

MASTER THESIS

**FEASIBILITY STUDY FOR THE
ESTABLISHMENT OF A NEW
AIRLINE COMPANY IN CYPRUS**

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Summary

This master thesis aims to discover if a newly-established airline carrier in Cyprus would be viable and, ultimately, suggest the best airline business model suitable for the Cyprus passenger aviation market. Of course, the choice of a particular business model greatly influences the financial feasibility of the company. In order to come into conclusions, the thesis examines the contemporary external environment of the Cyprus passenger airline industry, the internal business environment of the new airline, and the environment of the global passenger airline industry. The examination was carried out by using some powerful marketing tools, such as market analysis, competitive analysis (Porter's Five Forces) and a combination of SWOT and PESTLE analysis. Finally, the master thesis comes to the conclusion that a new airline company established in Cyprus, at the time the thesis was written, would most likely be feasible. The most suitable business model for the airline to succeed would be the low-cost model.

Περίληψη

Η μεταπτυχιακή διατριβή στοχεύει να ανακαλύψει εάν μια νεοϊδρυθείσα αεροπορική εταιρεία στην Κύπρο θα ήταν βιώσιμη και, τελικά, να προτείνει το καλύτερο αεροπορικό επιχειρηματικό μοντέλο, κατάλληλο για την Κυπριακή επιβατική αεροπορική αγορά. Φυσικά, η επιλογή του συγκεκριμένου αεροπορικού μοντέλου επηρεάζει την οικονομική βιωσιμότητα της εταιρείας. Για να φτάσει σε καταλήξεις, η διατριβή εξετάζει το σύγχρονο εξωτερικό περιβάλλον της Κυπριακής αεροπορικής βιομηχανίας, το εσωτερικό περιβάλλον της νέας αεροπορικής εταιρείας και το περιβάλλον της παγκόσμιας αεροπορικής βιομηχανίας. Ο έλεγχος έγινε χρησιμοποιώντας μερικά δυναμικά εργαλεία μάρκετινγκ, όπως η ανάλυση της αγοράς, η ανάλυση του ανταγωνισμού (Porter's Five Forces) και ενός συνδυασμού ανάλυσης SWOT και PESTLE. Τελικά, η μεταπτυχιακή διατριβή καταλήγει στο συμπέρασμα ότι μια νέα αεροπορική εταιρεία που θα ιδρυόταν στην Κύπρο, τη στιγμή που γράφτηκε η διατριβή, θα ήταν πολύ πιθανόν βιώσιμη. Το πιο κατάλληλο επιχειρηματικό μοντέλο για να πετύχει η αεροπορική εταιρεία θα ήταν το μοντέλο χαμηλού κόστους.

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Chapter 1

Introduction

1.1 Research Background

The aviation industry is a very dynamic and complex industry due to a variety of variables and forces that affect its operations both in the short and in the long-term. In general, over the last few decades, the airline industry and particularly the commercial passenger airline sector have been transformed in many different ways due to some critical changes that have taken place in the industry. More specifically, some of the major changes include, among others, the deregulation and the liberalization of the passenger air transport, the reduced government intervention, the privatization of many state-owned airlines, the emergence of new airline business models and so forth.

Therefore, as a consequence of all these changes, the commercial passenger airlines face rapidly expanding, aggressive and intense competition both in the developed and developing countries all over the world. Of course, this intense competition within the industry presents both opportunities and challenges to the airlines. More specifically, some airlines have taken advantage of this new industry environment and became very successful (mainly in terms of profitability) by adopting some efficient and sophisticated strategies or/and by changing completely their previous business model. On the other hand, there were many airlines that have declared bankruptcy and either ceased their operations or they were completely reorganized (under the bankruptcy protection) in a way to survive in the short term and become successful in the long-term.

Regarding Cyprus, the case of the Cyprus Airways (the former national flag airline carrier of the Republic of Cyprus) is an excellent and recent example of an airline that has failed to survive in the current industry environment. Particularly, Cyprus Airways (was the backbone of the island's

air transport network) ceased its operations at the beginning of 2015 due to major debt and other critical financial problems and is currently in liquidation process. As a direct consequence of this situation, an air connectivity gap (for the short-term) was created, to and from some destinations that were served by Cyprus Airways. Of course, this gap was covered relatively quickly by other foreign carriers that operate to and from Cyprus airports.

Given that the airlines constitute the main means of transport that connects the island with the rest of the world, it is worth mentioning it to highlight both the importance and the contribution of the operation to the various passenger airline companies that fly from/to Cyprus airports. Specifically, further to the transfer of locals to other international destinations for many different purposes (such as for leisure or business), the airlines play a vital role in the transport of tourists to and from the island that automatically contribute positively either directly or indirectly to the Cyprus economy as whole. That is because, Cyprus economy among others is based heavily on tourist industry which is closely related to the airline industry (the first feeds the former one).

Meanwhile, according to some articles from the mass media there are currently some new airline companies which were registered in Cyprus and waiting a license from the Civil Aviation Authority of the Republic of Cyprus in order to start flight operations from Cyprus to many different destinations.

Of course, the launch of a new airline is not a simple task or a gamble. That is because of both the industry characteristics itself and the various factors (controllable and uncontrollable, predictable and non-predictable) that affect the operation of the airline industry as a whole. Furthermore, the start-up of an airline constitutes a high capital investment.

Therefore, by observing the above, it can be realized that prior to the launch of a new airline (start-up), even if entering a new market with an existing airline there is a need for conducting a comprehensive feasibility study in order to help the prospected investors or other stakeholders within the industry to decide if their business idea represents a potential business opportunity.

1.2 The Research Question

The main research problem of the master thesis is to determine whether the establishment of a new airline company in Cyprus is feasible or not. Of course, this research problem goes far beyond the potential of financial feasibility of the new air carrier. Particularly, the choice of the most suitable/right (in terms of the possibility to be profitable) airline business model (a full service carrier or a low cost carrier) is among the main requirements of the present master thesis. Therefore, as it can be understood, the choice of the most suitable airline business model is interrelated with the financial feasibility of the airline.

1.3 Purpose of the Research

The final results of this study can help mainly the future prospective investors and/or other stakeholders in their decision to establish or not a new airline company in Cyprus. At the same time, in the case where the business decision is positive, the outcomes and the suggestions about the most suitable airline business model is also very crucial for the prospective investors. Finally, the results of the study can help both some governmental departments and nongovernmental organizations in their decision-making regarding airline related issues (such as changes in the airport charges, taxation, enlargement of the existing airports and so forth).

1.4 Methodology & Methodological Problems

For the purpose of the present master thesis, there were used both primary and secondary data. Particularly, on the first stage of the master thesis there were used many secondary sources (pre-existing analyzed data) such as data from book articles, journals, databases, reliable internet sites and so forth), whereas on the second stage there were used some primary data (raw data) mainly from different governmental departments of the Republic of Cyprus such as the Department of Civil Aviation and data from a Public Consultation by the Minister of Transport, Communications and Works regarding the passenger airlines in Cyprus. Moreover, there were used primary data from the private sector, such as the Hermes company which is the private operator of the two airports in Cyprus.

Furthermore, regarding the availability of secondary sources, there are many references in the international bibliography about the global passenger airline industry (including a number of passenger airlines worldwide that became very successful in the industry, and also to other airlines which fail to survive due to many different situations that finally led to shut down their operations). However, in the case of Cyprus there is no enough bibliography about the aviation industry in Cyprus.

Finally, it is worth mentioning that all provided data refers only to the area of the island which is under the effective control of the legal government of the Republic of Cyprus. Also, the aviation-related data refers only to the two legal airports of entry to the territory of the Republic of Cyprus which are those of Larnaca and Pafos. Finally, the master thesis covers mainly the chronological period from 2004 until the present. Of course, the starting date (2004) is not based on a random choice. In contrast, this date is symbolic, and that is because in 2004 Cyprus became a full member state of the European Union, which in terms of aviation means the liberalization of flights within all the EU member states.

1.5 Research Results

After an in-depth and comprehensive analysis of the current external environment of the passenger airline industry in Cyprus, as well as the internal (business) environment of the new start-up airline and at the same time the examination of the global passenger airline industry together with the positive forecasting for a continuous growth in the global air passenger demand (from a medium to long-term), it is clearly understood that the establishment of a new airline company in Cyprus seems to be financially feasible/viable. Of course, it is worth mentioning, that due to the fragile character of the airline industry, any possible future negative critical changes, mainly in the industry's external environment, could lead the new company to failure. Finally, by analyzing the two dominant passenger airline business models, it is understood that the most suitable airline business model for the case of Cyprus is the low-cost model.

1.6 Outline of the Thesis

The master thesis is organized in six main chapters as follows.

Further, in the current chapter (Chapter 1) which constitutes the Introduction, Chapter 2 analyses the global passenger airline industry as a whole, by reviewing its historical development, its structure and its importance. Moreover, this chapter addresses the specific characteristics of the airline industry as well as the profitability paradox of the industry. Finally, this chapter examines both the current status and the future perspectives of the industry.

Then, Chapter 3 focuses on the examination of passenger aviation in Cyprus, by presenting the aviation background, the historical overview and the economic benefits that derive (either directly or indirectly) from the passenger air transport in Cyprus.

Chapter 4 presents, evaluates and compares the two most dominant airline business models (in terms of market share), which are those of the low-cost and the traditional full-service airlines. Finally, this chapter closes by suggesting the most suitable airline business model (the most viable and profitable) for the case of the establishment of a new airline in Cyprus.

Chapter 5, on the first stage, analyses the passenger airline market in Cyprus by reviewing both the airline demand and the airline supply. At the same time, this chapter presents, analyses and suggests both the market segmentation process and targeting for the new start-up low-cost airline in Cyprus. Then, this chapter reviews the company's position (before the implementation of the business idea) by applying both SWOT and PESTLE analysis of the new start-up low-cost airline. Additionally, on the second stage, this chapter analyzes the attractiveness of the industrial environment (competitive analysis), where the new start-up airline in Cyprus will operate through the examination of Porter's Five Forces.

