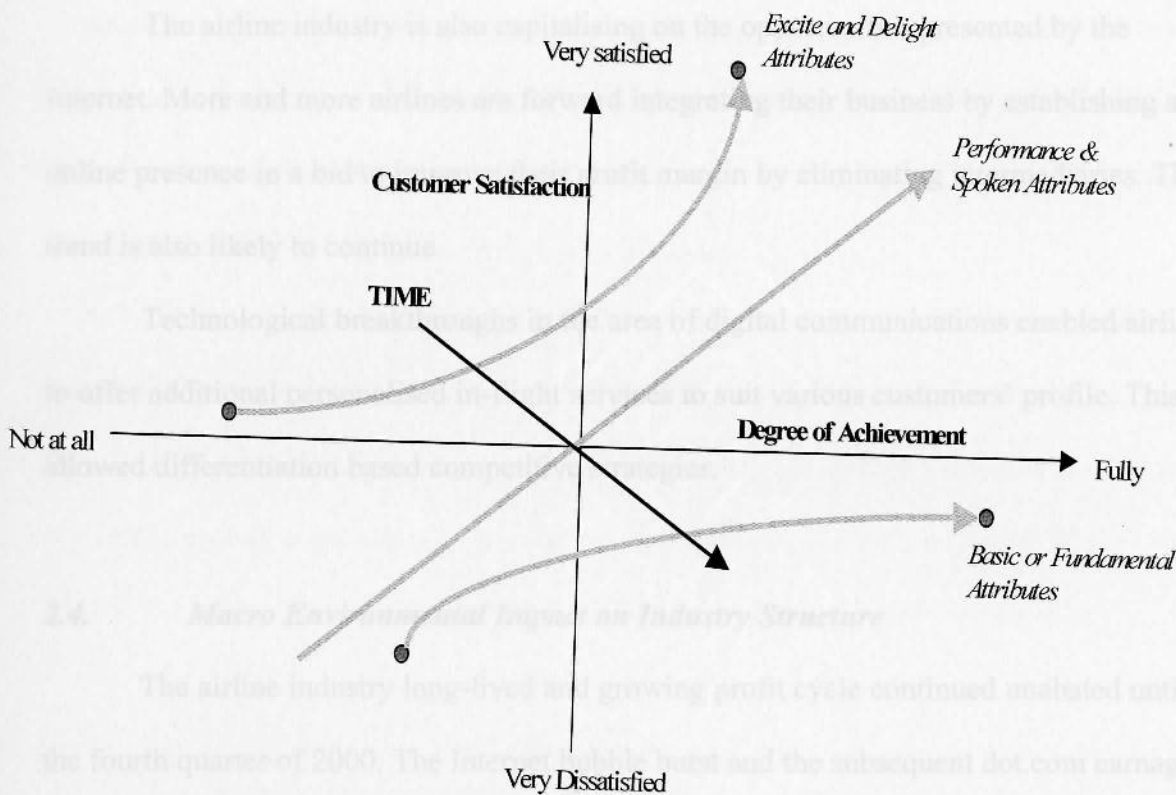


Figure 8 - Kano's Model on Customer Needs  
Source: Gustafson, et al, 1999

#### **2.3.4. Technology**

The advent of the Internet and use of Internet technologies expanded the range and availability of distribution channels and provided the consumer with additional choices through instantaneous access to global information. This increased the consumer purchasing power, thus applying greater pressure on airline yields. The availability and choice appealed to the mass-market leisure traveller who successfully exploited Internet provided opportunities. This trend is likely to continue, especially with the emergence of low-cost carriers, which offer discounted rates on high volume point-to-point services.

The airline industry is also capitalising on the opportunities presented by the Internet. More and more airlines are forward integrating their business by establishing an online presence in a bid to improve their profit margin by eliminating intermediaries. This trend is also likely to continue.

Technological breakthroughs in the area of digital communications enabled airlines to offer additional personalised in-flight services to suit various customers' profile. This allowed differentiation based competitive strategies.

#### **2.4. Macro Environmental Impact on Industry Structure**

The airline industry long-lived and growing profit cycle continued unabated until the fourth quarter of 2000. The Internet bubble burst and the subsequent dot.com carnage led to a worldwide slowdown that dragged down substantially business activities.

September 11 terrorist attacks aggravated the situation further in 2001.

The airline industry was not immune to the above macro environment disturbances. Intense global industry inter-rivalry caused by further political liberalisation adversely hit

all of its market segments. The business segment suffered the most. As a consequence of a fall in business traffic, airline yields and profitability dwindled and hit new bottoms. ICAO reported that scheduled airlines operating profits for 2000 were US\$11 billion, 15% or US\$1.5 billion less than 1999. IATA members' airlines experienced a net profit of 20% as a result of weakened yield despite traffic and capacity growth<sup>27</sup>.

The drop in yield, or revenue in passenger per kilometre (RPK), came also at a time of excess industry capacity. With the slowdown, and the increasing rate of retiring old and uneconomical assets, unit costs have risen. Profitability has been hard hit from all directions. Airlines RPK are about half the level of 30 years ago<sup>28</sup>. This is visible in market segments with intense competition such as North American routes. Passenger growth rate in this market segment headed south and slipped into negative territory by -0.1% between January-April 2001<sup>29</sup>.

As fares continue to drop along with sustained growth in world economy, passenger traffic will increase at an annual rate of 5.2% during the next 5 years (Figure 9). A historical progression of passenger growth for the next years yields a rate above GDP rate. Air traffic growth level will vary depending on geographical location (Figure 10).

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<sup>27</sup> Lehman, C. (2002), "The Year in Review"; *CAT Annual Training Sourcebook*, 2001-2002, pp 21-28.

<sup>28</sup> BA Fact Book, 2001 "Industry Profile", 2001; URL:<http://www.bashares.com/content/factbook.shtml>.

<sup>29</sup> Association of European Airlines (AEA) Yearbook; 2001; "AEA Airline's Performance 2000"; URL:<http://www.aea.be/Publications/framepage-publ.htm>

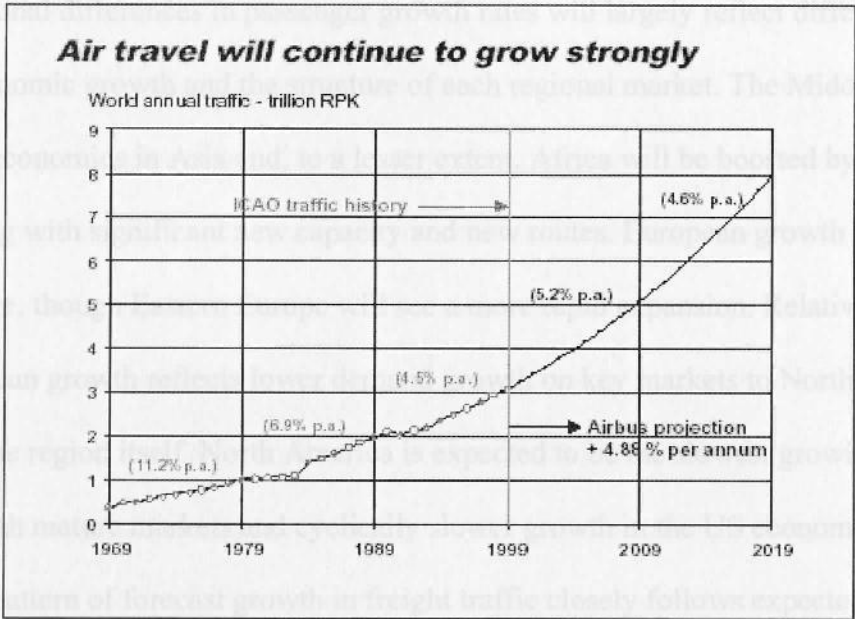


Figure 9 - Air Travel Growth Projections  
 Source: GMF, 2000

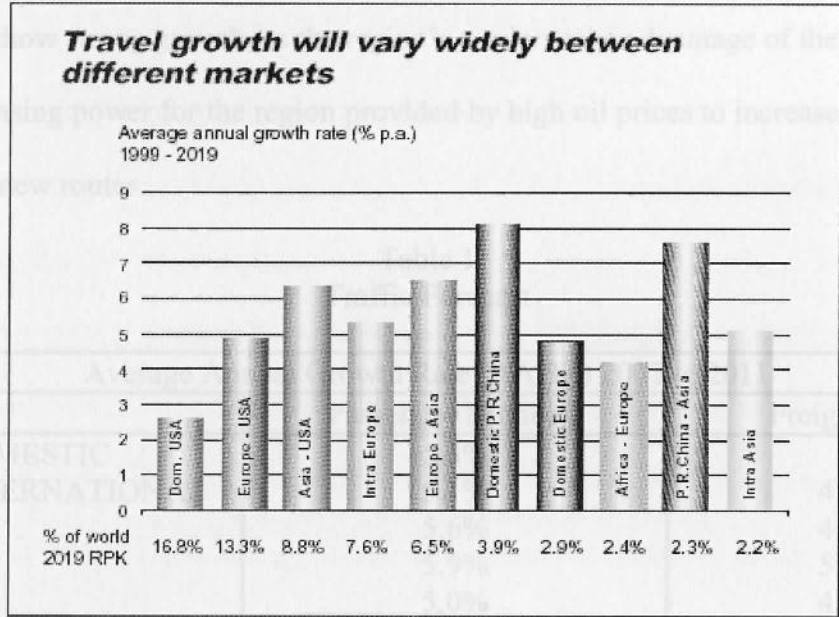


Figure 10 - Air Travel Growth Projections by Region  
 Source: GMF, 2000

Regional differences in passenger growth rates will largely reflect differences in regional economic growth and the structure of each regional market. The Middle East, developing economies in Asia and, to a lesser extent, Africa will be boosted by strong GDP growth, along with significant new capacity and new routes. European growth will be close to the average, though Eastern Europe will see a more rapid expansion. Relatively low Latin American growth reflects lower demand growth on key markets to North America and within the region itself. North America is expected to be the slowest growing region, reflecting both mature markets and cyclically slower growth in the US economy.

The pattern of forecast growth in freight traffic closely follows expected growth in regional economies and trade flows. Routes linked with Asia Pacific, and China and India in particular, are forecast to show particular strength. Middle Eastern air freight is also expected to show strong growth, as the region's carriers take advantage of the current strong purchasing power for the region provided by high oil prices to increase capacity on existing and new routes.

Table 1  
Traffic Forecast

Average Annual Growth Rate (AAGR) 2007 to 2011		
	Passenger Numbers	Freight Tons
TOTAL DOMESTIC	5.3%	-
TOTAL INTERNATIONAL	5.1%	4.8%
Africa	5.6%	4.6%
Asia Pacific	5.9%	5.4%
Europe	5.0%	4.3%
Latin America/Caribbean	4.4%	4.2%
Middle East	6.8%	5.0%
North America	4.2%	3.9%

SOURCE: IATA, 2007

## 2.5. Critical Success Factors

Going into the future, the endogenous and exogenous factors discussed above impact heavily on the airline industry and pose a challenge to airlines. However, opportunities do exist for incumbents and new comers. Porter advocated two main strategies that companies can adopt to build their source of competitive advantage in order to succeed.

