

Master's thesis
M.Sc. in EU Business & Law

**An analysis of the European low fare airline
industry
- with focus on Ryanair**

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1. Introduction

1.2. Preface

As I have studied a M.Sc. in EU Business & Law, I found it ideal to find a topic that would encompass both European business matters as well as aspects of EU law. The European airline industry suits this choice of topic very well as it is a business operating largely across European borders, but it has also been the center of a substantial amount of EU legislation through the deregulation of the industry and the abandonment of state aid for national carriers.

This has contributed to great changes in the dynamics and structure of the European airline industry, which I find fascinating and have therefore chosen to analyse this development in more detail through this thesis.

I also found it important that the subject of the European airline industry in general and the low fare airline business model in particular has not previously been analysed in Denmark on a thesis level. This is to the best of my knowledge from searching through academic libraries in Denmark not managing to find any recent (10 years) thesis covering this issue.

My interest is particularly centered round the emergence of the low fare airline business model in Europe and its impact on the European airline industry as a whole. I have therefore chosen to illustrate how this model has been implemented in Ryanair as this airline because it was the first airline in Europe to implement the low fare airline business model in Europe and is now the second-biggest low fare airline in Europe after easyJet based on revenue, but the biggest when considering its value by market capitalisation.¹ It also has created bases throughout Europe and has adopted a pan-European strategy. Therefore this company is a logical choice as a focus point for a practical approach towards the implementation of the low fare airline business model in Europe and an analysis of the European low fare airline industry.

1.2. Research problem

The research problem in this thesis evolves around the European low fare airline industry and its outlook for the future. Based on a theoretical framework that starts off at the

¹ www.londonstockexchange and www.ise.ie

macroenvironmental level analysing the external environment regarding the European airline industry the thesis will move on towards microenvironmental aspects when analysing particularly the low fare airlines with focus on Ryanair.

The overall aim of this thesis is to provide and assess the range of strategic options available for airlines implementing the low fare airline business model after having analysed both the macro- and micro environment and assess the outlook for the European low fare airline industry.

1.3. Research questions

This thesis has several facets and sub-questions, but if the research problem was to be put into research questions they are as follows:

- What are the overall principles behind the low fare airline business model?
- How has the macroenvironment influenced the emergence of low fare airlines in Europe?
- Which strategic approach to the implementation of the low fare airline business model is used by Ryanair and what is the core competence of this airline?
- What is the likely outlook for the European low fare airline industry?

1.4. Delimitation

As the thesis will look into the market for short-haul flights in Europe, it will only involve the part of operations from global competitors such as British Airways and SAS that involve their intra-European flights. I will also involve other low-cost competitors such as EasyJet in my competition analysis, as they are direct competitors and like Ryanair operates exclusively with European short-haul flights.

The thesis will make several mentions of Southwest Airlines based in the US though, as they are considered to be the first-ever to implement the low fare airline business model and many of its peers in the rest of the world including Ryanair have integrated many of its business practices into their own operations.

The term “low fare airlines” can be expressed in many ways, such as low-cost airlines or “no-frills” airlines, but this thesis will use the term “low fare airlines”. First of all, to not confuse

the terms by using different expressions and secondly, because their association: European Low Fare Airline Association² have adopted this expression, so it is natural to follow their example. Also, the abbreviation LFA will henceforth be used.

With regards to the term “full service airlines”, which can also be expressed as network carriers or “hub-and-spoke” carriers, this was chosen only to show conformity in the thesis as there does not seem to be a general consensus neither in the industry nor in the academic world, as to which expression is the most appropriate. The abbreviation FSA will often be used

As the European airline industry is extremely dynamic, a deadline of June 15 has been chosen after which date no new developments in the industry will be included and with regards to financial information the latest figures to be included in this thesis will be for the 3rd quarter, 2005, which is Ryanair’s case runs from Nov 1, 2004-Jan 31, 2005.³ However, in the epilogue following the conclusion major developments that have occurred after this deadline, which are specifically related to this thesis and the conclusions derived from it, will be mentioned.

² www.elfaa.com

³ Full year results for 2005 are not released before June 30, 2005

2. Science and methodology approach

2.1. Approaches to science

There are different approaches to science. The two angles most often introduced in social sciences are ontology and epistemology, which will be explained below

2.1.1. Ontology

From a philosophical viewpoint ontology is the understanding and explanation of the nature. One could describe it as a “study of being”. Bryman defines it as a theory of the nature of social entities as it refers to the inquiry into the nature of reality and is concerned with our pre-assumptions and images of the nature of social and organisational reality.⁴

It can be interpreted from two different angles; objectivism and constructivism.

2.1.1.1 Objectivism

Objectivism stresses that knowledge is based on observed objects and events and the emphasis is put on objects rather than thoughts or feelings. This approach claims that social phenomena and their meaning have an existence that is independent of social actors and implies that social phenomena and the categories that we use in everyday discourse have an existence that is independent or separate from actors.