Finally, the master thesis closes with the conclusion (Chapter 6), which summarizes the main points that derive from the core chapters and, at the same time, presents the most important outcomes/findings of the research and finally highlights some possible areas for further research.

Chapter 2

Global Aviation Industry Analysis

2.1 Historical Overview

Indeed, historically, the aviation industry was one of the most highly regulated industries. Particularly the “regulation of international aviation originated at the Paris Convention of 1919, which accepted that states have sovereign rights over the airspace above their territory. This immediately involved national governments in the regulation of the airline industry” (Scharpenseel 2001, 92).

Then, since the end of World War II, “the international air transport operates within the framework of the 1944 Chicago Convention on international air transportation, under which airlines’ commercial rights on international routes are governed by a complex web of more than 10,000 bilateral air services agreements (ASAs) between each country” (Oum, Zhang and Fu 2010, 371). Particularly, these bilateral agreements regulate many different parameters/conditions that relate to the international air transport, such as the exact number of routes (frequency of flights) that are allowed between the two nations, the volume of passenger traffic (capacity), the types of aircrafts and the number of the airline companies that are allowed to serve these predetermined routes and so forth.

In addition to the above, it is worth mentioning that almost every nation worldwide (particularly in the developed countries) has had its own national full-service carrier (flag carrier), which in many cases has represented the sole passenger airline provider (national monopoly) in the domestic airline industry. Particularly, the operation of these airline national monopolies has been linked, among others, with issues of very high airline fares, high operating costs, relatively

low growth rate of the demand for air transport, lack of business flexibility, low employee productivity and many other negative impacts, which derive from the existence of monopoly in the domestic airline industry.

By observing the above paragraphs, it is understood that the international airline industry was traditionally/historically highly regulated through strict bilateral agreements. On the other hand, it is realized that there were limitations and, in some cases, a complete absence of competition in the domestic airline industry, due to the exclusive existence of national airline carriers (legal monopolies) that limited or even did not allowed the establishment and operation of new airlines without the approval of the state.

Of course, throughout the years, many nations worldwide have tried to change the regulated status of the airline industry by passing some national airline-related acts or by signing some new bilateral air transport agreements that were more liberal than those in the past (these agreements eliminate some past restrictions). These attempts for removing or loosening either partially or permanently some past restrictions in the airline industry is called “deregulation”

On the one hand, the deregulation of the airline industry started in the United States of America (USA) where the USA Congress passed the Airline Deregulation Act in 1978 (Scharpenseel 2001, 92). Therefore, since passing that particular Act, the USA have achieved to remove many critical internal constraints in their domestic airline industry. On the other hand, in 1979, the USA government also tried to achieve a liberalization of international air markets by enacting “the International Air Transportation Act, which formally laid down the principle of promoting liberalized bilateral ASAs with foreign countries” (Oum, Zhang, and Fu 2010, 371-372). Therefore, in the aftermath of that international act, the USA reached numerous air transport-related agreements with some other nations worldwide that either remove or relax some past air transport constrains. Of course, as it is obvious, both the deregulation and the liberalization of the domestic air transport within the USA, and the merely liberalization of the international air transport (through the bilateral agreements), have represented the precursor of the deregulation and liberalization of international air transport, almost in the rest of the world.

Regarding the European Union (EU), both the deregulation and the liberalization of the air transport have taken place relatively late, compared to the USA. At the very beginning, the first steps for deregulation and liberalization were solely based on bilateral agreements between pairs of member states of the EU. Particularly, these bilateral agreements have granted some of the eight freedoms of the air between the EU member states that have signed the various air transport agreements. However, the legal inability to sign multilateral agreements for the benefit of the whole EU member states has limited and slowed the process for a more liberal air transport within the EU.

Indeed, the EU member states, due to many different reasons (such as market pressure, the emerging competition between some USA and EU airline companies and so forth), have tried to collectively take some drastic actions, in order to accelerate the procedure for a higher degree of deregulation, and finally achieve complete liberalization of air transport within the EU. Consequently, the EU member states have passed three air transport legislative liberalization packages (gradually), which replaced the air transport bilateral agreements between the EU member states (Scharpenseel 2001, 92). Specifically, the most notable liberalization package (in terms of its importance and the degree of liberalization) was the third one, which was passed in 1993. That is because this specific package, among others, allows the EU member state airlines to gain both free and unrestricted market access within the EU (in 1993 the EU was transformed into a single European market).

By observing the above, it is understood that the third air transport liberalization package represents the cornerstone of the air transport liberalization in the EU. That is because this specific package has removed almost all the restrictions regarding the air transport within the EU (intra-community routes). Consequently, this collective action of all the EU member states replaces the previously used bilateral agreement system with a multilateral agreement system. Therefore, as a result of this extensive liberalization, the EU is by now the largest domestic air transport market worldwide. Of course, regarding the international air transport, the bilateral agreements between EU member states and non-EU states continue to exist so far.

By concluding, it is notable to mention that the liberalization of airline industry led to many changes within the industry. Such changes include, among others, increase in the number of airline companies and demand, decrease in fares, increase in competition, the emergence of new airline business models, to mergers & acquisitions and so forth. Of course, these consequences have their pros and cons for the industry.

2.2 Industry Structure

The aviation industry is comprised of many different sectors/players that are under the same industry umbrella. Such sectors include, among others, the commercial airlines (both passenger and cargo), the aircraft manufacturers (such as Boeing and Airbus), jet engine manufacturers, the aircraft maintenance companies, the airports, the travel agents, and so forth. Meanwhile, it is a fact that the business operations of all these industry players are related (either directly or indirectly) to each other. However, because of the master thesis research question, this chapter focuses mainly on the commercial airline sector and particularly on the passenger airlines.

By focusing on passenger airlines, this specific sector can be categorized in many different categories, by taking into account different parameters. Typically, by taking into account the parameter network structure, the passenger airlines can be classified in two main categories, which are the scheduled airlines and the charter airlines respectively (Haanappelp 2003, 111). On the one hand, the scheduled airlines operate by following a specific flight program to predetermined destinations. On the other hand, the charter airlines do not operate in a scheduled manner. Specifically, the charter airlines operate supplementary to the scheduled airlines in order to cover the excess demand, which derives from some destinations in some specific periods during the year, such as in the summer periods when there are high flows of international tourists.

2.3 Industry Importance

Without any doubt, apart from the economic benefits that the industry offers to its various stakeholders, the aviation industry, and particularly the airline companies (both passenger and cargo), constitute a major factor in the economic development of both national and international

economies in many different ways, either directly or indirectly. For instance, by taking into account the fact that almost over 52% of international tourists travel by air (IATA 2015, 1), it is realized that the passenger airlines play a vital role in supporting/feeding the tourist industry, which itself plays a critical role in the economic wealth of many economies worldwide. Furthermore, the passenger airlines contribute to the economic development in many other ways, like by offering job opportunities individuals, or by increasing the public finances, which can derive from the imposed taxes generated from the sector and so forth.

In addition to the above, the passenger air transport offers many social benefits to individuals worldwide, such as by giving the opportunity to people to visit friends and families, or travel for leisure purposes in a relatively short period of time compared to other transport methods. Finally, the passenger airlines contribute to the cultural exchange of people all over the world.

2.4 Industry Characteristics

Indeed, as every other industry, the passenger airline industry has its own specific characteristics, which all together shape the industry environment that, in turn, plays a vital role in the whole economic performance of the industry.

First of all, the main characteristic of the passenger airline industry is the intense competition (well known as cut-throat competition). Indeed, following the deregulation and liberalization of the airline industry (mainly in the USA and the EU) numerous new airline companies were launched worldwide. Therefore, as it can be understood, these new airlines have led to increased competition among the passenger airlines. More specifically, the emergence of the new business model of passenger airlines, the Low Cost Carriers (LCCs), has led to intense price competition amongst existing traditional airlines (Full Service Carriers).

In addition to the above, the passenger airline industry is characterized as a cyclical industry in terms of financial performance. By observing the two figures below (Figure 1 & Figure 2), it is realized that the passenger airline industry passes through multiple cycles of financial success and failure. According to Doganis (2010) ‘four to five years of poor or bad performance are

generally followed by an upturn and five to six years of improving results'. Therefore, it is realized that every complete cycle (both upturn and downturn) lasts about 10 years.

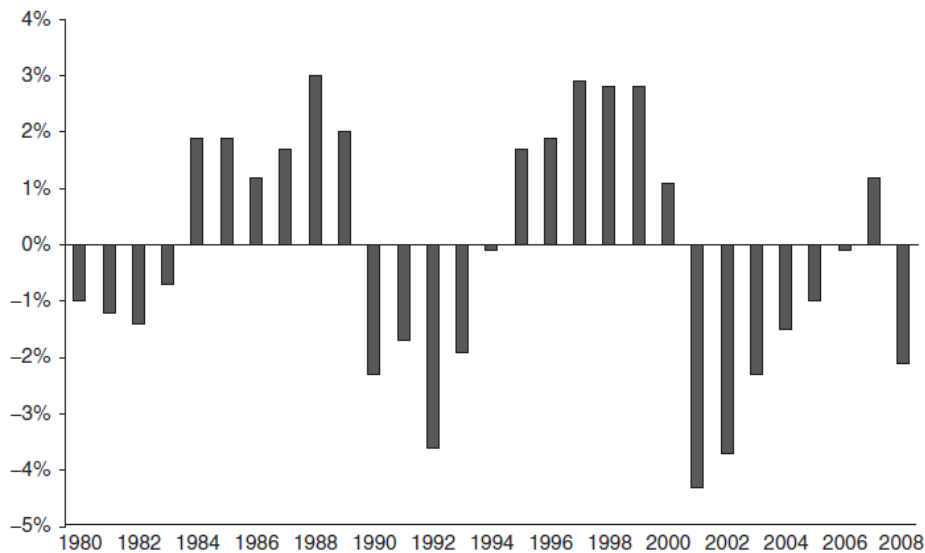


Figure 1: Annual net profit or loss as percentage of total revenue of ICAO member airlines 1980 – 2008 (Doganis 2010, 5).