Cost leadership strategy is all about achieving the lowest cost position in an industry. Improving the efficiency of the organization can be achieved using Porter's value chain analysis. For successful companies with a cost advantage, products and services are marketed at prices, lower than the competition, prompting ultimately above-average profits.

In the airline industry, this strategy has been successfully used by low-fare airlines such as Southwest in the US, or Ryanair and Go in Europe. Their low cost strategy has enabled them to achieve dominance in specific point-to-point market segments. The minimum efficiency scale (MES) and average cost curve of low-fare airlines is lower than others, placing them at an advantage.

Another critical success factor lies in pursuing a differentiation strategy. The latter involves the selection of one or more customer choice criteria and uniquely position the product to meet them. The aim is to differentiate in a way that leads to a price premium in excess of the cost of differentiation. This gives customers a reason to prefer one product to another. Differentiation is a source of competitive advantage if it is of course synchronized with the marketing functions that emphasize the brand value vis-à-vis the customer.

From an airline perspective, the packaging and delivery of the service can be differentiating. Singapore Airlines is one of the first few airlines to adopt this strategy.

American and European carriers started following suit<sup>30</sup>. There are however some pitfalls. In today's Internet age and the existence of associated technologies, market information is omnipresent. This implies that differential advantage can be imitated. That is not to say however, that the quality of the service can be copied. In today's environment, a sustainable renewable advantage needs to be the main focus of organizations that want to thrive and not just stay afloat. For successful companies pursuing this strategy, a shift in paradigm is required to acquire a culture that promotes innovation as a key driver to profitability.

This chapter has detailed most of the macro environmental determinants of the airline industry. What has transpired so far is that their impact on basic industry structure is heavy as markets are demand-driven, but that these are intricately linked also to risk elements. These findings shall be used to read the similar factors affecting the Middle Eastern aviation sector which is a sub-system of the global market, but which has more particular features given its young population and economic growth.

- The tremendous increase in oil revenues in an oil-rich region.
- The emancipation of the region's population which is under-30s and exists of economically enfranchised consumers.
- Its central geographical location.
- Technological developments.
- Regulatory developments.

In brief, the Middle East is fast becoming the "Next-Gen aviation centre of the world"<sup>31</sup>.

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<sup>30</sup> Chan Daniel (2000), "The story of Singapore Airlines and the Singapore Girl"; *Journal of Management Development*, Vol. 19 No. 6, pp. 456-472; URL:<http://www.emerald-library.com>

## CHAPTER 3

# THE BUSINESS ENVIRONMENT OF AIRLINES IN THE MIDDLE EAST

### 3.1. Introduction

There are many definitions of what constitutes the 'Middle East', reflecting cultural, social, geographical, economic and other considerations. For the purpose of this research, I have included the following countries:

Bahrain – Egypt – Iran – Jordan – Kuwait – Lebanon – Oman – Qatar – Saudi Arabia - Syria – United Arab Emirates.

The Middle East is becoming the hottest aviation sector in the world; the fundamentals of the industry are rapidly changing. The reasons for that are:

- The tremendous increase in oil revenues in an oil-rich region.
- The emancipation of the region's population which is under-30s and made of economically enfranchised consumers.
- Its central geographical location.
- Technological developments
- Regulatory developments.

In brief, the Middle East is fast becoming the "Next-Gen aviation centre of the world"<sup>31</sup>.

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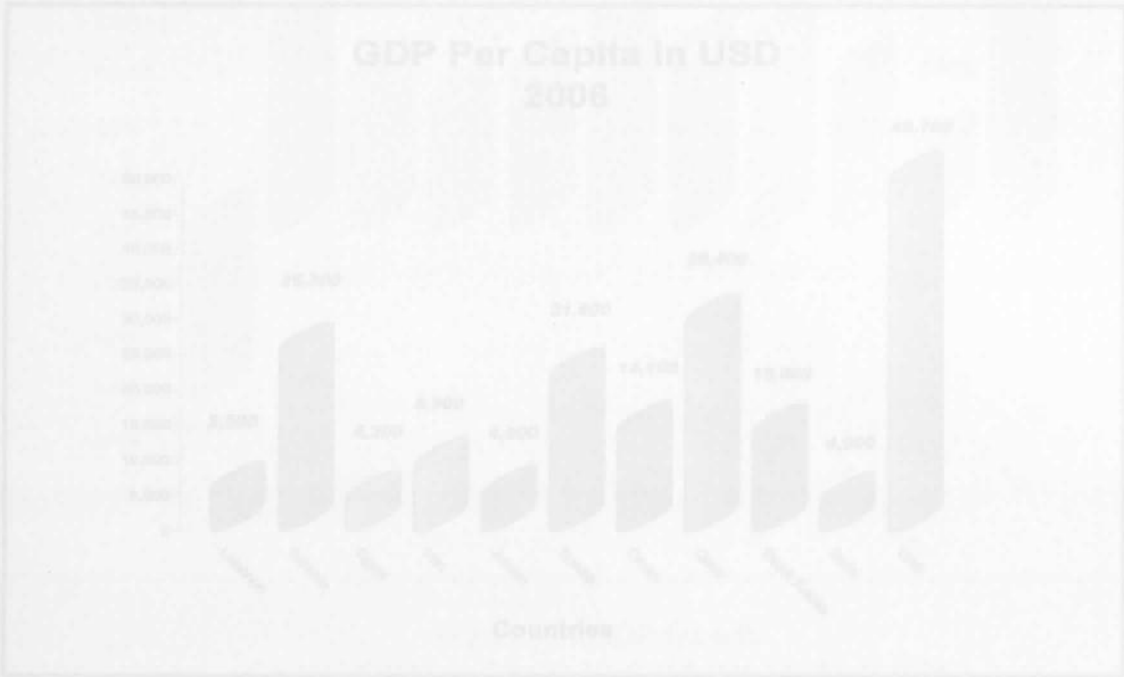
<sup>31</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2006.

3.2. The Macro Environment

3.2.1. Economic Outlook

A vibrant aviation sector is a key factor in the diversification of Middle East economies and plays a key enabling role for many other sectors, including the growing financial services and tourism industries. This is stimulating greater movement of migrant workers to the region as fares are reduced and air services increased. Because of that, several of the region's players have been undertaking large-scale expansion, injecting billion of dollars into fleet renewal, airport augmentation and tourism-related infrastructure construction projects.

The economic outlook of the region remains generally favorable with regional GDP growth around 5.7%<sup>32</sup>. Figures 11 and 12 illustrate the GDP and Per Capita in each of the countries researched.



<sup>32</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2006.

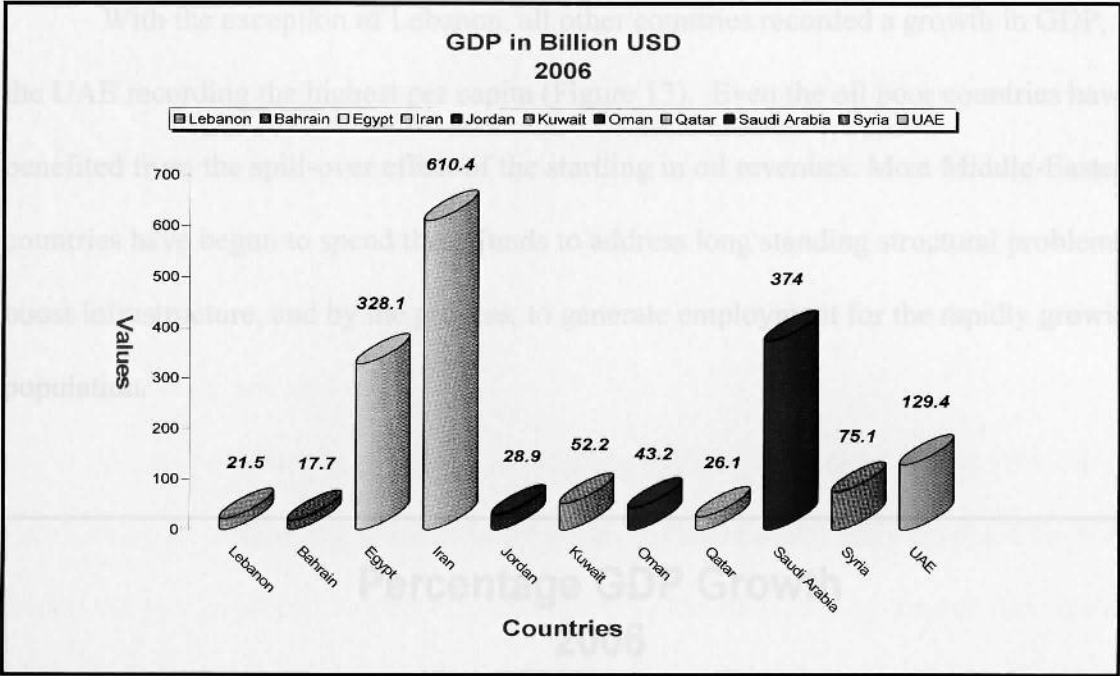


Figure 11 – GDP per Country in Billion USD  
*Source: Based on Middle East Aviation Outlook, 2006*

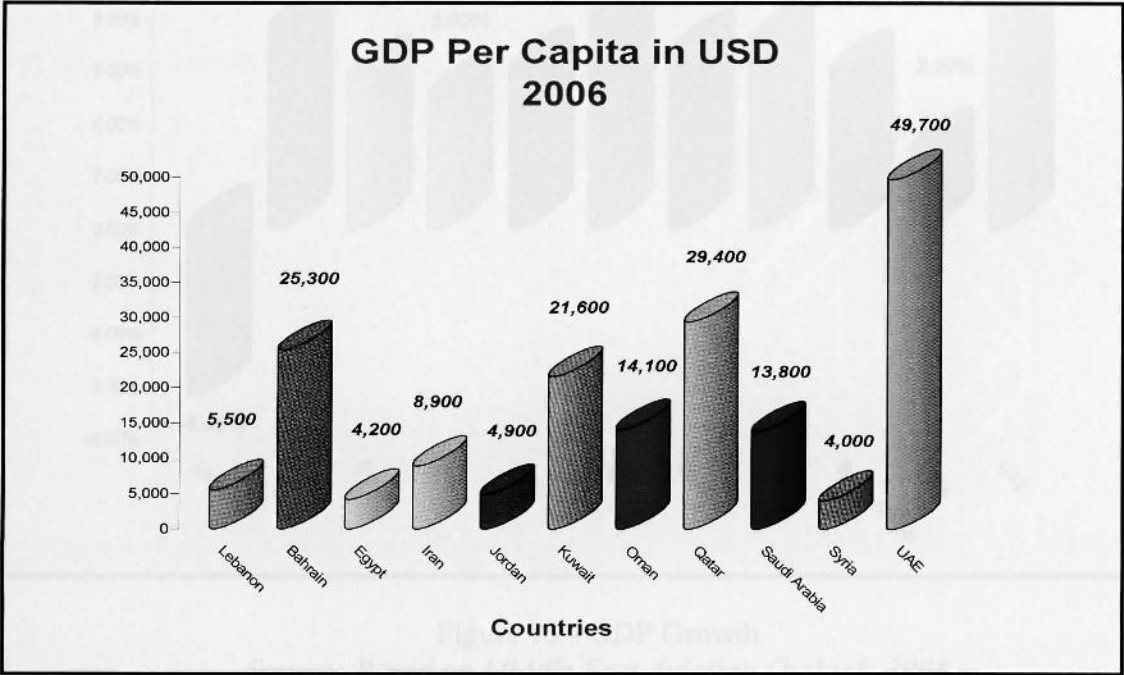


Figure 12 – GDP per Capita in USD  
*Source: Based on Middle East Aviation Outlook, 2006*

With the exception of Lebanon, all other countries recorded a growth in GDP, with the UAE recording the highest per capita (Figure 13). Even the oil poor countries have benefited from the spill-over effect of the startling in oil revenues. Most Middle-Eastern countries have begun to spend these funds to address long standing structural problems, to boost infrastructure, and by the process, to generate employment for the rapidly growing population.