2.1.1.2. Constructivism

Contrary to this viewpoint constructivism stresses that social phenomena and their meanings are continually being accomplished by social actors and implies that social phenomena and categories are not only produced through social interaction but that they are in a constant state of revision.⁵ It then follows, that this approach implies that everybody has an influence on social phenomena and how they are perceived.

⁴ A. Bryman: *Social Research Methods*, Oxford University Press, Oxford, UK, 2001

⁵ Ibid

2.1.2. Epistemology

Epistemology is the branch of philosophy that studies the nature of knowledge, its presuppositions and foundations as well as its extent and validity. An epistemological issue concerns the question of what is (or should be) regarded as acceptable knowledge in a discipline.⁶

Two traditional approaches exist within the epistemology; positivism and hermeneutics.

2.1.2.1. Positivism

The positivist approach is based on the assumption that science should be exact, verifiable and cleansed from subjectivity and this is the traditional approach within natural science fields such as physics, chemistry and biology as it provides a focus on researching cause-and-effect-laws and relations that are universally applicable and independent from the individual who studies them. Researchers applying the positivistic approach generally prefer the use of quantitative analysis methods.⁷

2.1.2.2. Hermeneutics

The hermeneutic approach is based on the assumption that reality may only be understood by a human interpreting the actions and language of another human and it assumes that people look for meaning in their actions because they are interpretive creatures and tend to place their own subjective interpretations on what happens around them.⁸

Due to its historic origin⁹ the hermeneutic approach has become the ideal in social sciences, where Business Studies is one of the fields where this approach is being applied. Researchers following this approach attempt to attain a holistic perspective on the studies concerned and since this approach, in contrast to the positivist approach, depends strongly on the subjective interpretation of the individual, the researchers here often favour the qualitative methods.¹⁰

⁶ Catherine Soanes & Angus Stevenson: *Oxford Dictionary of English*, Oxford University Press, 2003

⁷ W. L. Neumann: *Social Research method: Qualitative and Quantitative Approaches*, 3rd edition, Ally & Bacon, Boston, USA, 1997

⁸ I. Arbnor & B. Bjerke: *Methodology for Creating Business Knowledge*, 2nd edition, Sage Publications, Thousand Oaks, USA, 1997

⁹ The term "hermeneutics" refers to the ancient Greek God Hermes, who was known as the messenger among Gods and his task was to interpret messages from the Gods for the people. Hence, hermeneutics is known as the science of interpretation and when it was implemented in social sciences, it was concerned with the theory and method of the interpretation of human actions. Bryman (2001)

¹⁰ W. L. Neumann: *Social Research method: Qualitative and Quantitative Approaches*, 3rd edition, Ally & Bacon, Boston, USA, 1997

With regards to ontology the approach in this thesis will be more constructivist than objectivistic as the study of the low fare airline industry and Ryanair aims to illustrate that occurring phenomena are the product of social interaction and in a constant state of revision. Following this ontological approach, the epistemological considerations will be hermeneutic. This thesis will analyse the European low fare airline industry with focus on Ryanair and therefore one will have to interpret numerous data from various sources published in company documents and; thus it will be attempted to follow the doctrine of the “critical hermeneutic approach”, where the analysis of company data entails an examination of the documents and applying it to the organisational and industrial context.¹¹

2.2. Methodology

One needs to keep in mind the interdependence between ontology, epistemology and methodology. Depending on which angle a researcher refers to ontology, an epistemological perspective is taken, which leads to a choice of methodology.

For example, if one chooses an objectivistic view stressing that social phenomena and their meanings exist independently from social actors, a positivist approach, which strives to formulate an independent description of what causes and effects phenomena appearing in reality, is taken. Consequently applying quantitative methods is then often the preferred choice for researchers.

In contrast, choosing a constructive view stressing that social phenomena and their meanings are continually being accomplished by social actors, a hermeneutic approach, which is based on the assumption that reality may only be understood by a human interpreting the actions and language of another human, is taken. The use of qualitative studies is often preferred by researchers following the hermeneutic view.

The interdependence between ontology, epistemology and methodology is illustrated on the following page.