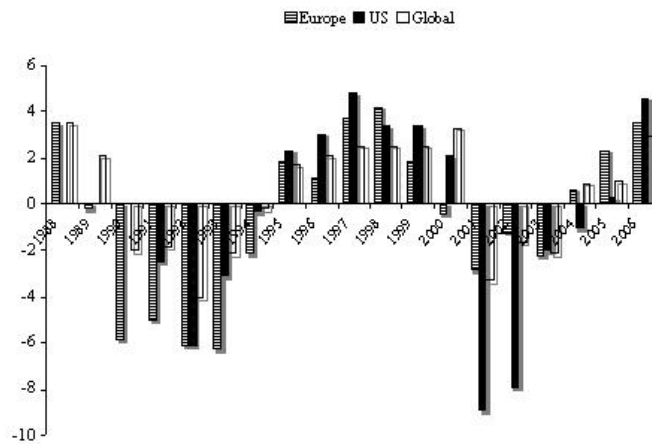


Figure 2: Operating margins of airlines 1988-2006 (Button 2008, 17).

However, despite the cyclical financial performance of the industry, there are some great examples of airlines that have succeeded (they show high profit margins even in bad economic times) and have become great players in the airline industry. These airlines include, among others, the case of SouthWest Airlines in the USA, Ryanair, EasyJet and Aegean in Europe, and Emirates in the Middle East.

Furthermore, as it is already mentioned earlier in this chapter, the airline industry is characterized even today (after the liberalization and deregulation period in many markets worldwide) by an unusually high degree of government intervention, in relation to the other industries (Heracleous, Wirtz and Pangarkar 2009, 4). Indeed, the governmental intervention continues to regulate the majority of international air routes, which are based on bilateral agreements between the different nations worldwide. Of course, there are some nations that have signed ‘open skies agreements’ with each other and have dramatically diminished or deduced the government intervention. Therefore, as it can be understood, the high degree of government intervention constrains healthy competition between the airlines (on international routes) and in turn affects catalytically both their profitability and viability.

Moreover, the airline industry is very sensitive to external factors, such as the oil price, the weather conditions, the issue of international terrorism, the political instability (including war in different regions), the variability in currency rates, the economic/financial downturns or recessions and so forth. As it can be realized, all these external factors are both uncontrollable (the airlines have no control over these factors) and unpredictable.

The figure below shows, amongst others, the negative impact of some of the main external factors/shocks (oil crisis, war, terrorist attacks and financial crisis) over the global demand for air passenger traffic. Additionally, by observing figure 3, it is realized that, however the negative impact of these external shock events over the passenger demand, the negative passenger gap did not last for a very long period of time (only short-term). Therefore, by observing these past shock events, it is understood that the airline industry seemed able to bounce back from these shocks relatively quickly (in the mid-term). According to IATA, this resilience of air travel to external shocks relates, among others, to the large declines in the cost of air travel and to the increase of both living standards and disposable incomes over time and so forth. Of course, this industry’s ability to relieve from different shock events cannot necessarily guarantee safety from future shocks. That is because there are many other factors that are outside of the control of the airline industry, such as the government policies, the regulatory environment and so forth. (Oxley and Jain 2015, 59-60).

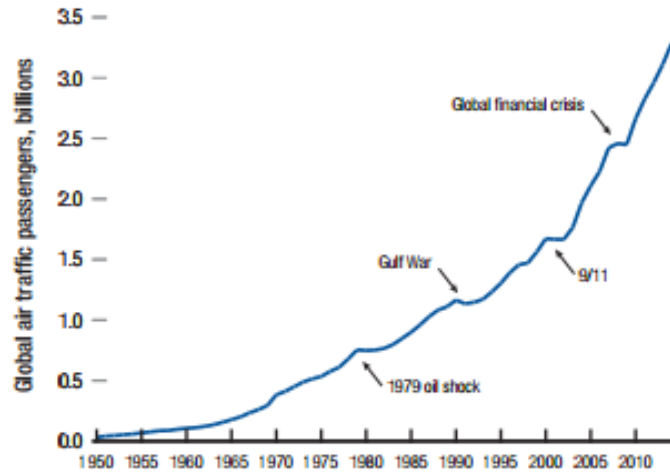


Figure 3: Global air traffic trend, 1950-2014 (IATA Forecast for 2014).

Starting with the examination of the oil price, it is significant to mention first that the fuels constitute the second biggest expenditure of the airlines (labor cost is the biggest expenditure). Indeed, the price of oil is both unstable (is going up and down during different periods) and unpredictable. As it can be understood, these variations in fuel price directly affect the profitability of the airlines, either positively or negatively. For instance, by the examining the chronological periods, where the price of oil is relatively low and the other factors were constant, it is realized that the airlines showed profits. In contrast, in periods where the fuel price is very high, the airlines reported big losses. Therefore, by observing the above, it can be understood that the fuel price plays a vital role in the profitability of the airlines.

In addition to the above, the threat of terrorism represents another relatively recent factor that affects the airline's operations as whole. Particularly, in the aftermath of the terrorist attacks of 9/11 (2001) in the USA mainland, the issue of terrorism was lifted among the main factors that affect negatively (in the short-term) the profitability of the airlines (by reducing the demand for air travel, by increasing the airline's costs due to the additional security measures at the airports, the flight delays and so forth).

Moreover, the aviation industry is strongly influenced by economic cycles. Particularly, on the one hand, the airline industry, in times of economic prosperity and expansion, reports increase in air passenger demand (due to the higher disposable income of the consumers), higher revenues and in turn higher profitability. On the other hand, in periods of economic downturn or recession, the industry reports decline in demand and lower revenues and profitability.

Another main characteristic of the airline industry is that it is highly seasonal. That is because many markets are highly seasonal in terms of high variations in passenger flow demand in different periods during the year (for instance, some specific markets present high passenger flows/demand in summer time, whereas in the winter period presents very low demand that in some cases make these destinations unprofitable). Therefore, the seasonality issue consists a major problem for the airlines, because it affects negatively their operations and, in turn, their financial performance (low revenues, short-term liquidity problems etc.).

Moreover, the airline industry has a perishable nature, as the aircraft seats cannot be stored for future use. In general, perishability represents one of the major characteristics of the companies that offer services. Indeed, the passenger airlines constitute a hybrid service provider as they offer both services and products. Therefore, as it can be understood, the perishability issue is related directly to the passenger load factor and the capacity of the aircrafts, which in turn affect the revenues and profitability of the airlines. Moreover, it is notable to mention that the problem of perishability is becoming higher after the deregulation and liberalization of the airline industry in many regions of the world. That is because, since the deregulation and liberalization of the industry, many airlines were launched that gradually led to excess capacity, lower load factor and lower profitability. Therefore, it is realized that the issue of perishability is very critical for this specific industry.

In addition to the above, the airline industry presents very high fixed-costs compared to other industries (high operating gearing). More specifically, according to many estimates, almost the 75% of total airline costs are fixed (Heracleous, Wirtz and Pangarkar 2009, 13). For instance, some of the most common airline fixed costs include, amongst others, the aircraft financing, the insurance, the labor cost (in developed countries where the wages are relatively high, the labor

costs represent the biggest cost for the airlines), the hangar rental and so forth. As it can be realized, the higher the fixed costs, the lower the marginal cost of carrying an extra passenger. Therefore, the profitability of the airlines is affected, critically and disproportionately, by the load factor.

Finally the aviation industry is subject to rapid technological advances and innovation, such as the building of more fuel-efficient aircraft engines, the creation of more aerodynamic aircrafts, the creation of new and more efficient navigation programs, the launch of a new more efficient website for direct ticket-selling (and cross-selling) and so forth. Therefore, as it can be understood, the different technological advances play a vital role in the total operation of the airlines in many different ways, such as by contributing to the increase of the airline's revenues/margins, by reducing their costs, by increasing the in-flight safety, or by offering convenience and differential service to their customers.

Finally, by summarizing all the above special characteristics of the airline industry, it is understood that the airline industry business environment will remain complex, unstable, fragile and exposed both to hyper-competition and to unanticipated external shocks.

2.5 The Profitability Paradox

According to many different reports, historically, the airline industry and, more particularly, the passenger airline sector (except a few successful airlines) presents very low profit margins (extremely lower than the industry's average margin) that automatically translate to poor financial performance. Of course, as it can be realized, this situation presents a paradox. That is because, despite the generally positive passenger growth rates (increase in demand for air travel) of passenger aviation over the years, the passenger airline sector reported very low profitability margins (even in periods with economic prosperity and growth).

In addition to the above, a recent study from IATA (Figure 4) shows that the airlines are the worst performing (in terms of the percentage of return on invested capital) of any of the different sectors of the aviation supply chain.

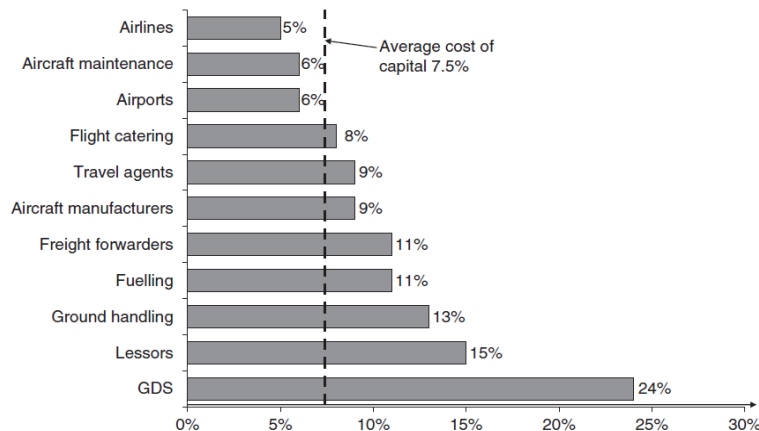


Figure 4: Average rate of return on invested capital in Aviation Supply Chain 1996-2004 (Doganis 2010, 6)

According to many scholars and aviation experts, this paradox is derived from a combination of different parameters/factors that affect critically the passenger airlines' operations as a whole. Particularly, the first main factor, among others, is the intense (cut-throat) competition among the rival airlines (price-wars). Another factor is the little or no competition in the industries that supply them, for instance many of the airline's suppliers constitute a monopoly, such as the airports and the air traffic control providers, or a duopoly, such as the main aircraft manufacturers, Boeing and Airbus. Finally, there is the vulnerability of the sector in various uncontrollable and unpredictable external shocks that in turn affects negatively, either the revenues and/or the expenses of the airlines, such as the increase in oil price, the terrorist attacks, the political instability/wars in some regions, the economic downturns, the weather conditions, and so forth (The Economist 2014, 1-2).