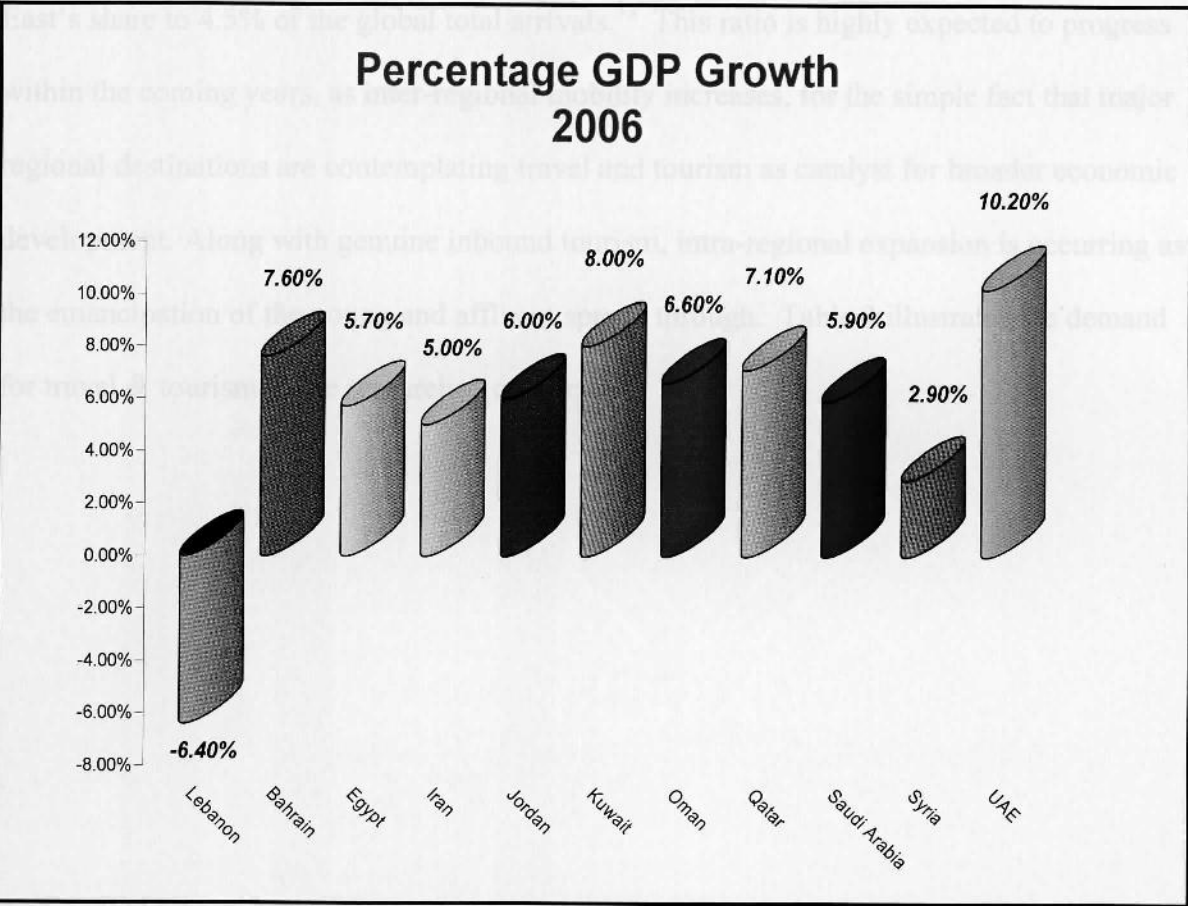


Figure 13 - GDP Growth  
*Source: Based on Middle East Aviation Outlook, 2006*

Large amounts of capital investments both public and private are thus being poured- in in an entrepreneurial spirit, so that local infrastructures can lead the expansion, while accelerating the process. Hence, the profusion of airports and airlines in the region stems sometimes from the natural rivalry among states that see the potential upside for their respective societies and economies through investing in this sector as part of a wider local economic vision, and national image.

A decade of strong growth in the tourism industry more than doubled the Middle-East's share to 4.5% of the global total arrivals.<sup>33</sup> This ratio is highly expected to progress within the coming years, as inter-regional mobility increases, for the simple fact that major regional destinations are contemplating travel and tourism as catalyst for broader economic development. Along with genuine inbound tourism, intra-regional expansion is occurring as the emancipation of the young and affluent spread through. Table 2 illustrates the demand for travel & tourism in the researched countries.

<sup>33</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2006.

Table 2  
Demand for Travel & Tourism

Demand for Travel & Tourism											
Country	Lebanon	Bahrain	Egypt	Iran	Jordan	Kuwait	Oman	Qatar	Saudi Arabia	Syria	UAE
Demand (USD billion)											
2004	10.7	3.2	14.9	20.7	3.3	8.5	3.8	4.4	27.5	3.6	20.5
2005	10.4	3.5	17.4	24.8	3.7	10.4	4.3	6.9	31.3	4.2	26
2006	9	4.2	19.6	28.6	4.2	12.1	4.9	8.9	33.2	4.5	30.8
2007*	7.8	4.5	21.4	31.7	4.6	13.8	5.4	9.6	37	4.8	33.9
% Change											
2004/2005	-2.20%	10.30%	16.70%	19.60%	12.20%	22.40%	11.70%	59.30%	13.80%	14.60%	26.40%
2005/2006	-14.10%	20.50%	12.70%	15.60%	13.90%	16.60%	14.20%	28.00%	6.00%	8.00%	18.80%
2006/2007*	-12.70%	6.60%	9.30%	10.80%	10.70%	13.90%	10.80%	7.80%	11.30%	6.20%	10.00%

Source: Based on Middle East Aviation Outlook, 2006

Religious traffic is a key driver of demand for travel in the region, especially to Saudi Arabia and Iran, positioned in first and third places among others. Saudi Arabia holds a significant advantage through their positioning in the Islamic world. With 1.2 billion Muslims across the globe, holding the two holiest sites in the Islamic world means that the number of visitors per year is significantly high. 47% of the travelers to the Kingdom visited on religious purposes<sup>34</sup>.

The United Arab Emirates has significant contrasts to Saudi Arabia. With a diminishing oil supply, the focus has been towards tourism and development. Becoming an increasingly inhabited by an expatriate community, the expansion of travel purposes has propelled the UAE to develop an efficient transport system.

Within the region, the UAE will show the strongest growth of 8.4%. Total international seat sales are forecasted to be around 105 million in 2011, an increase of 30 millions over 2006 levels<sup>35</sup>. Tourism and repatriation to and from the Emirates has become the countries main objective for many years to come. The constant development of hotels and attractions bring in the major players in the hospitality industry, thus giving a breadth of alternatives to potential purchasers of air tickets as this is the only practical way of entering the region.

Among the eleven countries studied, only Lebanon posted negative growth in demand for travel & tourism in the past 3 years. This is only due to the political instability

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<sup>34</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2006.

<sup>35</sup> Middle East Travel Magazine, issue 211, January/February 2008, page 21.

resulting in Lebanon losing its 5<sup>th</sup> rank to Kuwait and Qatar. The later posted phenomenal growth in demand, especially during 2005 and 2006.

There will inevitably be some overlap and phases of excess capacity within the region's airline sector. However, and notwithstanding the abundant financial resources available, the availability of new consumer-friendly capacity along with new operational and regulatory ingredients will catalyze the process of change and expansion.

From the aviation perspective, there are two pre-requisites for a successful operation: no commercial restrictions, and airports with un-limited capacities to accommodate peak demand; and it seems that this recipe is being massively applied for major hubs.

### **3.2.2. Political & Regulatory**

Most of the Middle-East countries' aviation sectors have until recently followed classical protectionist policies designed mainly to promote the interests of their flag carrier. However with some delay, they discovered as the world around them was opening-up, that they were indeed losing competitiveness and growth potentials, hindered by great inefficiencies which were indeed off-springs of their own state support. Furthermore, their neighborly rivalries have precluded to a great extent the intra-regional cooperation and complementarities.

Few countries have selectively implemented "open skies" policies. Airlines also had to progress and move gradually towards privatization and progressive commercialization of their various functions. The arrival of Low Cost Carriers (LCC) and the global liberalization and international alliances, have provided a further catalyst to accelerate the

process. Another driver of this process is the Arab Air Carrier Organization (AACO), which as the region's major airline association has actively encouraged more liberal attitudes. What has transpired so far in this respect include open skies regimes in the immediate region, liberal agreements with third parties, relaxed national ownership controls, and a corporate approach to sector development. Now as liberalization spreads, the scope of expansion is restricted less today by air rights than by availability of sufficient aircrafts. Table 3 summarizes the Airlines' Profile in the region.

The profile reveals the following facts:

- Egypt Air was the first airline established in the region in 1931, followed by MEA and Saudi Arab Airlines in 1945.
- All airlines established prior to 1993 were owned by their respective governments.
- Iran was the first country to allow the establishment of a private airline, followed the UAE, Kuwait and Saudi Arabia.
- Air Arabia, established in United Arab Emirate of Sharjah in 2003, was the first Low Cost Carrier in the region, followed by Kuwaiti Al Jazeera Airways in 2005, Saudi NAS and SAMA in 2007.
- Out of the 18 airlines studied, only 8 are profitable
- With the exception of NAS & SAMA which are in their first year of operations, both Air Arabia and Al Jazeera Airways are profitable.
- Emirates is the biggest airline in terms of number of destinations flown and fleet expansions.



3.2.4 Profitability is not dependent neither on the size of network and fleet, nor on the type and ownership. MEA for example is a full service, medium size regional airline (in terms of fleet and destinations flown) still owned by the government and managing to achieve profitability. Jazeera Airways is a newly established public small regional, yet profitable low cost carrier. Emirates, a government owned, global legacy airline flying to around 100 destinations across the globe, is posting record profits year after year despite its huge financial obligations towards fleet expansions.