¹¹ A. Bryman: *Social Research Methods*, Oxford University Press, Oxford, UK, 2001

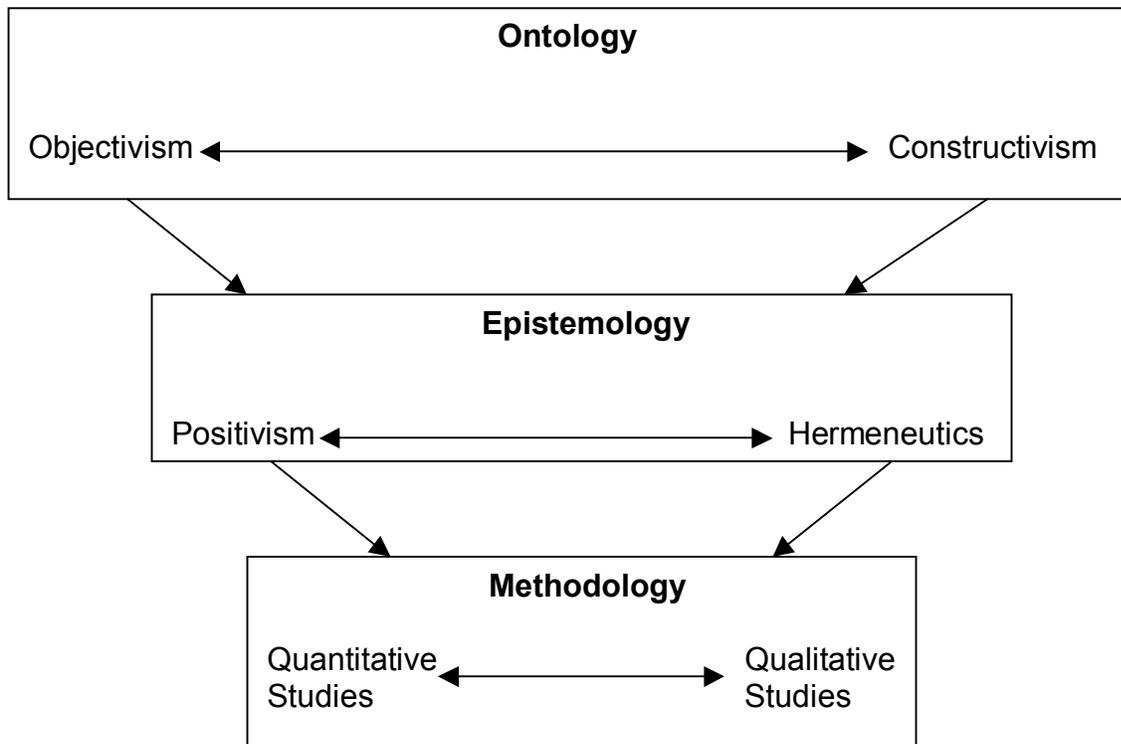


Figure 2.1: interdependence between ontology, epistemology and methodology¹²

2.2.1. Types of research

Research can be categorised into 4 types.¹³ These are exploratory, descriptive, analytical and predictive.

Exploratory research is used when the problem is vaguely understood and leads to an unstructured problem design. This kind of research helps increase familiarity with the researched area. During exploratory research new findings and information are discovered, so the researcher must be flexible and prepared for possible changes in the research direction. The key requirements for this type of research are ability to observe, find information and be able to explain findings. This method is often used in natural sciences as they often venture in unmapped territory.

Descriptive research is used when the problem is well structured and understood and the task to be solved is clear. The researchers should focus on the structure of the research, precise rules and procedures, since the ability to make good measurements is crucial for this type of research.

¹² A. Bryman: *Social Research Methods*, Oxford University Press, Oxford, UK, 2001

¹³ Ibid

Analytical research can be seen as a continuation of descriptive research as it attempts to explain why a particular situation exists. It tries to identify causal relationships e.g. “A” causes “B”.

Predictive research continues from analytical research as it attempts to predict future outcomes from a particular situation. This type of research tries to generalise and these generalisations will be applicable to similar problems.

Each of these research types can thus be seen as a continuation of the previous one.

With regards to the different types of research, the descriptive mode of research is applied within this thesis, as the research problem is well structured and the area of strategic marketing and management is well established in the academic world and the theoretical models used as the foundation for this thesis are from what is now mainstream theory in the area of marketing and management e.g. the Porters Five Forces model.

2.2.2. Types of data

A distinction can be made between the types of data collected. It can either be qualitative or quantitative. The former describes data which is nominal and the latter describes numerical data. Another distinction can be made between primary and secondary data.

2.2.2.1 Quantitative data

This method of data collection is associated with research, which is objective in nature and concentrates on phenomena¹⁴, e.g. statistical tests can be used to analyse data from a questionnaire with closed-end questions. This approach might present data in tables, charts or graphs to summarise the data collected in a way that the reader can get an idea of the situation being studied. Various statistical relationships may also be explored in order to try to identify patterns or hypotheses. This type of data research is very structured.

2.2.2.2 Qualitative data

This approach is more subjective in nature and involves examining and reflecting on perceptions in order to gain understanding of social and human activities.¹⁵ This type of data may be gathered from interviews, focus groups or secondary data sources. As they often reflect

¹⁴ Ibid

¹⁵ Ibid

personal opinions e.g. based on open-ended questions they can be hard for the researcher to interpret than quantitative data.