At the same time, the profitability of the airlines is subject to other factors that are related, either directly or indirectly, to the characteristics of the airline sector itself, such as the seasonality issue, the high fixed costs, the perishable nature of the airline sector, the governmental intervention (such as the pass of passenger airline-related regulations and agreements), and so forth.

2.6 The Current Status of the Global Airline Industry

As it is already mentioned, aviation industry as every other industry has passed through different stages (positive & negative) overtime. Currently, according to many official surveys from different independent aviation-related organizations (such as IATA, ICAO and so forth), the air passenger transport in many developed and developing countries worldwide exhibits high growth rates due to many different factors that enable more and more passengers to travel by air. According to recent IATA's press release, the global passenger traffic (in all regions worldwide) exhibited strong growth in demand (rose 6.5%) in 2015 for both domestic and international traffic compared to previous year (IATA 2015, 1). This high growth rate of 2015 'was the strongest result since the post-Global Financial Crisis rebound in 2010 and well above the 10-year average annual growth rate of 5.5%' (IATA 2015, 1). The high growth rate is a consequence of many different factors that affect the air passenger demand in many different regions, either directly or indirectly. Examples of those factors are the low oil prices, the lower fares, the economic growth of many emerging economies which is positively linked with high demand of air travel, the economic recovery in Eurozone and so forth (IATA 2015, 1).

2.7 The Future Perspectives of the Global Airline Industry

The future of air passenger transport seems to be very bright in terms of passenger growth. Particularly, according to IATA's latest updated/revised 20-year passenger growth forecast, which was first released in 2014 and covers the period 2014-2034, the total passengers will double to 7 billion by 2034 (the total global passengers in 2015 was almost 3.5 billion). More specifically, the average annual growth for global air passenger demand will be 3.8% until the end of the forecast period (2034). This percentage takes into account some possible future negative factors (negative developments in the global economy) that might affect the passenger demand within the forecast period (IATA 2015, 1).

Of course, the expected annual percentage (3.8%) of growth in air passenger demand will not be the same in different regions worldwide. Particularly, the findings of IATA indicate that 'the five fastest-increasing markets in terms of additional passengers per year, over the forecast period, will be China (758 million new passengers for a total of 1.196 billion), the US (523 million new

passengers for a total of 1.156 billion), India (275 million new passengers for a total of 378 million), Indonesia (132 million new passengers for a total of 219 million) and Brazil (104 million new passengers for a total of 202 million' (IATA 2015, 1).

The percentage of future expected annual air transport growth seems to be higher in emerging/developing economies (for China and India the predicted annual growth rate will be 12.5% and 16.5% respectively) than in developed economies (such as the USA and Europe). Specifically, for Europe, the IATA's predicted annual growth rate is 2.5% (significantly lower than the expected global average of 3.8%). That is because the air passenger market is already highly developed in this economic area.

By observing the above predictions, it is understood that the citizens from the emerging economies will represent a high percentage of the future travelers/tourists. Therefore, these emerging economies are of great importance, regarding the future overall growth of the airline industry.

Chapter 3

Passenger Aviation in Cyprus

3.1 Passenger Aviation Background

Indeed, without any doubt, the passenger airlines constitute the main transport means that connect the island of Cyprus with the rest of the world. Specifically, according to some official reports/statistics of the Ministry of Communications and Works of the Republic of Cyprus, more than 98% of total passenger traffic movement to and from Cyprus is by air (Flourentzou 2012, 1). Therefore, by observing this high percentage, it is clearly understood that the connection of Cyprus with any foreign nation relies almost entirely on air transport.

In addition to the above, it is worth mentioning that the majority of the above percentage of air passenger traffic comprises mainly tourists (foreign market) who visit Cyprus primarily for leisure purposes. In contrast, the percentage of locals is relatively low compared to that of tourists, because Cyprus has a small domestic market due to the population of the island, which is less than one million people (in the area that is controlled by the legal Cyprus government).

Furthermore, it is also worth mentioning that Cyprus passenger aviation consists only of international flights (there are no domestic flights due to the small territory of the island) that operate from the two airports of the country, which are the Larnaca International Airport (primary airport) and Pafos International Airport (secondary/regional airport).

The operation of international flights between Cyprus and any third country (non-EU member state) is regulated by the provisions of Bilateral Air Services Agreements (BASAs). In general, according to the Department of Civil Aviation of the Republic of Cyprus, Cyprus has so far signed BASAs with 51 countries. However, 22 out of 51 BASAs became inactive after the

Cyprus accession to the EU on 1st May 2004 (the 22 BASAs were signed before the accession to the EU).

3.2 Historical Overview

As it is already mentioned, Cyprus, as many other nations worldwide, has had its own national airline (flag carrier), the Cyprus Airways, which recently (2015) ceased its operations permanently, mainly due to its bad financial performance and is currently under liquidation process.

Particularly, Cyprus Airways was established in 1947 (when Cyprus was a British colony) and since 1960 (when Cyprus became an independent state) the company became the national carrier of the Republic of Cyprus, with the Cyprus government holding the majority of its shares (over 50% of the total shares). Cyprus Airways was a traditional scheduled full-service carrier and since its establishment it had been the only airline company based in Cyprus until 1992. Then, in 1991, Eurocypria Airlines, a wholly-owned subsidiary of Cyprus Airways, was established as a charter carrier in order to cover the excess demand of air passengers from many different markets to and from Cyprus, mainly in the peak season. Eurocypria Airlines started their flight operations in 1992. However, the new state-owned airline declared bankruptcy in 2010.

Indeed, for the period prior to the accession of the Republic of Cyprus to the EU, both Cyprus Airways and its subsidiary Eurocypria Airlines were enjoying a protectionism regime (monopolistic environment and preferential treatment) from the Cyprus government. As it can be understood, the passenger aviation in Cyprus, in the chronological period 1960-2004, was characterized by unusually strong national intervention/regulation on international flights, which in turn eliminated any form of competition between the two state-owned airlines and the foreign airlines as well (regarding their common international routes to and from the island).

However, despite the enjoyment of the governmental protectionism policies and the lack of any form of competition, the state-owned airlines were unprofitable due to a combination of different factors that have taken place both in their internal (controllable factors) and external business environment (uncontrollable factors). On the one hand, the internal factors include, among

others, the extremely high cost structure of the airlines (the airlines were overstaffed, with very high salaries compared to other airlines worldwide), the maintenance of flight operations to unprofitable routes, the mismanagement and so forth. On the other hand, the passenger aviation in Cyprus faced some external shocks that also negatively affected the profitability of the airlines. Such shocks include the illegal invasion of Turkey in the Republic of Cyprus in 1974, which left Cyprus Airways both without aircrafts and its base (the International Airport of Nicosia, which was the only airport in Cyprus), the different international oil crises, the terrorist attacks of 9/11, the war in Iraq, the SARS and the recent global economic and financial crisis.

Indeed, these unprofitable airlines survived by receiving financial aid from the government either by direct cash injections or by government loans on preferential terms (such as loans with very low interest rates).

Of course, the accession of the Republic of Cyprus to the EU has transformed radically the past status quo of the passenger aviation sector in Cyprus (mainly regarding the flight operations to destinations within the EU). Particularly, through its accession to the EU, Cyprus entered automatically the liberalized single European aviation market, where there are no restrictions for the EU carriers to provide services anywhere within the EU. As a result of this transformation, from 2004 until the present, many EU airlines (such as Aegean, Monarch, Ryanair, EasyJet, Blue Air and so forth) have started operations to and from Cyprus. These airlines consist of both full service and low cost carriers.

Given the dependence of Cyprus on the European markets, it is realized that the liberalization of Cyprus aviation was a great opportunity, not only for the airlines, but also for the passengers. Particularly, the passengers benefited from lower fares due to the increased competition and the introduction of the new aviation business model in Cyprus, which is the low-cost no frills model (Ryanair, EasyJet, Wizz Air and Monarch to name a few, constitute some of the major low-cost carriers that currently operate from Cyprus).

Finally, it is worth mentioning that the two state-owned carriers in Cyprus, due to their high-cost structure and their weakness to switch swiftly (thanks to their bureaucratic character, which constrains the flexibility to adapt to new changes) to the new liberalized open market, were

unable to compete with the carriers of the EU member states in the new competitive environment. Additionally, the European Commission has banned any future financial aid by the Cyprus government, in order to protect the fair and healthy competition amongst the airlines that operate within the EU Single Aviation Market. Therefore, all these changes/challenges in the aviation environment led both state-owned airlines to cease their operations (Eurocypria Airlines declared bankruptcy in 2010 and Cyprus Airways ceased its operations in 2015).

3.3 The Economic Benefits of Air Transport in the Republic of Cyprus

Regarding Cyprus, the operation of the passenger airlines to and from the island represents a catalytic factor for the wealth of Cypriot economy in many different ways. For instance, as stated previously, the Cypriot economy is heavily dependent on tourism, which is directly related to the operation of passenger airlines, from and to major tourist markets. Particularly, according to a survey (Figure 5), the 88.9% of foreign tourists in 2010 arrived in Cyprus by air (Oxford Economics 2011, 19).