### 3.2.3. *The Geography*

The region's relevance to global aviation far out-weighs any of the usual market determinants for aviation importance. The Middle East is one of the few places in the world where a traveler can with a single stop, travel between any other two points in the world. In fact, within an 8,000 nautical mile radius, the Middle East geographic global aviation centrality is assured, mainly in the critical long-haul arena.

This geographic value seems to be enhanced by two important factors: the airline liberalization which allows intermediate spots to become valuable hubs, and the introduction of the long-haul aircrafts permitting non-stop services.

Thus with Asia poised as the leading growth region and a major global economic player, Middle East airports are the major link between Europe and southern Asia, North Asia and Africa, Europe and Australia, and so on. Furthermore, the region is within proximity distance to key emerging markets such as India and Russia.

<sup>10</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation Market, Centre for Asia Pacific Aviation – 2007.

### **3.2.4. Demographics**

Each country in the region posts distinct demographic profiles with different population growth rates, age breakdowns and diversity. Some of these differences are driven by the base of population and the individual nation's economy and social trends.

All countries have growing populations, with some increasing at much faster rate than others. In terms of rate of population growth, UAE is leading the way as its remarkable economic performance has encouraged both organic growth and increased immigration to serve its economy. At the other end, Iran and Lebanon have the smallest population growth, as their recent past has both stunted normal rates and spurred emigration. Egypt is the leader in terms of absolute population-growth, even with relatively minor growth rates of 1.72%.

A major characteristic of the demographics of the Middle East countries is their extremely youthful population, with well over half aged under 25 years. The median age in Western Europe, for example is 40.5, while North America's is 36.3 and China is almost 33 years<sup>36</sup>. This will shape aviation and tourism policies and provide much of the future market as liberalization opens markets up to internal travel.

The youngest nation is Oman, with a median age below 18.9. Qatar at the other end has the highest median age in the region, at 31.9 years. Lebanon among the other countries included in this research has the highest percentage of its population over 64 years of age, standing at 7.1%.

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<sup>36</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2007.

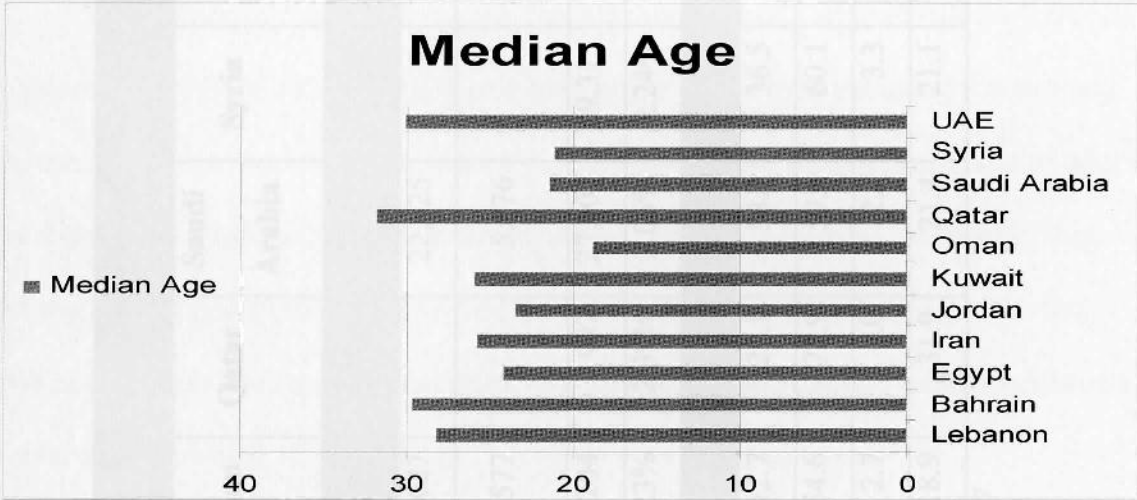


Figure 14 – Median Age in the Middle East  
 Source: Based on CIA World Fact Book, 2007

The population of the Gulf part of the region is approximately 130 million, with Saudi Arabia's 27.6 million residents making it the largest. Egypt has the largest population in the geographic region, just above 80 million inhabitants, followed by Iran with nearly 70 million.

The Gulf region has the most diverse population and expatriates groups, where many of the residents are non-nationals. In the UAE, 81% of the population is not citizens. The migrant worker populations in the Gulf Cooperation Council (GCC) countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE form a natural and lucrative traveling potential.

Table 4  
Population Demographics

Population Demographics											
Country	Lebanon	Bahrain	Egypt	Iran	Jordan	Kuwait	Oman	Qatar	Saudi Arabia	Syria	UAE
Population											
Nationals (000)		474				1,215	2,627		22,025		844
Non-citizens (000)		235				1,291	577		5,576		3,600
Total (000)	3,925	709	80,335	65,398	6,053	2,506	3,204	907	27,601	19,315	4,444
Growth Rate %	1.23%	1.40%	1.72%	0.66%	2.40%	3.60%	3.23%	2.39%	2.06%	2.24%	3.99%
Demographics											
0-14 yrs /%	26.7	26.9	32.2	23.2	33.0	26.7	42.7	23.1	38.2	36.5	20.6
15-64 yrs/ %	66.7	69.4	63.2	71.4	63.0	70.5	54.6	72.9	59.4	60.1	78.5
64+ /%	7.1	3.7	4.6	5.4	4.0	2.8	2.7	4.0	2.4	3.3	0.9
Median Age	28.3	29.7	24.2	25.8	23.5	26.0	18.9	31.9	21.4	21.1	30.1

Source: Based on CIA World Fact Book, 2007

A vibrant aviation sector is a key factor in the diversification of Middle East economies and plays a key enabling role for many other sectors, including the growing financial services and tourism industries. This is stimulating greater movement of migrant workers to the region as fares are reduced and air services increased. Because of that, several of the region's players have been undertaking large-scale expansion, injecting billion of dollars into fleet renewal, airport augmentation and tourism-related infrastructure construction projects.

### 3.2. Conclusion

#### 3.2.5. *Technology*

The size of aircrafts and their cruising speeds and range significantly offset the airline's average hourly productivity. Generally, the larger the aircraft, the less it will cost to operate per unit of output, whether a passenger per mile, or a ton per kilometer. A faster plane will by definition be made to transport more passengers or tons per hour than a slower one. In general, the less time spent on the ground loading and unloading relative to distance covered; the greater productivity per hour. In recent years, large wide-bodied aircrafts have dominated orders, alongside single-aisle aircrafts working on inter-regional routes. As a percentage of total fleet, the Middle East will be acquiring planes much faster than the rest of the world's airlines over the next five years, and an even higher proportion considering the number of seats. As a consequence, Airbus and Boeing are in an intense battle mainly over lucrative wide-bodies. In effect, the two manufacturers have state of the

• Infrastructure and investment capabilities allowing long term planning.

<sup>10</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation report, Centre for Asia Pacific Aviation - 2007.

art competing models in the 8,000 nautical miles range segment including the high capacity A380 and the B747-8<sup>37</sup>.

In an attempt to follow global trends, all airlines studied in this section have online presence, trying to capitalize on the opportunity presented by the Internet. However, with the exception of low cost carriers who rely on the internet as their primary sales channel, legacy airlines have low penetration rate, especially in the Middle East region.

### 3.3. Conclusion

As governments become more prepared to accept unrestricted third, fourth, as well as fifth and even seventh freedom operations, Middle East airports have the necessary ingredients for a whole new dimension of airline expansion. Those ingredients include:

- Open skies regimes.
- Numerous existing liberal agreements with third parties.
- Relaxed national ownership controls.
- A geographically central location.
- The increasing ability, formally and operationally for new local and foreign airlines to establish locally.
- A young and growing population.
- New generation aircraft capable of non-stop beyond service to any point in the world.
- Infrastructure and investment capabilities allowing long term planning.

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<sup>37</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2007.

- A corporate approach to economic development, including tourism-supportive and other government-seeded commercial investment around the hub airport.

With this combination of ingredients, it becomes possible for traditional growth rates to be exceeded. However, it will remain difficult for airlines with poor strategic planning and business models to benefit from the a favorable atmosphere and achieve profitability.

Regional aviation markets are well poised for modernization, expansion and integration. Growth is thus an established trend in the region; yet some countries are less ready than others to ride the wave. Lebanon could be regarded as an example in this respect, whereby due to its uncertain political climate, massive public debt and limited investments, the country is not benefiting from a regional spill-over in terms of FDI economic resources and new business opportunities, despite resilience showed so far. The next section aims at analyzing the situation of Lebanon.

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<sup>18</sup> The Civil Aviation Sector in Lebanon, Journal of Air Transport, Vol. 7, No 1, 2002.

<sup>19</sup> The Civil Aviation Sector in Lebanon, Journal of Air Transport, Vol. 7, No 1, 2002.

## CHAPTER 4

### ANALYSIS OF THE AIRLINE INDUSTRY IN LEBANON

#### 4.1. Macro-environmental Characteristics

Prior to the start of the disturbances in 1975, Lebanon's civil aviation and tourism sectors flourished. Beirut International Airport (BIA) handled 2.5 million passengers in 1975 and served as the gateway to the Gulf countries. The national airliner Middle East Airlines (MEA) owned a fleet of 20 planes and dominated the skies of the Middle East<sup>38</sup>. Over the next 15 years of conflict, Lebanon's civil aviation sector was decimated. Beirut International Airport (BIA) suffered major destruction along with prolonged periods of closure while MEA sustained severe hardships and financial losses. MEA shrunk down to a secondary airliner, leasing nine aircraft only and incurring annual losses requiring a total treasury subsidy of about USD 400 million<sup>39</sup>. Over the same period, the Gulf countries enjoyed increased oil revenues since 1974 and were developing their own aviation sectors with ambitious airport development plans and major fleet expansion. BIA and MEA had clearly lost their roles and dominance. Following the cessation of military activities, a national plan for the development of the civil aviation sector had been formulated and implemented. Such multi-component plans called for several changes, mainly on the regulatory level.

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<sup>38</sup> The Civil Aviation Sector in Lebanon, Journal of Air Transport, Vol. 7, No.1, 2002.

<sup>39</sup> The Civil Aviation Sector in Lebanon, Journal of Air Transport, Vol. 7, No.1, 2002.

Beirut. The Lebanese Government, which took office in October 2000, announced the adoption of an open skies policy based on fully liberal third, fourth, and fifth freedom rights. This meant that any airline can carry traffic from its own and other countries into Lebanon without prior government approval. Lebanon was the second country after Dubai to adopt such policy in a region long known for its resistance to open skies. A study to formulate a civil aviation strategy for Lebanon was funded by the World Bank. Its recommendations supported the government's decision on open skies policy adoption and quantified the expected economic benefits of such policy under various traffic growth scenarios. However, the implementation of the open skies forced the National Flag Carrier MEA to retreat from some routes in the face of overwhelming competition from larger airlines. Not surprisingly, the government weighed the interests of the economy as a whole ahead of its flag carrier and the negatives MEA was experiencing were out weighed by the positives the tourism industry was enjoying. The country benefited to an especially high degree from the inflow of tourists from other parts of the Arab World in favor of closer, more culturally comfortable Lebanon.