However, the use of one data collection method does not exclude the other. Qualitative data can also be quantified to a certain extent; for instance a certain reaction to an interview question or in focus groups may be quantified.

2.2.2.3 Primary and secondary data

Data can also be divided into primary and secondary data. Primary data consists of original data collected by the researcher and secondary data consists of information gathered by others for either similar or different purposes.

Secondary data can be gathered from a number of different sources and may be both internal and external company sources, which may be:

- Financial/business reports (internal)
- Textbooks/periodicals/magazines (external)
- Published articles/academic journals (external)
- Internet resources (internal/external)

The main advantage of gathering secondary data is that gaining knowledge from previous research saves the time and financial resources of performing the research yourself. Investigating secondary data saves managers from “reinventing the wheel”.¹⁶

The disadvantages of using secondary data include the fact that the majority of this data was gathered for a different purpose than your own. The idea is to take the research problem/hypotheses as the starting point for secondary data that is needed, and not the other way around; another disadvantage can be the validity of the data as it is the responsibility of the researcher that the data are accurate.¹⁷ Also secondary data may quickly become outdated in our rapidly changing business environment, so the researcher has to be careful that the data is still valid.

¹⁶ Ibid

¹⁷ P. Ghauri, P. Gronhaug & I. Kristianslund: *Research Methods in Business Studies – A practical guide*, Prentice Hall, London, 1995

When the collection of secondary data is saturated and no longer adds value to the research process, one may then choose to collect relevant primary data. This can be accomplished by one of the data collection processes mentioned below:

- Interviews
- Surveys
- Questionnaires
- Case studies
- Focus groups
- Observation

As primary data will not be used in this thesis, one will not need to elaborate more on the data collection methods.

The collection of primary data with regards to this thesis has been deemed unnecessary as the data collection methods for primary data does not seem to add value to solving my research problems, which are deemed to be solved through the use of secondary data.

The thesis will mainly be based on qualitative studies as the purpose is to analyse a specific industry and company in-depth, but quantitative data collected through internal- or external company documents will be used to support the analysis, but I will not carry out any independent statistical work.

2.3. Reliability and validity

Certain factors may influence the reliability and validity of parts of this thesis. As secondary data are being used as a resource of information in this thesis, one must keep in mind that these data were likely collected for a different purpose. Also company documents such as annual reports may highlight the positive aspects as they are a public source of information for potential customers and investors. However, they have been viewed critically and also complemented with analyst reports from respected financial institutions, which one must assume are objective.

With regards to academic papers and relevant textbooks, it has been assumed that reliability is on order, as they have been published in respected scientific journals or publishing companies

respectively. Internet sources could pose a problem in this respect as they do not undergo the same scrutiny regarding validity of sources as the former. However, these sources are carefully selected and data has been checked against other sources where possible.

The theoretical framework chosen may also influence the findings in this thesis, as using other models may alter the outcome of the analysis to some extent, but as a variety of models, which are all well-established in the academic community, have been used, this approach should be reliable. The theoretical framework will be explained in detail in the next chapter.

Concerning the research for this thesis, high internal validity (meaning that results obtained within a study are true) can be assumed as the findings in this study can be considered true. However, the external validity (meaning that results obtained can be generalised) of this thesis can be discussed, since the results might not be general as unexpected events in the economic environment and/or strategic reorientation within the industry in general or Ryanair specifically may not only influence the external validity but also the reliability. It cannot be assumed that the exact same findings will occur if this study is repeated in the future.

3. Theoretical framework

3.1. The structure of this thesis

The theoretical framework of this thesis begins by defining the concepts of strategy and competitive advantage as these issues are at the core of the aim of this thesis; namely to establish the strategic position the low fare airline business model holds in Europe.

Different viewpoints will be presented regarding the description of these terms as there are various schools within the theory on strategy.

First, the thesis introduces the concept of the low fare airline business model and the more traditional full service airline business model, which will provide an understanding of the different strategic approaches

Afterwards the thesis commences with an analysis at the macroenvironmental level of the European airline industry, which also has an impact on the low fare airlines. For the purpose of

this analysis the framework of the PEST-analysis¹⁸ (political-legal, Economic, socio-cultural and technological) and therefore these four elements will be the cornerstones of this chapter.

The next step of the framework moves one step down towards the microenvironmental level by introducing the Porter's Five Forces model, which is a tool for an industry analysis. It introduces five forces which influence the industry¹⁹:

The model has been chosen in order to analyse the current stage of the airline industry as it easily enables the reader to get an overview of the major influential factors in the industry and their levels of influence.

A Ryanair case study, which moves one step further down the ladder towards the microenvironment, is then performed. This consists of a financial and strategic analysis of Ryanair, which has chosen to implement the low fare airline business model. Porter's generic strategies will be introduced, which will help us understand which generic strategy Ryanair has used and the tools they use to achieve this strategy.