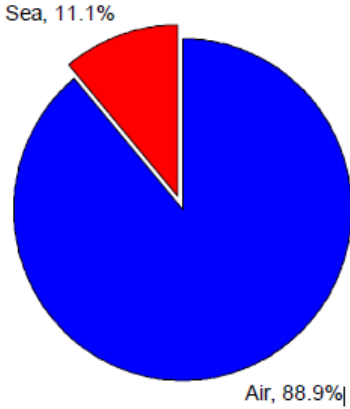


Figure 5: Foreign visitor arrivals by mode of transport in 2010 (Oxford Economics 2011, 19)

In addition to the above, Table 1 shows that the passenger airlines and their supply chain represent a major employer in Cyprus and also contribute to the Gross Domestic Product (GDP).

Table 1: Aviation's contribution of output and jobs to Cyprus Source (Oxford Economics 2011, 14).

	Direct	Indirect	Induced	Total	% of whole economy
Contribution to GDP (€ million)					
Airlines	64	17	24	105	0.6%
Airports and Ground Services	297	101	119	517	3.0%
Total	361	118	144	622	3.6%
Catalytic (tourism)	788	892	355	2,035	11.7%
Total including catalytic	1,149	1,010	499	2,657	15.2%
Contribution to employment (000s)					
Airlines	1.6	0.4	0.5	2.5	0.6%
Airports and Ground Services	8.0	2.3	2.7	13.0	3.3%
Total	9.6	2.7	3.2	15.5	3.9%
Catalytic (tourism)	19.9	20.7	7.8	48.4	12.3%
Total including catalytic	29.5	23.3	11.1	63.9	16.2%

Finally, Table 2 shows that the airlines contribute to the public finance through the imposed taxes.

Table 2: Aviation makes a substantial contribution to Cypriot tax (Oxford Economics 2011, 18).

	€ million	€ million
Taxes on Aviation Sector's GVA		67
	<i>Comprised of:</i>	
Corporation Tax	11	
Income and SS	56	
Aviation Sector's direct tax contribution		<u>67</u>
Tax generated through the aviation sector's indirect and induced impact		108
Total tax attributable to the aviation sector's economic footprint		<u>175</u>

Therefore, by observing the above points, it is understood that the aviation sector has a great economic impact on the whole Cypriot economy (either directly or indirectly).

Chapter 4

Determining the Suitable Business Model

4.1. Development and Evaluation of Alternative Airline Business Models

Historically, the passenger airlines, and more specifically the majority of the former national flag carriers worldwide, were operating as Full Service Network Carriers. However, since the deregulation and the liberalization of the aviation industry (first in the USA and later in the EU) new kinds of airline business models have emerged, such as the Low-Cost Carriers, the Holiday or Leisure Carriers (known also as charter airlines), and the Regional Carriers (Reichmuth 2008, 5-11).

In addition to the above, it is worth mentioning that, relatively recently, a new trend has emerged from some airlines to operate in a way that combines a number of typical elements of the pre-existing business models. This model is known as Hybrid Business Model (Reichmuth 2008, 13).

Indeed, although there are many different airline business models, the most dominant today (in terms of market share) are those of traditional FSNCs and LCCs. Particularly, on the one hand, the FSNCs (traditional business model) are also well known as legacy or hub and spoke airlines. A FSNC 'is an airline that focuses on providing a wide range of pre-flight and onboard services, including different service classes, and connecting flights' (Reichmuth 2008, 5). A great example of such carriers in Europe are, among others, British Airways, Air France/KLM, Aegean, Lufthansa, Cyprus Airways and so forth. On the other hand, the philosophy of the LCC business model is to offer the basic service (air transfer) to the consumer at the lowest possible price. Indeed, the concept of LCCs was emerged firstly in the USA by Southwest airlines in the 1970s1

(after the deregulation and liberalization of the USA's domestic airline market). However, the LCC model was adopted in Europe almost two decades later. More specifically, in 1991, the Irish company Ryanair, a previously unprofitable traditional FSNC, was transformed to LCC by copying the original low cost model of the Southwest airlines (Cento 2009, 19). Then, in 1995, the low cost model was adopted in the UK by EasyJet. Over time, the LCC model was adopted by many airlines worldwide and undoubtedly has both revolutionized and changed the structure of the passenger airline industry.

Regarding Cyprus, the concept of LCCs was introduced in the aftermath of the Cyprus accession to the EU. Particularly, in 2005, Monarch Airlines was the first LCC that started operations from and to Cyprus (Larnaca airport). Since then, many other LCCs have entered the Cyprus aviation market and fly to a wide range of destinations. As a result, these LCCs are gradually gaining more and more market share in the expense of FSNCs.

Currently, according to the latest official data, which is released from the Press and Information Office of the Republic of Cyprus, almost 40% of the total scheduled international seat capacity in Cyprus is taken by the LCCs, while the rest 60% was taken by the FSNCs.

Moreover, by observing Figure 6, it is realized that the competition from LCCs is growing dramatically over the last decade in Cyprus. Additionally, it is realized that in the last 2-3 years the degree of growth rate is lower than in the previous years (for example the growth rate between the 2009-2010 was increased by 133.33% whereas for the years 2013-2014 it was increased by 5%).

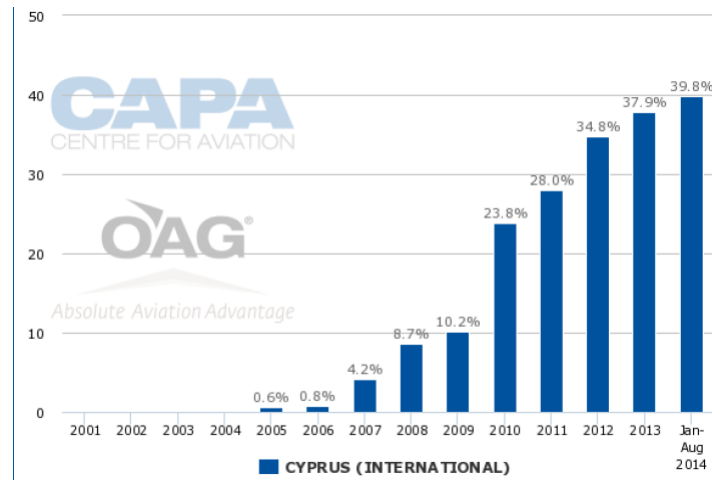


Figure 6: LCC Capacity Share (%) of Total Seats in Cyprus: 2001-2014 (CAPA 2014, 3)

4.2. Low Cost Carriers Vs Full Service Carriers

As it is pointed out earlier in this chapter, the LCCs and the FSNCs are the most dominant airline business models worldwide. Indeed, these two models present numerous fundamental differences in many aspects of their internal business environment. Particularly, some of the main fundamental differences include, among others, their different cost structure (overall costs), their pricing strategy, their network structure, their network range, the offered service (service range), their sales channels and so forth. Of course, all these differences determine or/and affect the way that the two models compete with each other, within the whole airline industry.

By examining first the factor cost structure, which refers to the overall airlines' costs (both fixed and variable), indeed represents the most important fundamental difference among the two models, which in turn affects heavily the airlines' pricing strategy (low fares/high fares). In general, the traditional FSNCs have a very high-cost structure, whereas the LCCs have a very low cost structure.

Particularly, on the one hand, the high cost structure of the FSNCs relies to numerous factors/practices that contribute to huge increases of the total airlines' costs. Some of the most critical factors/practices include:

- The high labor cost, which for most airlines represents almost the 1/3 of their total costs. Particularly, the FSNCs used to hire large number of staff both for their in-flight and in

ground services (in some cases overstaffing), with relatively high-fixed salaries, compared to those of LCCs (Cyprus Airways was an excellent example of a FSNC with extremely high labor cost).

- The use of inhomogeneous fleet. That is because the use of different types of aircrafts results in higher maintenance costs, training costs and so forth.
- The offer of multiple classes (usually 2-4 classes)
- The use of primary airports (hubs), which are more expensive

In contrast, the low cost structure of the LCCs is based on a combination of a numerous sophisticated and revolutionary business practices which is completely different of those of FSNCs. Such practices include:

- The relatively low labor cost, which is based on different practices such by hiring only the required staff, with lower fixed salary and a combination of variable salary (i.e. profit share schemes).
- The use of homogenous fleet.
- The offer of a single “class”.
- The use of regional/secondary airports, which are more expensive than the primary airports.

Regarding their network structure, the FSNCs use hub and spoke networks (connecting flights). Of course, the use of hub and spoke networks has both advantages, such as the use of economies of density and scale that both led to lower unit costs, and disadvantages, like the complex and tight time frames are possible to cause flight delays that automatically mean lower utilization of the aircraft and in turn higher costs. In contrast, the LCCs use only point-to-point network in order to increase the aircraft utilization by avoiding flight delays and so forth. Additionally, the LCCs pay too much attention to quick turnarounds of their aircrafts in order to reduce their costs (airport fees) and also to boost the aircraft utilization.

In addition to the above, the two models also present differences in their network range. Specifically, the FSNCs operate short, medium and long haul flights whereas the LCCs operate

short and medium haul flights. Of course, there are some exceptions of LCCs that have recently started to operate long haul flights.

The two models present major differences in the offered service. Particularly, the FSNCs offer a full range of ground (such as VIP lounge at the airports) and in-flight services (such as complimentary food and beverage during the flight). In contrast, the LCCs offer a simple product, without any frills (the LCCs is also known as low fares no frills carriers). For instance, the LCCs do not offer free in-flight catering. Therefore, it can be realized that the FSNCs gain competitive advantage over their rivals by offering a superior service to their consumers (product differentiation), whereas the LCCs gain competitive advantage by offering very low fares (cost leadership strategy).