In 2004, Beirut International Airport thrived with large gains in both passengers and carriers (54 carriers served the airport, up from 35 the previous year<sup>40</sup>) and its contribution to the total Arab airports traffic in terms of Aircraft movements that reached an unprecedented level (Table 5). However, the assassination of former Prime Minister Rafic Al Hariri in February 2005 and the July 06 Israeli aggression decimated tourism numbers. The latter was especially harmful, airport runways were closed for a little less than 2 months. It was not until September 06 that most of foreign airlines resumed operations to

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<sup>40</sup> Directorate General of Civil Aviation - Lebanon

Beirut, some with reduced frequencies. USD 600 million were being allocated to rehabilitate the airport's terminal and runways, but traffic numbers only approached their norms in 2007<sup>41</sup>. However, internal Lebanese political tension continues to hamper economic activity, particularly in the tourism and retail sectors<sup>42</sup>.

Figures 15, 16, and 17 illustrate the growth in aircraft, passengers, and Cargo movement at Beirut Rafic Hariri International airport from 1990 to 2007.

Table 5  
 BIRHIA Traffic vs Total Arab Airports

YEAR	A/C Movement		Passenger's Movement		% Contribution
	Arab World Rounded Figure	% Contribution	Lebanon	Arab World Rounded Figure	
1990	51	2.56%	2,006,956	76,400,000	2.63%
1991	610	2.78%	2,060,020	75,800,000	2.72%
1992	878	2.60%	2,322,344	83,700,000	2.66%
1993	707	2.83%	2,343,387	83,800,000	2.80%
1994	627	3.03%	2,444,851	84,100,000	2.98%
1995	952	3.05%	2,605,851	101,100,000	2.58%
1996	468	2.97%	2,840,460	103,400,000	2.69%
1997	1,240,000	3.15%	3,334,710	125,300,000	2.66%
1998	1,300,000	2.94%	3,285,076	133,500,000	2.46%
1999	960	2.36%	2,815,138	144,500,000	1.95%

<sup>41</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2007.

<sup>42</sup> [www.cia.gov/library/publications/the-world-factbook](http://www.cia.gov/library/publications/the-world-factbook)

Source: Based on Statistics Issued by the Directorate General of Civil Aviation in Lebanon & AACO

Table 5  
BRHIA Traffic v/s Total Arab Airports

YEAR	A/C Movement			Passengers' Movement			Cargo	
	Lebanon	Arab World Rounded Figure	% Contribution	Lebanon	Arab World Rounded Figure	% Contribution	Lebanon	Arab World Rounded Figure
1997	23,051	900,000	2.56%	2,006,956	76,400,000	2.63%	55,037	2,000,000
1998	25,010	900,000	2.78%	2,060,020	75,800,000	2.72%	54,300	2,000,000
1999	27,878	960,000	2.90%	2,222,344	83,700,000	2.66%	52,439	2,100,000
2000	29,707	1,050,000	2.83%	2,343,387	93,800,000	2.50%	59,243	2,300,000
2001	30,627	1,010,000	3.03%	2,444,851	94,300,000	2.59%	62,789	2,200,000
2002	32,952	1,080,000	3.05%	2,606,861	101,100,000	2.58%	65,913	2,600,000
2003	34,468	1,160,000	2.97%	2,840,400	105,400,000	2.69%	65,674	2,900,000
2004	39,023	1,240,000	3.15%	3,334,710	125,300,000	2.66%	62,081	3,300,000
2005	38,198	1,300,000	2.94%	3,285,076	133,500,000	2.46%	62,295	3,500,000
2006	32,980	1,400,000	2.36%	2,815,138	144,500,000	1.95%	56,758	3,900,000

Source: Based on Statistics Issued by the Directorate General of Civil Aviation in Lebanon & AACO