Afterwards a competition analysis shows the competitive environment of the European airline industry and the strategic approaches other FSA's and LFA's are using. The thesis then continues by using the SWOT-model analysing the Strengths, Weaknesses, Opportunities and Threats of Ryanair within the frame of the earlier macroeconomic analysis. The sections opportunities and threats also provide an outlook for the European low fare airline industry deduced from the findings made in this thesis.

The model on the following page aims to illustrate the theoretical framework, which is applied within this thesis. This is only a general guideline as there will be references to both the macro- and microenvironment e.g. is the SWOT analysis by definition comprised of both the macroenvironment (opportunities and threats) and the microenvironment (strengths and weaknesses).

¹⁸ Philip Kotler: *Marketing Management – The Millenium Edition*, Prentice-Hall, 2000

¹⁹ Michael E. Porter: *Competitive Strategy*, The Free Press, New York, USA, 1980

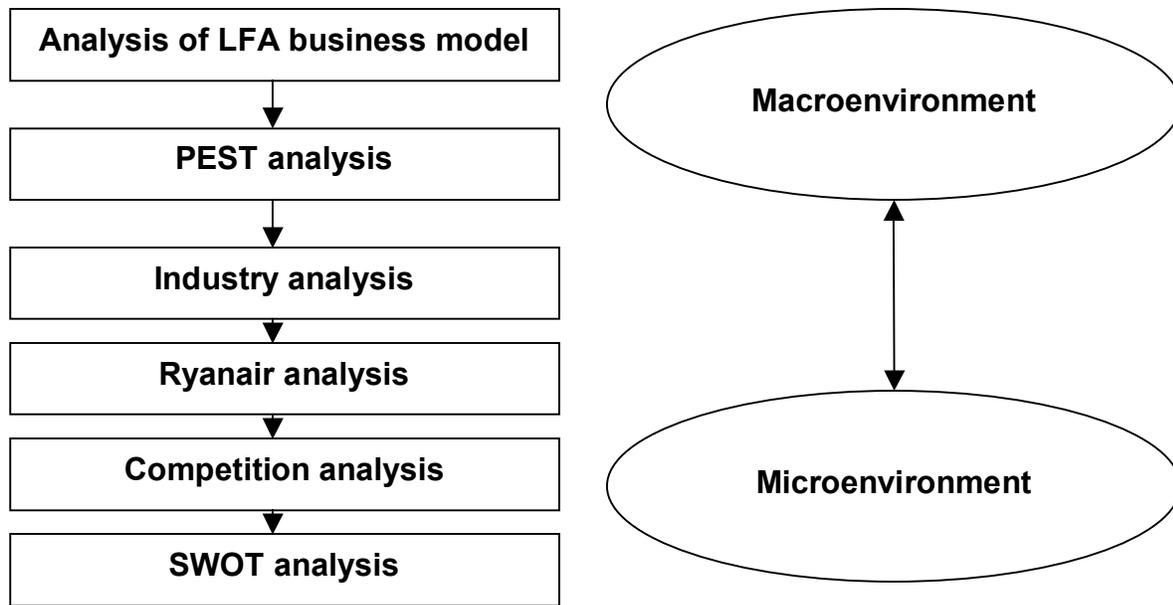


Figure 3.1: Model of the theoretical framework of this thesis

Most of the theories used in this thesis are built on models and models are based on abstract assumptions and reflect only a part of reality. Irrelevant information in regard to the research problem is left out in order to enable researchers to find solutions. Depending on the particular problem, assumptions are made and different realistic details are ignored. As a consequence, models are restrictive which provides potential to criticise them easily.²⁰

However, it has been assessed that the models are useful as they provide structure to the theoretical framework and as the models used are mainstream strategic models and therefore much research has previously been founded on them, it feels their validity can counter potential criticism.

3.2. Theory on strategy and competitive advantage

Within the concept of strategy there are several schools of thought with different approaches. The schools mentioned below can be regarded as the leading within the theory on strategy:

- The Positioning School
- The Resource-based School

²⁰ B. Wolff & E. P. Lazear: *Einführung in die Personalökonomik*, Schäffer-Poeschel Verlag, Stuttgart, 2001

3.2.1. The Positioning School

The paradigm of the Positioning School focuses on, how it is possible for a company to achieve competitive advantages, when companies are subjected to equal operational conditions.²¹

The leading theorist within this school of thought is Michael E. Porter, who in an article from 1996 tried to summarise his definition of strategy, including new aspects that had arisen since his original work on this subject in 1980²²:

- Strategy is the creation of a unique and valuable position involving a different set of activities compared to competitors.
- Strategy is creating a fit among a company's activities – the success depends on doing many things well, not just doing a few and integrating among them.
- Strategy is making trade-offs in competing – the essence of strategy is what not to do. Strong leaders willing to make choices are essential.
- Strategy requires constant discipline and communication in regard to the choices made in terms of customer target segments, product range and other strategic issues and policies.