Moreover, the two models differ in their sales channels. On the one hand, the FSNCs use a wide range of sales channels/networks, which include both direct (through the airline official webpage, the telephone, the company's sales offices and so forth) and indirect sales (through travel agents and other third-party intermediaries). In contrast, the LCCs are based solely on direct sales (through their official website and through their telephone centers). Of course, it can be understood that by skipping any form of intermediaries the LCCs lower their costs and in turn their fares.

Finally, the two models differ completely in terms of their pricing strategy. Particularly, the FSNCs use complex pricing procedures, which include, among others, 'price discrimination techniques based on different fare classes, complex systems of discounts with limited access, customer loyalty schemes and overbooking techniques' (Malighetti, Paleari and Redondi 2009, 195). In contrast, the LCCs use dynamic pricing techniques (set very low prices long time prior to the flight date and higher prices when the flight date comes closer).

The table below summarizes various differences between the two business models.

Table 3: Comparison between low-cost and traditional airlines model (Eller and Moreira 2013, 14).

	Low-cost carriers	Traditional network Airlines (early 2000s)
	<i>Simple product</i>	<i>Complex product</i>
Fares	Low, simple – one-way	Round trip - complex
	Minimum restriction	Multiple restriction
	Minimum restriction Fares rise nearer departure	Lower fares last minute
Distribution	Avoid travel agents	Dependent on travel agents
	Aim 100% direct: either online or call centre	Own ticket offices/call centre
	Ticketless	Paper tickets
In flight	Single class	2 or 3 classes
	High-density seating	Low seat density
	No seat assignment	Assigned seats
	No meals or free drinks	In-flight catering
	<i>Simple operations</i>	<i>Complex operation</i>
Aircraft	Single type – maximum two	Multiple types – aircraft tailored to route
	High utilization (11 hours/day)	Low utilization on short sectors
Sectors	Short – 500 to 1.000 km	From ultra-short to long
	Point-to-point	Hub-based network
	No hubbing or connecting flights	Pax-Emb/flights connect at hub
Schedules	Used to shift demand	Response to current demand
Airports	Secondary or uncongested (where possible)	Focus on large airports
	20-30 minutes turn around	1 hour turn-around on short sectors
Staff	Competitive wages	Higher wages
	Profit-sharing	Minimal profit-sharing
	High productivity	Over-staffed

Therefore, by observing the above mentioned points, it can be clearly understood that the two dominant airline business models present numerous fundamental differences in their whole business philosophy, which in turn affect the way that they compete within the whole airline industry.

4.3. Recommended Model

Indeed, there is no single universal airline business model that guarantees the success of any airline worldwide. In contrast, the decision-making about the choice of the most efficient airline business model is based on many different factors and variables, such as the consumer

characteristics of the target markets, the general global economic situation (prosperity, financial crisis or recession), the real distance range between the origin and destination countries (short, medium or long haul flights) and so forth.

Indeed, the passenger airline industry in Cyprus is heavily dependent on foreign leisure travelers. According to recent official surveys and statistics, the leisure travelers are price sensitive and tend to choose low cost carriers. Moreover, further to the leisure travelers, many official airline data show that an increasing number of business travelers (who traditionally flight with FSNCs) are switching to LCCs (only for short to medium haul routes).

Furthermore, as it is already pointed out earlier, the global economic situation and, more specifically, the economic situation in the target markets, affects the decision-making regarding the airline business model. Generally speaking, in periods of economic prosperity, the consumers have more disposable income and they are not very price-sensitive. In contrast, in periods of financial crisis or recession consumers become more price-sensitive, because they have less disposable income to spend. On the one hand, by taking into account the current financial situation in Cyprus (domestic market), which is currently in a recession period, it is understood that the most suitable business model is the low-cost model. On the other hand, by taking into account the financial situation in the countries of origin of the majority of foreign passengers that fly to and from Cyprus (EU nationals), which also suffer either form financial crisis or are experiencing a recession period, it is realized that the most suitable model is the low-cost model. Finally, it is also worth mentioning that the low cost-model is the most suitable for the future fastest growing passenger markets, which are emerging in developing countries (such as Africa, China, India and so forth) where the consumers have very low incomes compared to those in the developed countries.

Finally, the distance between the origin and destination countries is a very critical element, regarding the decision between the two airline business models. Particularly, many statistics show that LCCs are more preferable for short-haul and medium-haul routes. In contrast, the FSNCs are more preferable for long-haul routes, where the passengers need the full service

(more seat space, free meals, and in-flight entertainment) which is only offered by this type of carriers.

Therefore, by taking into account the industry environment in the Republic of Cyprus, it is realized that the most suitable/recommended model is the launch of a LCC.

Of course 'the success of the low-cost model is based on a fragile balance between fare levels, load factors and operating costs' (Malighetti, Paleari and Redondi 2009, 19).

Chapter 5

Passenger Airline Market and Competitive Analysis

5.1. Airline Demand

Without any doubt, the growth rate of the total air passenger traffic to and from Cyprus has increased in a significant way (above the expected average annual increase, which was 2% - 3%) in the last two years (2014 & 2015). Apparently, that increase is related directly to the increased tourist flows (leisure travelers) to and from the island.

Particularly, according to the latest published Annual Report (2014) of the Department of Civil Aviation of the Republic of Cyprus, the total passenger traffic in 2014 (7.412.755 passengers) was increased almost by 4.3% compared to 2013 (7.108.038 passengers).

The Table 4 shows the passenger traffic to and from Cyprus for the last five years 2010-2014 (the number of passengers includes also the transit passengers).

Table 4: Passenger traffic to and from Cyprus for the period 2010-2014 (Department of Civil Aviation 2015, 51)

YEAR	PASSENGERS		
	LARNACA	PAFOS	TOTAL
2010	5.475.905	1.646.937	7.122.842
2011	5.636.426	1.786.947	7.423.373
2012	5.158.109	2.220.190	7.378.299
2013	4.944.547	2.163.491	7.108.038
2014	5.316.676	2.096.079	7.412.755

Moreover, according to the passenger traffic report of Hermes Airports (the private company that operates the two airports in Cyprus), in 2015 were transported 7.608.655 passengers via the two Cyprus' airports (Hermes 2015, 1) Therefore, as it can be realized, the total passenger traffic in 2015 was increased almost by 3.5% compared to 2014 (7.345.214 passengers).

In addition to the above, according to recent data released at public consultation of Marios Demetriades (current Minister of Transport, Communications and Works of the Republic of Cyprus) the majority of air passengers to and from Cyprus were from EU countries (71.9%). Therefore, by observing Figure 7, it is realized that Cyprus air passenger transport depends heavily on EU markets.

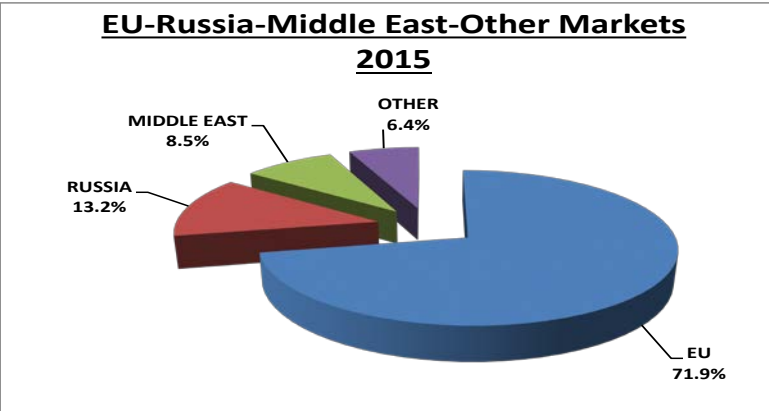


Figure 7: Cyprus Passenger Airline Market Share in 2015 (Demetriades 2015)

Moreover, it is noteworthy that the top ten markets for Cyprus in 2015 were the following:

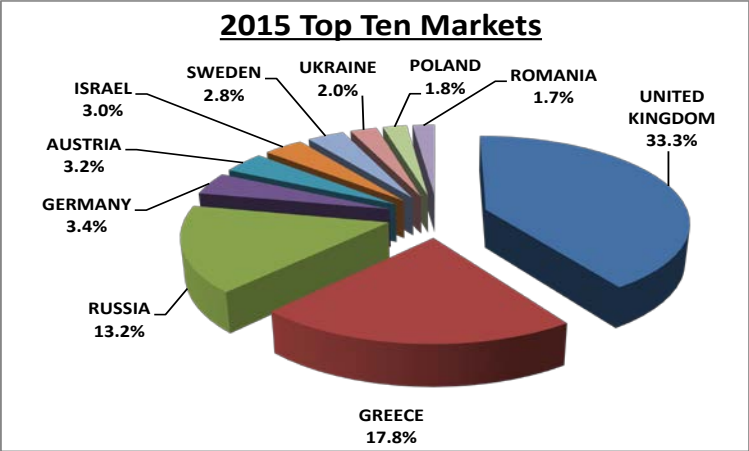


Figure 8: Top Ten Passenger Airline Markets for Cyprus in 2015 (Demetriades 2015)

Therefore, by observing the above chart, it can be realized that the primary market for Cyprus is the United Kingdom (UK), with a passenger traffic rate of 33.3% and is followed by the markets of Greece at 17.8% and Russia at 13.2%.

Moreover, it is worth mentioning, that the peak air traffic occurs during the summer periods (April - October). As it can be understood, the passenger aviation in Cyprus faces the problem of seasonality.

By concluding, as it is pointed out earlier, the global air passenger mobility (demand for air travel) will continue to grow in the next two decades (with different growth rates in every region/continent), due to many different factors (demand market drivers) that boost the mobility of people. Therefore, based on these forecasts, Cyprus is expected to be benefited as every other country from this increase in demand. Additionally, according to the Department of Civil Aviation (2016), “the traffic growth depends on competition in tourism the international economy as well as other external factors such as political stability in the region”.