# Yearly International Traffic - BRHIA

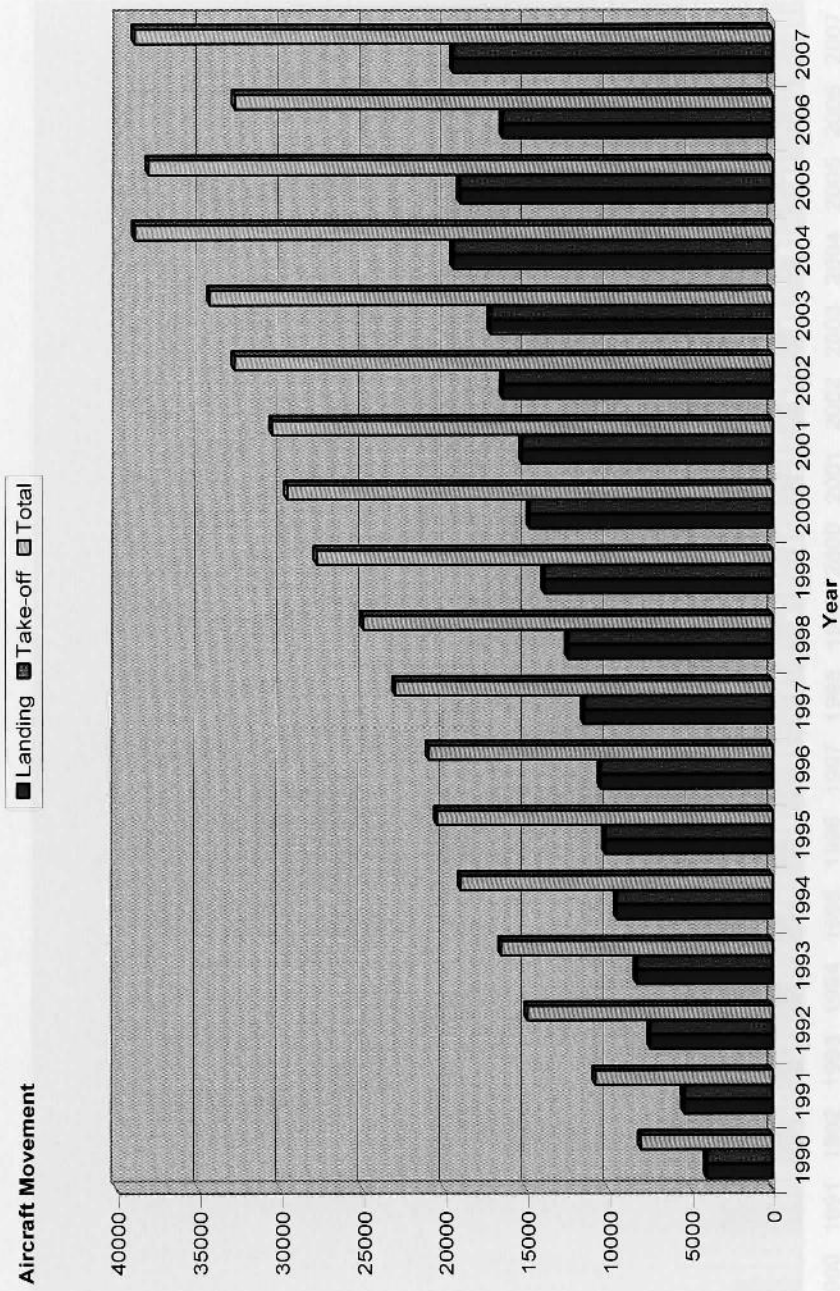


Figure 15 - Aircraft Movement  
Source: Department of Civil Aviation - Lebanon

Yearly International Traffic - BRHIA

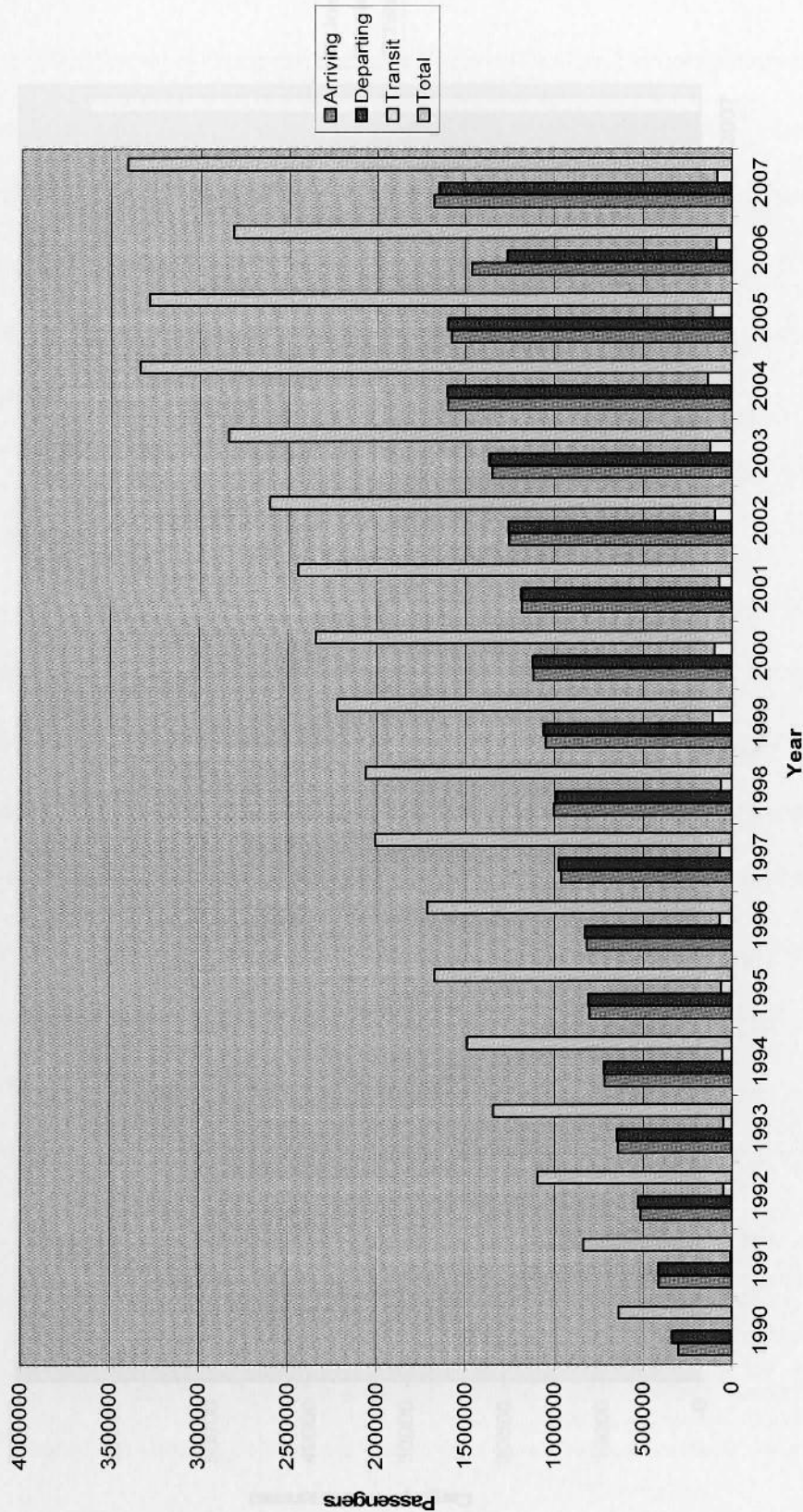


Figure 16 - Passengers Traffic  
Source: Department of Civil Aviation - Lebanon

# Yearly International Traffic - BRHIA

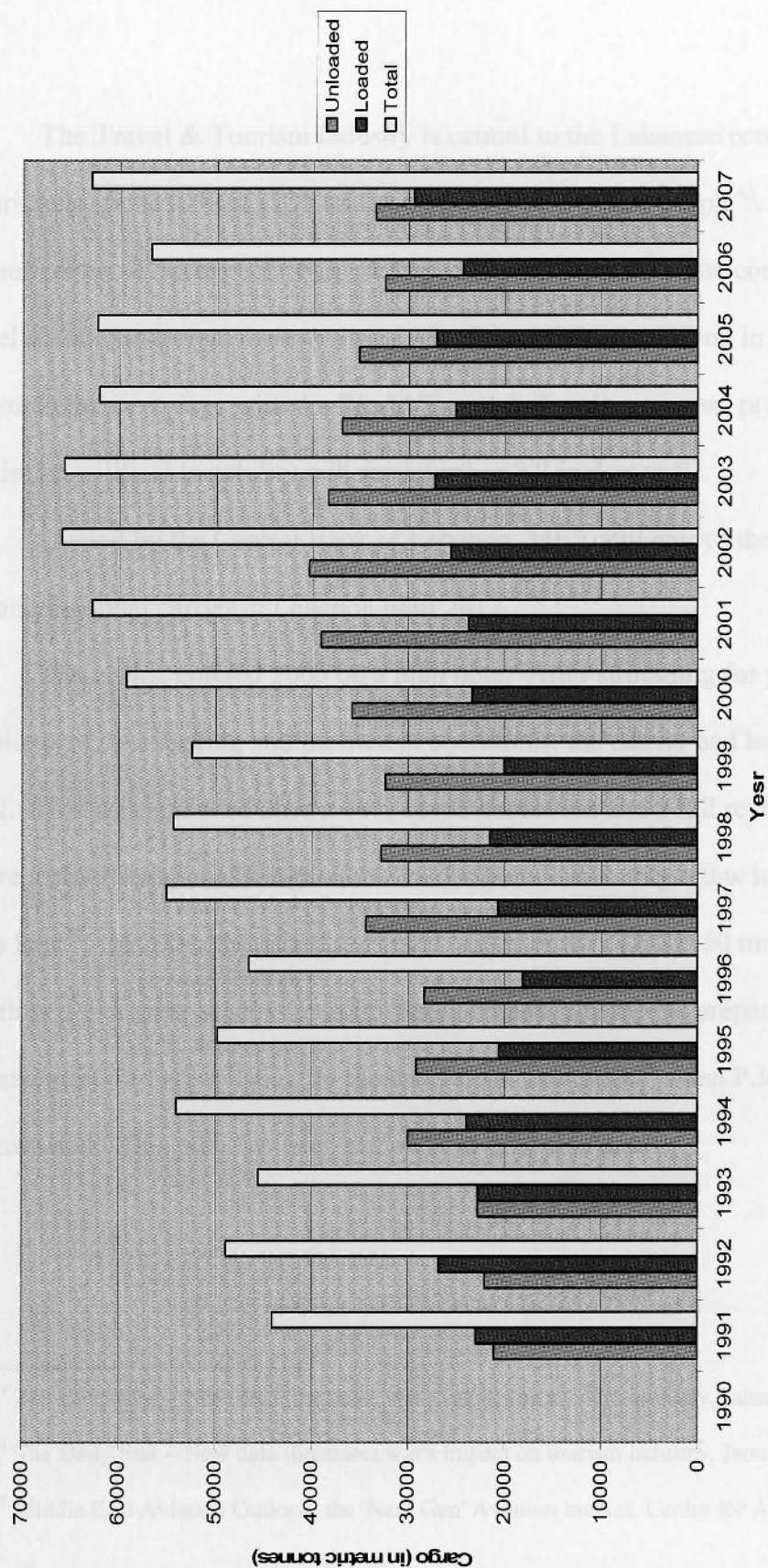


Figure 17 - Cargo Traffic  
Source: Department of Civil Aviation - Lebanon

The Travel & Tourism Industry is central to the Lebanese economy. It directly contributes about 10% of GDP and employs about 140,000 people<sup>43</sup>. Lebanon GDP, which is a reflection of business activity; declined by 6.4% in 2006. The country's revenues from travel & tourism has gone down by 14.4%, from USD 10.4 billion in 2005 to USD 8.9 billion in the next year, with the World Travel & Tourism counsel predicting that the continued political instability will see a further fall in demand<sup>44</sup>.

Owned by the Central Bank of Lebanon, MEA still enjoys the exclusive rights to be the only national carrier in Lebanon until 2012.

The airline entered 2005 on a high note. After struggling for years to overcome its problems of overstaffing and inefficient operations, the carrier had been profitable since 2002. That was achieved after a 40% cut in headcount and a full review of its operations where a strictly regional and medium-haul schedule and only a few long-haul destinations were kept<sup>45</sup>. In 2004, the carrier posted a record profit of USD 50 million and was positioned in a great success in 2005, and its management was preparing for a 25% privatization through a listing on the local stock exchange<sup>46</sup> when P.M. Rafic Hairi was assassinated. This plan has been put on hold until this date.

2004 Net 2005 Net 2006 Net 2007 Net  
Cash Sales Cash Sales Cash Sales Cash Sales

Figure 18 – Total Airlines' Agents Sales in Lebanon  
Source: Based on Figures Issued by IATA Lebanon

<sup>43</sup> The Daily Star – New data illustrates war's impact on tourism industry, January 2007.

<sup>44</sup> The Daily Star – New data illustrates war's impact on tourism industry, January 2007.

<sup>45</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2007.

<sup>46</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2007.

During the weeks of Summer 2006 conflict, MEA was forced to relocate operations to Syria, Jordan and Cyprus for a period, and operated its normal routes and charters to sustain the crisis.

MEA managed to record a USD 20 million profit in 2006<sup>47</sup>, in spite of the political situation with the great majority of this profit generated during the first half of the year.

However, ticket sales out of Lebanon have maintained a year on year growth, with shortfalls concentrated during months of crises. Figure 11 illustrates Airlines / Agents Sales for the period 2004 to 2007.



Figure 18 – Total Airline/ Agents Sales in Lebanon  
Source: Based on Figures Issued by IATA Lebanon

<sup>47</sup> Middle East Aviation Outlook, the 'Next Gen' Aviation market, Centre for Asia Pacific Aviation – 2007.

Since 1990, Lebanon has reported a positive yet non steady single digit GDP growth except for the year 2006 and that for the obvious reasons highlighted earlier in this chapter. Passengers' traffic as well maintained a positive growth with an apparent recovery a year after period of instabilities such as in 1991 to 1993 when foreign carriers resumed their operations to Beirut after the end of civil war. The same observation is witnessed in 1997 and 2007, a year following a foreign aggression. The double digit growth recorded in 2004, and which was the highest in terms of real numbers (around half a million passengers) translates the positive impact of the adoption of open skies policy coupled with a stable situation.

Cargo on the other hand follows a different trend which is more related to other factors such as customs legislations, trade laws and the availability of cheaper substitutes (sea and land transportation), especially when non perishable items are concerned. Table 7 lists the GDP, Passengers and Cargo growth rates from 1991 to 2007.

Table 6  
GDP Growth V/s Traffic Growth, 1991 to 2007

YEAR	GDP Growth rate (%)	Growth in Passengers' Traffic (%)	Growth in Cargo Traffic (%)
1991	3.6	31.23	
1992	4.2	30.52	10.88
1993	6	22.94	-6.80
1994	8	10.88	18.60
1995	6.5	12.30	-7.90
1996	4.0	2.56	-6.51
1997	4.0	16.99	18.35
1998	3.0	2.64	-1.34
1999	1.0	7.88	-3.43
2000	0.0	5.45	12.98
2001	1.5	4.33	5.99
2002	1.5	6.63	4.98
2003	3.0	8.96	-0.36
2004	4.0	17.40	-5.47
2005	0.1	-1.49	0.34
2006	-6.4	-14.31	-8.89
2007	0.3	21.09	10.87

*Source: Based on the CIA World Fact Book, 2007*

#### 4.2. **Impact of the Political Instability on Traffic Flows and Sales**

There is a strong relationship between trends in Sales, passengers and Cargo traffic with major political and security incidents the country witnessed since 2005. Some were more significant than others.

The events plotted on figure 13 relates to:

- February 2005: Assassination of PM Rafic Hariri.
- July, August and September 2006: Israeli War and blockade.
- January 07: Street Riots and sit backs.
- November 07: Presidency Crisis.

Based on the graph on page 64, the following observations are made:

- Assassinations led to a temporary drop in sales and passengers traffic, mainly during the month of occurrence. Recovery witnessed usually in the following months. No impact observed on Cargo traffic.
- A war scenario impacting the airport operations had a tremendous negative impact on sales, passengers and cargo traffic.
- Street riots, sit backs and strikes had a negative temporary impact over passengers & cargo traffic mainly, with strong recovery recorded in the following month.
- Political conflicts and crisis could be behind the drop in passengers' numbers during the month of occurrence but had no impact over sales and Cargo traffic.