For many years there was little criticism of this school of thought, but in the last decade criticism has erupted. Henry Mintzberg criticises its analytic and deterministic approach and particularly disagrees with Porter's belief that "strategic thinking rarely occurs spontaneously". His view is that "strategy is not so much formulated consciously by individuals as it is formed implicitly by the decisions they make, one at a time".²³

Other scholars have also criticised the total focus on the elements of product differentiation and cost leadership as it is now crucial for companies to create value for the customer through the whole value chain as has also the its hostile view on the company's environment as this is inapplicable with cooperation, which can also be seen as a competitive advantage.²⁴

²¹ Michael E. Porter: *Competitive Strategy – Techniques for Analyzing Industries and Competitors*, The Free Press, 60th edition, 1980

²² Michael E. Porter: *What is Strategy?*, Harvard Business Review, Nov-Dec 1996

²³ Henry Mintzberg: *The Rise and Fall of Strategic Management –Reconciling Roles for Planning, Plans and Planners*, Prentice Hall, 2000

²⁴ B. Eriksen & N. Foss: *Dynamisk Kompetenceudvikling – en ny ledelsesstrategi*, Handelshøjskolens Forlag, 1997

Taking the criticism into consideration Michael E. Porter is generally credited for building a bridge between corporate strategy and industrial economics. Therefore some of his theory on strategy is applied in this thesis.

These theories/models will be explained below.

3.2.1.1. Theory on Porter’s Five Forces model

This theory starts with an investigation of the macroenvironment of the industry in question. This model introduces five forces which influence the industry and it is illustrated in the model below²⁵:

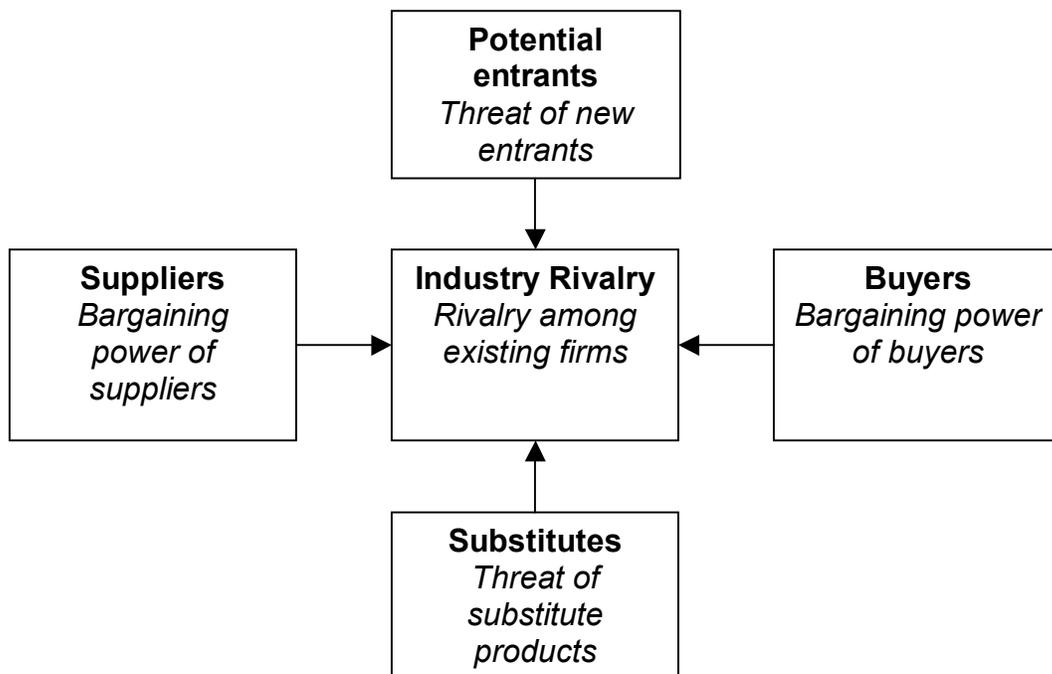


Figure 3.2: Porter’s Five Forces model²⁶

3.2.1.1.1 Threat of potential entrants

Prices and investment structures are influenced by the threat of new entrants. It depends on the entry barriers and reaction of incumbent competitors if new entrants have an opportunity to enter the existing market. There are seven major entry barriers:

- Economies of scale

²⁵ The following section consists of excerpts from Michael E. Porter: *Competitive Strategy*, The Free Press, New York, USA, 1980

²⁶ Adapted from the model in Michael E. Porter: *Competitive Strategy*, The Free Press, New York, USA, 1980

- Product differentiation
- Capital requirements
- Switching costs
- Access to distribution channels
- Cost disadvantages independent of scale
- Government policy

Newcomers are in a very difficult position if the entry barriers are high, making the threat of entry low.