5.2. Airline Supply

During a recent public consultation, the Minister of Transport, Communications and Works has said that almost 70 foreign airlines fly to and from Cyprus (130 routes to 40 different countries). At the same time, he has argued that “Cyprus has very good air connectivity but it could be better” (Demetriades 2015). Finally, he said that none of the above companies holds a market share of over 15%. Therefore, it is realized that the air passenger transport in Cyprus is not dependent on only one airline.

By observing Figure 9, it is realized that the market share of the top ten airlines in Cyprus is between 2.8%-13.4%.

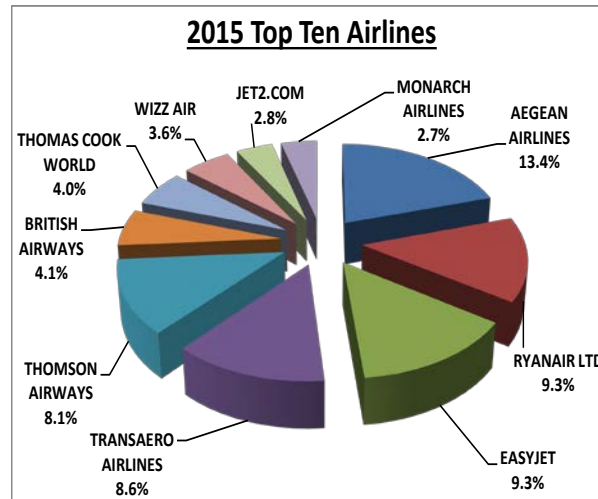


Figure 9: Top Ten Airlines Operating in Cyprus in 2015 (Demetriades 2015).

Finally, it is noteworthy that at the time of writing the master thesis, there are many start-up Cyprus-based airlines (registered in Cyprus) that are in the final stages of obtaining authorization (air operator certificate) from the Department of Civil Aviation, in order to start operations from Cyprus to many different destinations.

Therefore, by observing the above-mentioned points, it can be realized that the more airlines (existed or start-ups) fly to and from Cyprus, the more intense the competition will be. Of course, the intense competition will put pressure on prices (price wars), which in turn will affect negatively the airlines' profitability. Moreover, the increased number of airlines is possible to create excess capacity (over-supply of passenger seats) for some markets, which in turn will negatively affect the airline's profitability (lower load factor will result lower revenues). A great example of excess capacity is the UK market.

5.3. Market Segmentation and Targeting

Indeed, the mass consumer market consists of numerous different groups of people who have distinct needs, wants and desires. Therefore, every single firm of any industry divides the mass market into smaller, well-defined, parts (segments) in order to be able to focus on those segments (targeting), which seem to be attractive and related closely to the firms' objectives and resources/operations.

According to Kotler and Keller (2012), “a market segment consists of a group of customers, who share a similar set of needs and wants” (needs-based segmentation). Of course, the segmentation process can be based into different groups of variables. Such groups of variables may derive either from descriptive characteristics (such as geographic, demographic or psychographic characteristics) or behavioral considerations (such as occasions, benefits, user status, usage rate, loyalty status, readiness stage, attitude toward product and so forth.).

Therefore, by observing the above, it can be realized that both market segmentation and targeting play a critical and decisive role for the overall success of every single firm in the market. Of course, the successful segmentation of the mass market is not a simple task or a gamble. That is because the creation of every segment must contain some critical criteria. Particularly, according to many scholars of the field of marketing, a well-established segment must be measurable, substantial, accessible, differentiable and actionable (Kotler and Keller 2012, 231-232).

Regarding the case of the establishment of a low-cost passenger airline in Cyprus, the market segmentation process of the start-up airline will be based on a matrix of different variables. Of course, the selection of these variables is mostly based on their importance for the specific case.

More specifically, in the first stage (due to the fact that the airline industry in Cyprus is based solely on international flights due to the absence of domestic flights), the global airline market will be divided by taking into account geographic segmentation variables. Generally speaking, the geographic segmentation divides the whole market by taking into account geographical variables, like the consumers’ nations/countries, states, regions, continents, cities, neighborhoods or by using any other geographic-related parameter(s). Therefore, for the case of the establishment of a new airline in Cyprus, the international passenger airline market will be divided by continents, such as the EU market, the Russian market, the Asian market, the African market, the American market and so forth.

Then, in the second stage, the market will be divided by using again some geographic variables, such as the physical distance between origin and destination countries. Therefore, by using the variable distance, the airline market can be divided in three categories: short, medium and long-

haul destinations. Of course, by using this type of segmentation, the airline will be able to focus only on those markets that belong into its predetermined network operating range. Therefore, it can be realized that the new airline, due to its low-cost business model, will focus only on the markets that are characterized as short-haul and medium-haul destinations.

Then, in the third stage the market will be divided by using occasional segmentation. That is because the occasional segmentation divides the consumers according the purpose of their trip as vacation, leisure or business travelers. Therefore, it can be realized that due to the low-cost airline business model, the airline will focus heavily on leisure travelers.

5.4. SWOT Analysis

5.4.1. SWOT's Analysis Objectives

Indeed, the SWOT analysis can be used by every company, which is currently in the market for numerous different reasons, such as the formulation of business and strategic planning, the development of new products and so forth. Alternatively, the SWOT analysis is an excellent tool for understanding and reviewing the company's position before the implementation of a new business idea (such as the launch of a new low-cost airline in Cyprus). That is because through SWOT analysis the firm's management becomes highly aware about its major internal strengths and weaknesses, and on the other hand, about both its opportunities and threats that derives from the external environment.

Therefore, by applying the SWOT analysis, on the one hand, the firms can take advantage both of its internal strengths and external new opportunities. On the other hand, the firms are enabled to take the appropriate corrective measures in order to empower/fix their internal weaknesses, and also to find the right ways to deal effectively with their external threats. At this point, it is very significant to address that the firms have almost no control over the factors derived from the external environment. On the other hand, the firms can have a full or partial control over the factors that take place inside their firm.

5.4.2. Brief Description of the Start-Up Airline

Of course, prior to the implementation of a SWOT analysis for the new low-cost airline that is intended to be launched in Cyprus, it is significant to briefly describe the new start-up airline first. Therefore, in the first phase, the new low-cost airline will be operated by six young, homogenous, medium-sized, leased aircrafts (the four aircrafts will be based in Larnaca Airport and the rest two in Paphos Airport), these aircrafts will fly only in European and Middle Eastern destinations (short and medium-haul destinations to secondary airports). Additionally, the company, in the first years of its creation, will outsource many non-core activities, such as the ground services and the aircraft maintenance. In general, the new airline will adopt the original (pure) low-cost model philosophy (such as the Ryanair business model).

5.4.3. Applying the SWOT Analysis

Strengths

The major strengths of the new low-cost airline are the following:

- The low costs
- The low fares
- The presence in both airports in Cyprus (Larnaca and Paphos)
- The natural strategic, geographical location of its bases provides an ideal opportunity for expansion into new markets (Cyprus is ideally located to serve three continents, and also has the potential of becoming a bridge between other countries – transit point for air travel).
- The investment in innovation and technology
- The flexibility in aircraft deployment and crew training due to the single aircraft type (homogenous fleet).
- The management focus on keeping the costs and fares low.
- The operational flexibility of the airline. Particularly, the new airline aims to be very flexible in terms of selecting both the destinations and the frequencies to these destinations.

Weaknesses

The major weaknesses are the following:

- The weak company reputation and low brand awareness due to the company age (start-up).
- The relatively short network range compared mainly to other European low-cost carriers.
- The distance of secondary airports from main locations (mainly at destination airports).
- The new airline will be too exposed to outsourcing.
- The reliance on international passengers (the domestic market in Cyprus is very limited due to the small size of the country).

Opportunities and Threats

On the other hand, the opportunities and threats (external environment) of the new airline can be identified by using the so called PESTLE analysis. Particularly, the PESTLE analysis examines the political, economic, social, technological, legal and environmental factors of the external environment that can represent either an opportunity or threat to the firm (Kotler and Keller 2012).

Political factors: Indeed, there are numerous political factors that can affect, either positively or negatively, the airline passenger demand to and from Cyprus.

- The continued offensive politics of Turkey in the region of Cyprus (mainly due to the natural gas) can affect critically the tourist flows to Cyprus (due to fear that Cyprus may engage into war with Turkey). Therefore, as it can be realized, this issue will automatically affect negatively the airline passenger demand to Cyprus (due to the two-way relationship between the tourism industry and the passenger airlines in Cyprus). Finally, by observing the above, it can be clearly understood that in the case of escalation of these offensive politics and the creation of political instability in the region of Cyprus, this issue will pose a major exogenous threat for the airlines that operate from and to Cyprus.

- The political instability in the region around Cyprus (Syria, Egypt) led many tourists to switch to safer destinations, like Cyprus. Therefore, this issue poses an opportunity for the airlines that operate from and to Cyprus.
- Finally, the accession of Cyprus to the EU, together with the political stability in the EU area and the continue EU enlargement, creates opportunities for the airlines to expand to new profitable routes (markets).
- The recent terrorist attacks against EU member states will affect negatively the air travel (threat).

Economic factors:

- The continued growth of leisure tourism in Cyprus (mainly from EU member states) poses as an excellent opportunity for the new low-cost airline.
- The ongoing global economic recession pose as a threat for the airlines, because the recession limits the purchasing power of consumers (less spendable income) and in turn the need for air travel.
- The progressive recovery from the banking crisis will pose an opportunity for the new airline in Cyprus. That is because the company will borrow money more easily with lower interest rates and so forth.
- Fuel price increase will pose a threat to the airline (increase in costs and lower the profitability).
- The seasonality of demand in air transportation in Cyprus (during the winter months) will pose as a major threat for the new low-cost airline.
- The fierce competition among the airlines, and more particularly the fast growing low-cost carriers in Europe, will pose a great threat to the new low-cost airline.

Social factors:

- According to many surveys, there is a change in consumer lifestyle (consumer behavior). Particularly, consumers became more price-sensitive (economically minded passengers) than in the past. Therefore, this shift in consumer behavior is an opportunity for the low-cost airlines.