Sales - Passengers - Cargo Monthly Statistics - 2005 to 2007

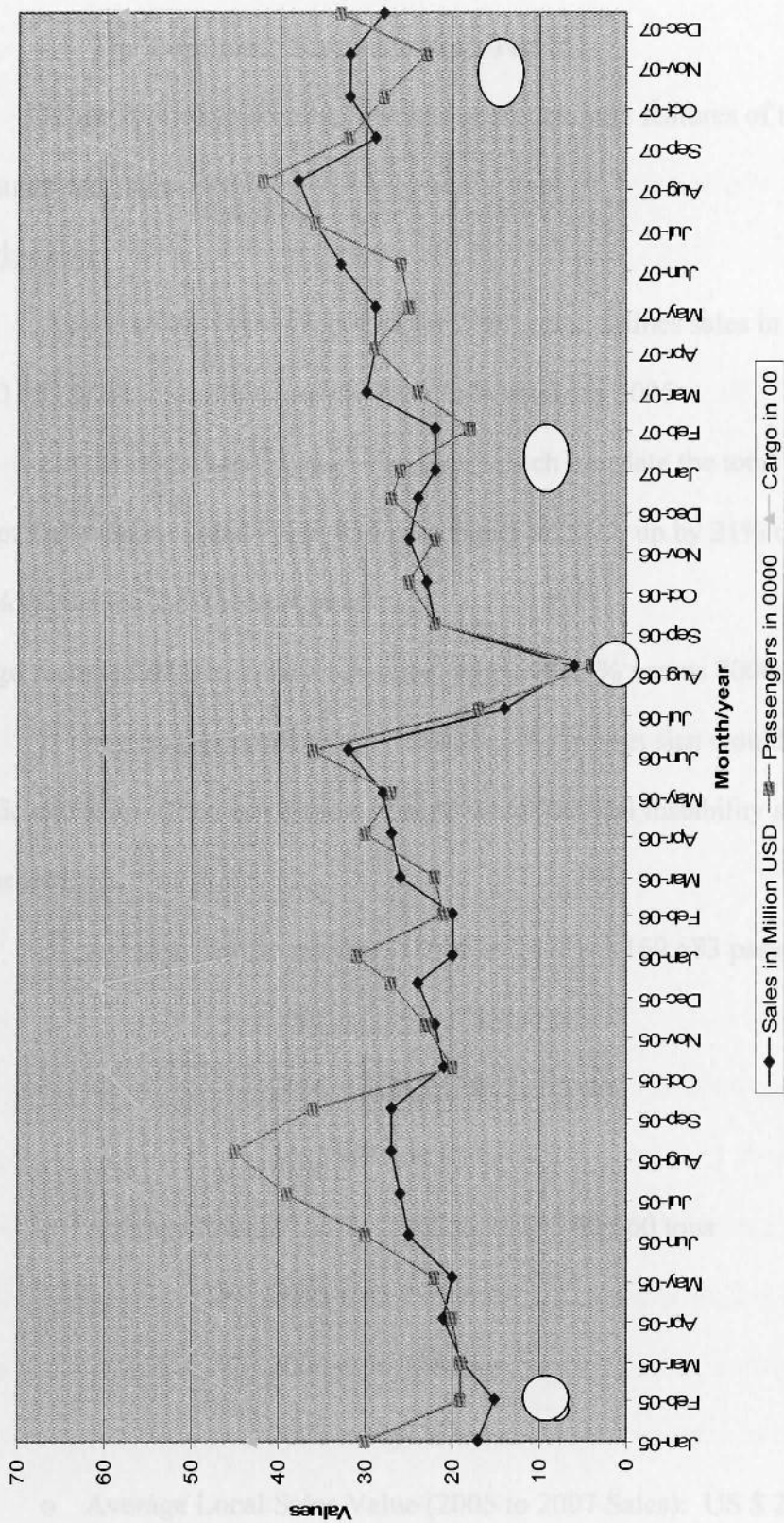


Figure 19 – Monthly Sales, Passengers and Cargo Statistics from 2005 to 2007

Source: Based on Statistics issued by the Directorate General of Civil Aviation & IATA Lebanon

### 4.3. The Dominant Economic Features

In the following section, the dominant economic features of the Airline industry in Lebanon are elaborated:

#### Market size:

As per IATA figures reported for 2007, total airlines sales in Lebanon exceeded USD 361 Millions, with a growth of 36.11% vis-à-vis 2006.

On the other hand, airport statistics, which translate the total traffic demand into and out of Lebanon recorded 3,408,834 passengers in 2007, up by 21% compared to 2006 and 2.2% versus the 2004 record year.

Cargo recorded 62,926 Tons exchanged, up by 10.87% versus 2006.

A conservative approach in measuring the market size would be to take the average traffic and sales of the last 3 years, during which several instability scenarios were witnessed:

- Average Traffic numbers (2005 to 2007): 3,169,683 passengers

- 2005 = 3,285,076
- 2006 = 2,815,138
- 2007 = 3,408,834

- Average Freight traffic (2005 to 2007): 60,660 tons

- 2005 = 62,295 tons
- 2006 = 56,758 tons
- 2007 = 62,926 tons

- Average Local Sales Value (2005 to 2007 Sales): US \$ 296,913,045

- 2005 = US\$ 263,962,933

- 2006 = US\$ 265,457,208
- 2007 = US\$ 361,318,994.

Needless to mention that such results were achieved despite the continuous political and security threats the country experienced in 2007.

#### Market Segments:

In addition to the global trend of business and leisure traffic, Labor traffic into Lebanon is also a lucrative and growing segment. The driver of this market is mainly the increasing numbers of working women among Lebanese households, on the backdrop of a socially spread phenomenon.

Lebanon is also characterized by another market segment, Visiting Friends and relatives (VFR). With a tradition of emigration, Lebanon has a large population overseas. Yet, the family and social ties remain strong with the country of origin.

#### Scope of competitive rivalry:

Primarily regional. Regulatory barriers to entry are low due to open Skies policy.

#### Market growth rate & position in the business life:

Sales growth recorded 36.11% in 2007 compared to 2006 despite the political instability the country is going through. A shy improvement of 29 aircraft landing and take-off, 74,124 passengers and 845 tons of cargo versus the record year of 2004 was published in 2007. The years of 2005 and 2006 recorded a decline in numbers, with the highest decrease in 2006 as a result of the airport total closure during the summer war crisis and blockade. Growth rates recorded in the past three years are as follows:

- Traffic Growth (2007 versus 2004): **2.2%**

- 2005 V/s 2004 = -1.49%

- 2006 V/s 2005 = -14.31%
- 2007 V/s 2006 = 21.09%
- Freight Growth (2007 versus 2004): **1.36%**
  - 2005 V/s 2004 = 0.34%
  - 2006 V/s 2005 = -8.89%
  - 2007 V/s 2006 = 10.87%
- Local Sales Growth (2007 versus 2004): **61%**
  - 2005 V/s 2004 = 17.79%
  - 2006 V/s 2005 = 0.57%
  - 2007 V/s 2006 = 36.11%

Although data for airline industry position in the business life are not available, the Travel & Tourism Industry contributes about 10% of GDP.

#### Number of players (airlines) & their relative size:

Seventy three airlines operated to Beirut during 2007 out of which thirty nine had scheduled regular flights whereas the remaining carriers operated charters or private services.

More than 67% of the market is serviced by 10 Airlines. Market shares range from as little as 0.1% to as high as 35.72%<sup>48</sup>. Figure 20 illustrates the relative size in terms of market shares for the top twenty carriers operating to Lebanon.

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<sup>48</sup> Department of Civil Aviation – Statistics 2007

# Market Share

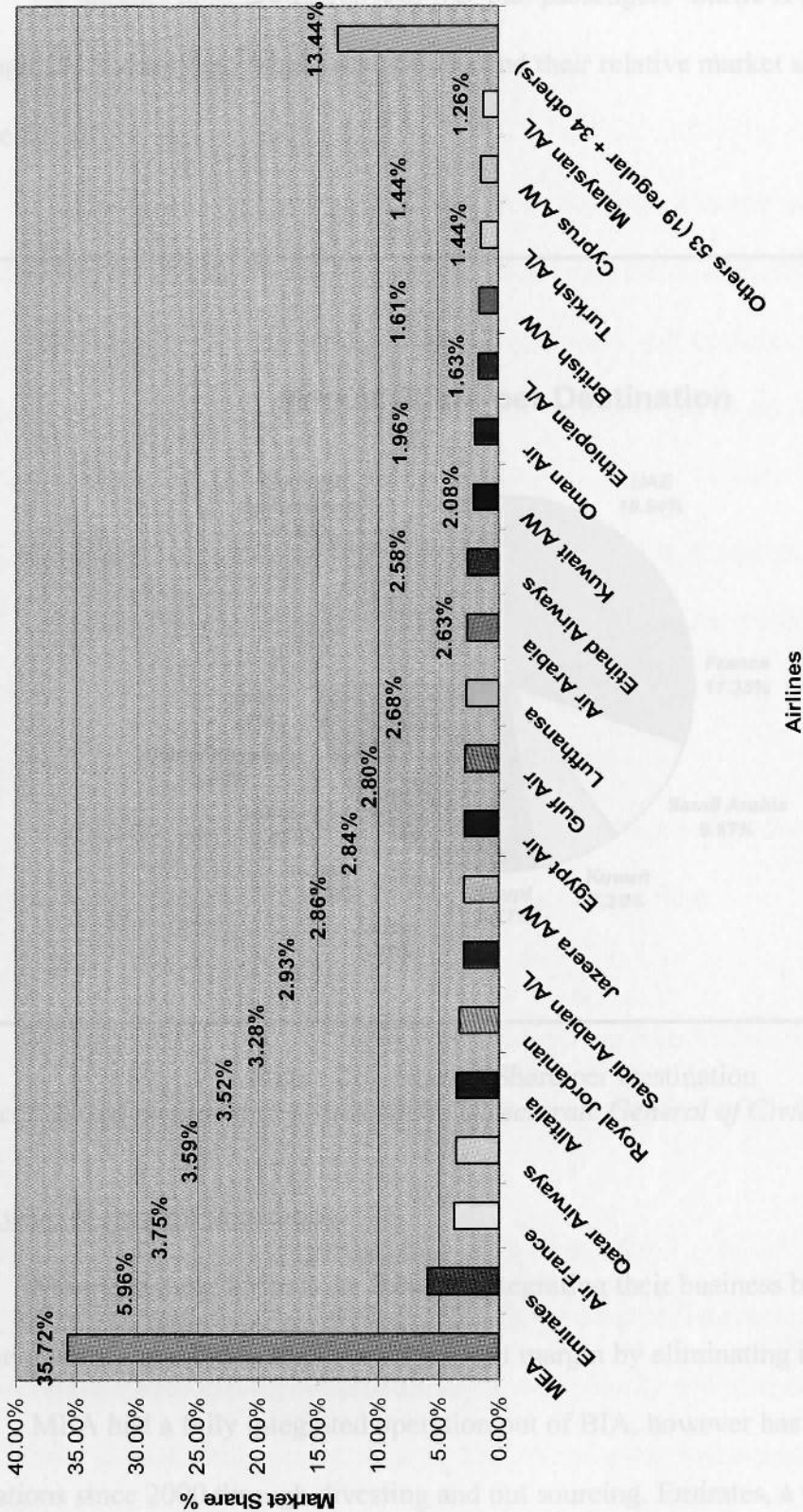


Figure 20 - Number of Airlines & their Relative Size  
Source: Based on Statistics Issued by the Directorate General of Civil Aviation in Lebanon

On another note, around 75% of the total passengers' traffic is going to, from and through 10 destinations. These destinations and their relative market share are shown in figure 21.