3.2.1.1.2. Bargaining power of suppliers

Suppliers can use bargaining power by raising prices or reducing the quality of goods and services, which they provide. Supplier groups possess control if the following apply:

- It is dominated by a few companies and is more concentrated than the industry it sells to
- It is not obliged to compete with other substitute products for sale to the industry
- The industry is not an important customer of the supplier group
- The suppliers' products are differentiated or it has built up switching costs
- The supplier group poses a credible threat of forward integration

3.2.1.1.3. Threat of substitutes

All firms in the industry are competing with industries producing substitute products. Substitutes limit the potential returns of an industry by offering replacement for the product offered by the industry in question. Substitutes are particularly dangerous if they can serve the needs as well as the product of this industry at a lower price.

3.2.1.1.4. Bargaining power of buyers

Buyers compete in the industry by pushing down prices, bargaining for higher quality and more service and placing competitors against each other. Buyers are powerful if the following circumstances are present:

- They are concentrated or purchase large volumes relative to seller sales

- The products they purchase from the industry represents a significant fraction of the buyers' costs or purchases
- The products they purchase from the industry are standard or undifferentiated
- They face low switching costs
- They earn low profits with the purchased goods
- They pose a credible threat of backward integration
- The industry's product is not important to the quality of the buyer's products or services
- They have full information

3.2.1.1.5. Existing rivalry within the industry

Rivalry among competitors takes place when competitors feel the pressure or see the opportunity to improve their position. Intense rivalry is the result of a number of interacting structural factors:

- Numerous or equally balanced competitors
- Slow industry growth
- High or fixed storage costs
- Lack of differentiation of switching costs
- Capacity augmented in large increments
- Diverse competitors
- High strategic stakes
- High exit barriers

3.2.1.2. Theory of Generic Strategies

Porter states²⁷ that positioning determines whether a firm's profitability is above or below average, meaning that a company that is able to position itself well in the market can be profitable although the market in general is not. This can be achieved through following one of the generic strategies:

- Cost leadership

²⁷ This section consists of excerpts from: Michael E. Porter: Competitive advantage – Creating and Sustaining Superior Performance, The Free Press, New York, USA, 1985

- Differentiation
- Focus

The model is shown below.

		Competitive advantage	
		Lower cost	Differentiation
Competitive Scope	Broad target	Cost leadership	Differentiation
	Narrow target	Cost focus	Differentiation/ Focus (Stuck in the middle)

Figure 3.3: Generic strategies²⁸

3.2.1.2.1. Cost leadership

In cost leadership strategy the aim is to become the low cost producer in the industry. When following a cost leadership strategy a company typically operates on a broad scope. This strategy requires aggressive construction of efficient facilities, vigorous pursuit of cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts and cost minimisation in areas such as service, sales force, marketing etc.

Achieving a low cost position and maintaining it brings along above average returns in its industry even if strong competition exists. Cost leadership provides the company with competitive advantages as lower costs imply higher returns. A low cost position also defends the company against powerful buyers as they can make use of their power only to the level of the lowest price in the market. It provides a protection against suppliers as the low cost makes the company more flexible to fight increasing costs. The facts leading to a favourable low cost position also offer significant entry barriers due to cost advantages.

²⁸ Adapted from the model in Michael E. Porter: Competitive advantage – Creating and Sustaining Superior Performance, The Free Press, New York, USA, 1985

3.2.1.2.2. Differentiation

The second generic strategy is differentiation. In a differentiation strategy a company is also operating at a broad scope but looking for a product or service that is perceived as unique in the industry and is widely valued by customers. A company is compensated for its exclusivity by a premium price. The types of differentiation are diverse in each industry. It is very important to stress though, that this approach does not allow the company to ignore costs, but the costs are a secondary strategy target.

3.2.1.2.3. Focus

The last generic strategy is the focus strategy. This is to some extent different from the other two because it focuses on a very narrow competitive range within an industry. The companies pursuing such a strategy select a segment or group of segments within the industry. They shape their strategy to serve their narrow strategic target more effectively and efficiently than the other participants that are competing on a broader scale.

Therefore companies achieve differentiation either because of being able to meet the needs of a certain target group due to lower costs in serving this target group or both. Even though the focus strategy does not achieve a low cost strategy or differentiation, it does achieve one or both of these positions with respect to its narrow target group.

3.2.1.2.4. Stuck in the middle

There is a certain risk embedded in these three strategies, called “stuck in the middle”.