Technological factors:

- The innovation in technology can pose an opportunity for the new low-cost airline. That is because by adopting the latest technology (such as online check-in and so forth) can keep the costs low. Moreover, the use of the latest technology in aircrafts would lower the fuel consumption and other costs related to the airline operations.
- The fact that more and more people gain access to the internet via numerous devices, such as PCs, tablets and smartphones, poses a great opportunity for the low-cost carriers. That is because the start-up low-cost carrier will be heavily based on online ticket sales (direct sales).

Legal factors:

- The pass of different and strict regulations regarding air travel (such as safety and environmental regulations) could increase the cost of the airlines. Therefore, this issue poses a threat mainly to the cost structure of the airline (the compliance with the additional regulations will increase the costs and in turn the air fares).

Environmental factors:

- Without any doubt, over the last years, the consumers are becoming more aware about the protection of the environment. This factor will pose an opportunity for the new start-up airline in Cyprus, because the company will use environmentally friendly procedures/methods in order to protect the environment. In contrast, if the company does not adopt such methods, it would pose a threat to the viability of the airline.

Therefore, by observing all of the above, it is realized that the new company possesses many strengths and relatively few weaknesses, which are possibly to be overcome in the progress by taking the appropriate measures. Furthermore, the external environment presents a variety of opportunities and a limited number of threats. In conclusion, both the internal and external environment seem to be relatively attractive to the newly-established company.

5.5. Competitive Analysis by Applying Porter's Five Forces

Indeed, most firms of every industry operate in a very dynamic and complex market environment, where the competition is very hard. In general, according to many scholars in the field of business, the competition amongst the firms relies mainly on the existing rivalry firms, which operate within a particular industry. However, Michael Porter has introduced another four forces that play a critical role to the competition amongst the firms in an industry.

More specifically, Porter's five competitive forces include the rivalry firms (industry competitors), the potential new entrants (the barriers to entry), the threat of substitutes, the suppliers' bargaining power and the buyers' bargaining power (Porter 2008, 25). Therefore, according to Porter, the "awareness of the five forces can help a company understand the structure of its industry and stake out a position that is more profitable and less vulnerable to attack" (Porter 2008, 25). Moreover, it is worth mentioning that the general framework of Porter's five forces suggests that the higher the intensity of each force, the lower the potential for industry profitability (attractiveness).

Therefore, by observing the above, it can be realized that the examination of Porter's Five Forces is a very useful tool for an in-depth examination of the industrial environment, where the start-up airline in Cyprus will operate, in order to evaluate the nature of competition that will face. Therefore, the results of this examination will indicate the attractiveness or not of this specific industrial environment.

Rivalry firms: In general, this aspect of the Five Forces refers to the existing rivals/competitors in the industry. Regarding the airline industry in Cyprus, it is a fact that there are almost 70 airlines, which fly to and from the island (among these airlines there are many successful LCCs

such as Ryanair, Easyjet, Wizzair, and Monarch to name a few). Particularly, the majority of these airlines operate to and from many significant EU markets. Of course, there are some markets where the competition is extremely high (such as the UK market), whereas there are some markets where the competition is moderate. Therefore, by observing the above, it can be realized that the low-cost start-up airline will face relatively high competition from the existing low-cost rivals only on their common routes (in particular markets). However, the new start-up airline will set-up the destinations sophisticatedly in a way to avoid any face-to-face competition with the some low-cost market leaders, like Ryanair and Easyjet to name a few. Therefore, the overall rivalry threat (competition) against the new airline can be characterized as medium to high.

Potential new entrants: The accession of Cyprus to the EU enables any company that is registered to any EU member state to fly to and from Cyprus without any limitations (liberalization). Indeed, since the accession of Cyprus to the EU in 2004, many EU carriers enter the Cyprus market (particularly, the competition from LCCs is growing dramatically). Additionally, the progressive liberalization/deregulation of the global passenger airline industry removes the pre-existing barriers of entry. Therefore, by observing the above, it can be realized that the threat for new entrants in Cyprus' airline industry is high (in general, there are no major barriers of entry).

Threats of substitutes: Indeed, as it is mentioned earlier, Cyprus relies almost solely on air transport. Therefore, the threat of substitutes is very low.

Bargaining power of suppliers: In general, the most important suppliers in airline industry are the aircraft manufacturers (duopoly of Boeing and Airbus), the labor, the fuel and the airport providers. Indeed, all these suppliers have high bargaining power. Alike, in the case of the new start-up airline in Cyprus, the new airline will face the airport monopoly prices (Hermes firm is the sole airport provider in Cyprus). Regarding labor, the workforce in Cyprus, and particularly the pilots, are highly unionized (of course outsourcing of the rest work force, except from flight attendants will diminish any power form the labor). Therefore, by observing the above, it can be realized that the bargaining power of the new company's suppliers will be medium to high.

Bargaining power of buyers: Given that the today's consumers are price-sensitive, the wide proliferation of the internet enables the consumers to be informed about the competitors' prices/fares and in turn to choose the airline that offers the lowest price. Additionally, the low switching costs (for instance the absence of loyalty schemes by the LCCs such as the frequent flyer programs) enables the consumers to change airline without any cost. Therefore, by observing the above, it can be realized that the bargaining power of buyers is high.

Concluding from the study of Porter's Five Forces, it is realized that, despite the challenges faced due to competition, the environment is in fact attractive.

Chapter 6

Conclusions and Recommendations

6.1 Conclusions

Indeed, the gradual deregulation and liberalization of the air transport in many regions throughout the world (mainly in the USA and in the EU) has transformed radically the pre-existing (monopolistic or oligopolistic) highly regulated external environment of the entire passenger airline sector. Particularly, some of the main consequences of the deregulation and liberalization of the passenger air transport were, among others, the tremendous increase in the number of passenger airlines (that in turn led to intense competition), the emergence of new airline business models (such as the low-cost model), the decrease in fares, the increase in air passenger demand (mainly due to the lowest fares), the creation of excess capacity for some routes (over-supply), the privatization of many former state-owned airlines (national flag carriers) and so forth.

Therefore, by observing the above, it can be realized that in the aftermath of the progressive deregulation and liberalization, the airline sector entered to a new era with the main characteristic being the intense (cut-throat) competition. Of course, as it is mentioned in the main chapters of the master thesis, some airlines have taken advantage of this new industry environment and became very successful, while some others failed to survive and ceased their operations permanently.

Regarding Cyprus, the case of Cyprus Airways is an excellent example of an airline that failed to survive in the new industry competitive environment (since the accession of Cyprus to the EU in 2004) and finally ceased permanently its operations in 2015.

Therefore, given the high and multidimensional importance (mainly economic and social importance) of the passenger airline sector in Cyprus, and the fact that Cyprus remained without any Cyprus-based airlines (of course, at the time of writing, some new airlines registered in Cyprus and are waiting for a license to start flight operations), the main research question of the master thesis is to determine whether the establishment of a new start-up airline company in Cyprus will be feasible or not. Moreover, master thesis aims to determine the most suitable/right (in terms of possibility to be profitable) airline business model for the new start-up Cyprus-based airline.

Starting first with the decision about the choice of the most suitable airline business model, it is realized that there is no single universal business model that guarantees the success of any airline worldwide. That is because the decision-making about the choice of the most efficient airline business model is based on many different factors and variables such as the consumers' characteristics at the targeted markets (such as the price-sensitive consumers), the global financial situation and so forth. Therefore, by examining many critical factors it is realized that the most suitable airline business model for the case of Cyprus is the low-cost airline.

Then, after an in-depth and comprehensive analysis of the current external environment of the passenger airline industry in Cyprus through market analysis, competitive and PESTLE analysis (opportunities and threats of the external environment) it is understood that the current airline environment in Cyprus is relatively attractive for the new low-cost airline. Of course, is worth mentioning that the biggest current challenge for the new low-cost airline will be the issue of the seasonality of demand in air transportation in Cyprus.

Moreover, by taking into account the trends in the global passenger airline industry, together with the positive outlook for a continuous growth in global air passenger demand (from a medium to long-term), it can be realized that they contribute positively to the decision for the establishment of a new airline company in Cyprus.

In addition to the above, by reviewing and evaluating the internal business environment (internal strengths and weaknesses) of the new start-up airline, it is realized that the company is strong with relatively not very critical weaknesses.

Therefore, by taking into account all the findings mentioned above, it is clearly understood that the establishment of a new airline company in Cyprus seems to be financially feasible/viable.

6.2 General Recommendations

Given the complex and fragile character (high vulnerability to outside shocks) of the airline sector, as well as today's fast changing and uncertain external industry environment, the new start-up airline (or any other airline) should pay attention to some points that could play a critical role to the business success (mainly to the airline's profitability or even survival in some cases).

Therefore, first of all, the airline management should not lose its focus for further cost reductions (cost leadership strategy) by adopting/using any sophisticated/innovative methods (including the use of technology). Additionally, the new airline should focus on the changing customer needs (customer oriented) in order to be able to respond appropriately and quickly to any changes of the tastes of its customers in the targeted passenger airline markets. Moreover, the airline management should be characterized by flexibility in order to respond quickly to any changes needed (such as to stop operations to any unprofitable routes and so forth). Finally, the new low-cost airline should avoid any face to face competition (price-wars) with the some big European low-cost carriers such as Ryanair (it has the lowest passenger unit cost in the EU).

6.3 Recommendations for Further Research

Given that there is not enough literature about the passenger airline sector in Cyprus, a future research could be carried out in order to cover many issues in the field of passenger airlines in Cyprus. Among other important issues, is how the Cyprus-based airlines can deal effectively with the issue of the seasonality of demand (during the winter months) for air transportation in Cyprus.

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Abbreviations

BASA	Bilateral Air Services Agreements
EU	European Union
FSNC	Full Service Network Carrier
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
LCC	Low Cost Carrier
UK	United Kingdom
USA	United States of America