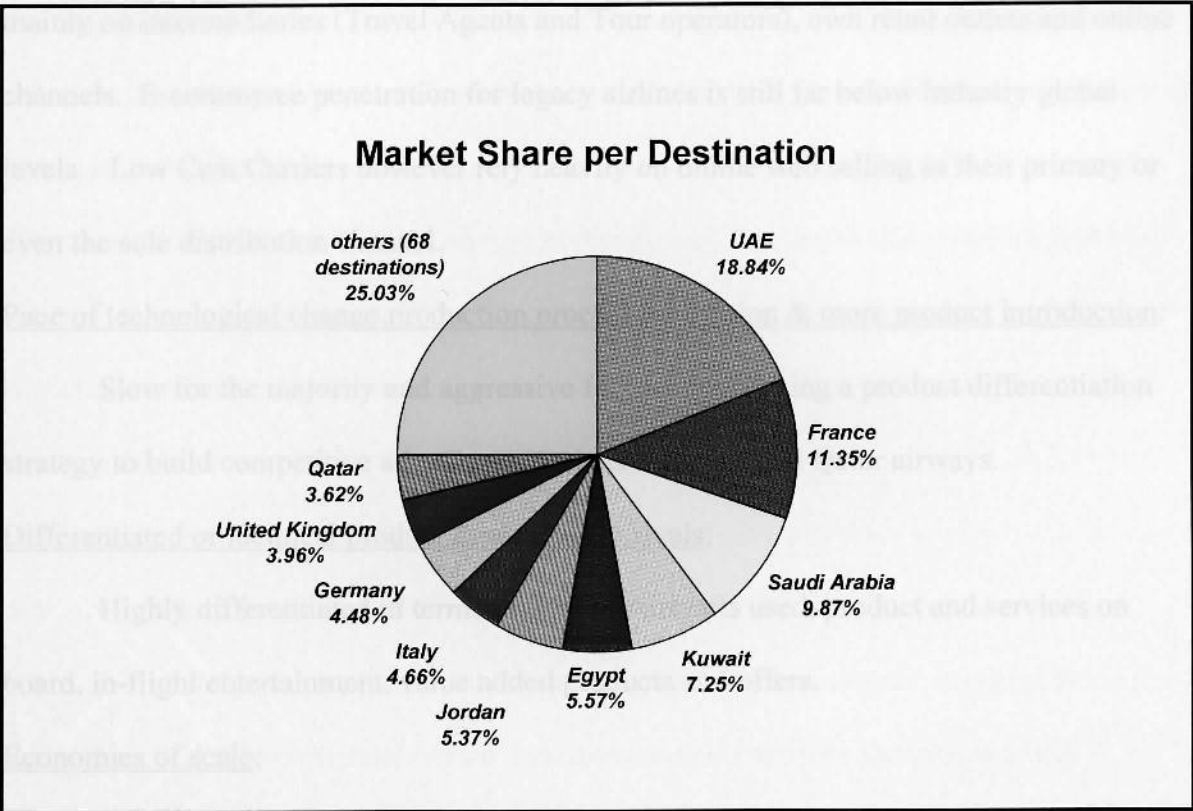


Figure 21 – Market Share per Destination  
Source: Based on Statistics Issued by the Directorate General of Civil Aviation in Lebanon

Backward & forward integration:

More and more airlines are forward integrating their business by establishing an online presence in a bid to improve their profit margin by eliminating intermediaries.

MEA had a fully integrated operation out of BIA, however has restructured its operations since 2000 through divesting and out sourcing. Emirates, a foreign player in the

market, is integrated forward into Hospitality business, software development, logistics solutions and Training.

Type of distribution channels used:

The majority of airline operators to Beirut use similar distribution channels, focused mainly on intermediaries (Travel Agents and Tour operators), own retail outlets and online channels. E-commerce penetration for legacy airlines is still far below Industry global levels. Low Cost Carriers however rely heavily on online web selling as their primary or even the sole distribution channel.

Pace of technological change production process innovation & more product introduction:

Slow for the majority and aggressive for airlines seeking a product differentiation strategy to build competitive advantages such as Emirates and Qatar airways.

Differentiated or identical product & services of rivals:

Highly differentiated in terms of type of Aircrafts used, product and services on board, in-flight entertainment, value added products and offers.

Economies of scale:

The new wide-bodied aircrafts such as some versions of the Airbus 380 (double deck) could accommodate more than 750 passengers, which translate the need for airlines to achieve economies of scale.

Capacity utilization versus low-cost production efficiency:

The airline industry is a highly leveraged and capital intensive industry which requires proper strategies to boost the revenue productivity and increase utilization of fixed assets (airplanes). Cutting ground time at airports and using multi-tiered price discounts are examples of such strategies used by airlines.

### Capital requirement and the ease of entry & exit:

The aviation industry is characterized by high entry barriers and fixed costs associated with set up cost of required factors of production such as aircrafts, manpower, infrastructure, and distribution channels which make it harder for new competitors to enter the market. Exit barriers on the other hand are also high as most of the companies that decide to leave the industry face high costs that are mainly due to the fact that assets used in this industry will not have any alternative use and will not be disposed of at book value. However, for already established carriers, a deregulated market such as Lebanon and the increase in consumers and suppliers have opened a pathway to ease the entry and exit, especially for Low Cost Carriers. Lebanon is one of the first destinations served by all newly established airlines in the Middle East.

## **4.4. The Five Forces of Competition**

In the following section we shall analyze the Five Forces model of competition to assess the competitive pressures in the Lebanese market, whereby the business and operating environment is changing due to both exogenous and endogenous factors.

### **4.4.1. Threat from Potential Entrants**

Threat posed by potential entrants depends on two major factors: barriers to entry, and reaction of incumbents. As stated earlier, the Open skies policy has substantially lowered the barriers to entry. However, a relatively elevated landing rights fees on the backdrop of political instability, and the protectionist government approach towards Middle East Airlines renders this factor moderate.

Brand name and frequent flyer point also play a role in the Airline industry. An airline with a strong brand name and incentives can usually be enough to lure a customer even with higher prices.

Nonetheless, the reaction of the national carrier which has operated in a monopolistic environment during the civil war has always been vehement. Another reason for grievance relates to its financial limitations to easily compete in the modern business environment which requires huge investments in assets and technology; in this respect, scale-related barriers are a more serious concern for MEA than other international players.

#### **4.4.2. Threat of Substitutes**

Threat of substitutes for passengers' transportation is very low due to the fact that alternative transportation modes are either under-developed and cumbersome such as road transport, or that it is un-practical to use. However substitutes are found within the same industry. This means that on certain segments such as labor, price substitution effect is quite high, taking into consideration that substitutes are fairly satisfactory in terms of quality and easy to access. However, a substitute for air freight is sea freight. The decline in Cargo traffic witnessed since 2003 is partially associated to the usage of sea shipping.

#### **4.4.3. Bargaining Power of Suppliers**

The airline supply business is mainly dominated by Boeing and Airbus. For this reason, there isn't a lot of cutthroat competition among suppliers. Also, the likelihood of a supplier integrating vertically isn't very likely. In other words, we probably will not see suppliers starting to offer flight service on top of building airlines. Other service providers

such as network companies, IT, and reservation systems are only a handful serving the whole industry.

#### **4.4.4. Bargaining Power of Customers**

Bargaining power of customers is relatively weak. Airlines do have a normal business relationship with their intermediary customers (travel agencies); yet due to limited seasonal availabilities they are able to exercise sufficient bargaining power to influence the terms of supply to their favor. Access to the same distribution channels by various suppliers, even if agencies are sometimes being offered lower margins and incentives on volume sales remain a moderate factor in influencing the choices of end-users.

#### **4.4.5. Rivalry among Competitors**

Highly competitive industries generally earn low returns because the cost of competition is high. This can spell disaster when times get tough in the economy. MEA tries aggressively to defend its market position against new comers. Brand preference and customers loyalty is strong among Lebanese traveling outbound from Beirut. Rivalry is high during low seasons, especially among foreign players on the local market, those who share rather close market shares. Differentiation is being highlighted on specific travel connections and legs, rather than on general operating grounds. However, the market becomes price inelastic during periods of high demand. Rivalry among low cost carriers is low as growth rates of their target market are high and the market is still underserved by such type of carriers.

#### **4.5. The Industry Driving Forces in Lebanon**

Increasing globalization of the industry is one of the major driving forces; international carriers launch aggressive long-term strategies to win regional global market positions, backed by their technological know-how and economies of scale. The Aviation Industry did not reach its maturity in Lebanon for obvious reasons; that is why the opportunities and potential long-term industry growth rates seem more or less realizable in the future.

#### **4.6. Industry Key Success Factors**

The key success factors for airlines in Lebanon stem around the following:

- Location; convenient at the crossroad to major destinations.
- Deregulated market with Open skies policy.
- Diversified market segments
- Strong contribution to the local economy; leading to investment in infrastructure and superstructure.
- Large expatriate population with strong family and social ties in the country.
- Service-oriented culture, where tourism remains the core.
- Diffusion of technical know-how.
- Bank secrecy laws
- Climate & beautiful scenery
- Undervalued real estate market relative to the region

#### **4.7. Assessment of the Industry Attractiveness**

Aside from its volatile political atmosphere, Lebanon's macro and competitive environment parameters described earlier and its key characteristics play a favorable role in attracting foreign carriers.

In fact, since the adoption of the open skies policy in 2002 and until 2004, the pattern of traffic growth in Lebanon was above IATA's published growth rates for the Middle East region. Furthermore, record achievements in terms of passengers' inflows and outflows were reported in 2007, a growth far above IATA 6.8% average annual growth rate forecast for the Middle East region.

Other favorable indicators are its diversified market segments, low threat of substitutes, and weak bargaining power of customers and suppliers resulting in moderate rivalry among competitors.

On the other hand, and apart from the political instability, the less favorable indicators are related to low barriers to entry which increase the threat of potential foreign new entrants.

When the aviation sector did endure the consequences of the political turmoil in 2005 and war in 2006, the level of value loss to foreign airlines has been questionable and proved to be offset by sound contingency planning and strategic reaction. An example of that is MEA strategic decision to relocate operations to neighboring countries and to operate charter flights during airport closure, maintaining thus a profitable result by the end of 2006. On a similar note, Emirates contingent reaction of flight diversions and capacity increases to/from Damascus to cope with the surge in demand during 2006 summer war, resulted in increased revenues.

## CHAPTER 5

### CONCLUSION

This research had the objective of assessing the attractiveness of the airline industry in Lebanon's uncertain environment. We conclude with the following results:

First, on the global level, although the micro factors influenced by strategic managerial decisions are important to the overall performance of any company, the fact remains that the macro environment retains the upper hand in affecting the growth if not the stability itself of the respective players. Thus, few industries are as affected as the airline industry by the phenomenon of globalization. In fact, aviation is in itself a major vector of globalization; it is directly correlated to the health of the world economy whereby demand increases during healthy economic cycle. Furthermore, deregulation which is another globalization attribute has been recently a strategic trend in the industry contributing to its expansion. These factors coupled with demography in terms of age brackets, economic dynamics, and the subsequent population mobility, have been major drivers of the low cost carriers for example.

Second, on the regional level, it is noted that the fundamentals of the airline industry are rapidly changing in the Middle East; the region is becoming the hottest aviation area in the world, which is evidenced by the above-average growth indicators. The main base for this exceptional performance is supported by the recent underlying economic growth, large amounts of direct capital investments into both infrastructure and superstructure, but also

by the inter-related characteristics namely geography, accessible technology and regulatory openness.

Third, with regard to Lebanon, the airline industry apparent fragility is counter-balanced by its dynamic adjustments and adaptability to changing operating environments, largely affected by the instability of the political and security conditions. In fact, throughout the previous periods, the sector has demonstrated a high degree of resilience against backdrops, firmly supported a deregulated market and favorable competitive atmosphere.

Finally, as macro economic conditions affect directly this sector within various levels, there exist a real systematic risk common to all three areas of study. Thus a major challenge in the days to come relates to the incidence of the surge in fuel prices which could have a dramatic impact on demand and growth of the airline industry; a subject for a new analysis....

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