A company that tries to be successful in all generic strategies simultaneously but fails to achieve any of them gets stuck in the middle and has no competitive advantage. A company that ends up there is at a great disadvantage as the cost leader, differentiator and focuser will be in a better position to compete in any market segment.

Ending up stuck in the middle is often a manifestation of a company’s unwillingness to make choices about how to compete. The company that is stuck in the middle has to make a major strategic decision and choose one of the generic strategies. It either has to achieve cost leadership or else it must change direction and look for a particular target for a focus strategy or achieve a unique position through differentiation. The choice depends on the company’s abilities, limitations and opportunities.

3.2.2. The Resource-based School

The theory involving this school of thought evolves around the company itself, meaning the internal perspective, which is in contrast to the Positioning School. Wernerfeldt suggested in his article²⁹ that one should focus on company as bundles of valuable resources. This was new to theoreticians in the field of management who, through the influence of Porter's theories, had focused particularly on the company's environment and had forgotten the internal resources of the company.³⁰

This view combines aspects concerning resources, capabilities and competences.

Analysing the capabilities of an organisation can become a strategic issue. It is important in terms of understanding whether the available resources and competencies fit the environment in which the organisation is operation. Further, it is significant to evaluate if environmental opportunities and threats can be anticipated. Understanding the strategic capability is also crucial from another perspective since they may lead to a revised strategic development. New opportunities may exist by stretching and exploiting the organisation's unique resources and competencies in ways which competitors find difficult to match and/or in new directions. However, managers need to be careful, because if resource and competence exploiting strategies are favoured one may not spot environmental opportunities.³¹

Strategic capabilities can be related to three main factors:³²

- Resources available in an organisation.
- The competences with which the activities of an organisation are undertaken.
- The balance of resources, activities and business units in the organisation.

The terms resources and competencies can be explained as follows:³³

“Resources can be classified in four groups: physical, human, financial and intangible resources. All of them are necessary to support the strategy chosen by an organisation. Some of these resources are unique in the sense that they are difficult to imitate for competitors and therefore they may create competitive advantages.

²⁹ B. Wernerfeldt: *A Resource-Based View of the Firm*, Strategic Management Journal, Vol. 5, 1984

³⁰ B. Eriksen & N. Foss: *Dynamisk Kompetenceudvikling – en ny ledelsesstrategi*, Handelshøjskolens Forlag, 1997

³¹ M. R. Grant: *The Resource-based Theory of Competitive Advantage – Implications for Strategy Formulation*, Californian Management Review, p. 114-135, Spring issue, 1991

³² Gerry Johnson, Kevan Scholes & Richard Wittington: *Exploring Corporate Strategy*, Prentice Hall, 2004

³³ Ibid

Competences are difficult to assess in absolute terms. That is why usually a basis of comparison is needed to determine their development. Looking at the organisational history can provide a basis as improvements and/or declines become obvious, industry norms will offer hints about competitors' competence levels and also benchmarking helps to assess competences."

An organisation needs to reach a threshold level of competence in all activities it undertakes, but only some of these activities are core competences. Core competences can be characterised as unique competences for a specific company.

According to Hamel & Prahalad³⁴ a core competence must fulfill three criteria:

- A core competence gives a company the opportunity to enter different markets.
- A core competence must provide a significant contribution to the advantages a customer has with a given product.
- A core competence must be difficult for a competitor to imitate.

Further, Grant points out that "capabilities involve complex patterns of coordination between people and between people and other resources".³⁵ This means that Grant believes that a coordination of resources leads to activities, which can be learned by the members of the organisation that creates a routine pattern leading to the creation of capabilities.

One could then consider drawing similarities between the terms core competences and capabilities, as the latter is the ability to achieve something extraordinary, which can be resembled to the discussion on core competences by Hamad & Prahalad.

- Resources can be human or materialistic. Resources can be rare and therefore not available to all.
- Competences can be defined as something that one company within a given industry is able to do, which others cannot, within the same time period. A competence can never consist of just one single resource, which is why a competence always consists of several resources.

³⁴ G. Hamel & C. K. Prahalad: *Competing for the Future*, Harvard Business School Press, 20th ed, Boston, 1994

³⁵ M. R. Grant: *The Resource-based Theory of Competitive Advantage – Implications for Strategy Formulation*, Californian Management Review, p. 114-135, Spring issue, 1991

- A core competence can be a rare competence, meaning that it requires at least a certain time period to duplicate. A core competence can be so rare, that it cannot be neither purchased nor duplicated.

The issues regarding core competences/capabilities will be covered through the SWOT analysis in the chapter on Strengths.

3.2.2.1. Theory on the SWOT analysis

When analysing a company and its strategy one should consider its internal Strengths and Weaknesses and its external Opportunities and Threats and this is done through the SWOT analysis.

Ken Andrews was the first strategic theorist to build to publish work on the strategic fit between the company’s resources and capabilities with the external environment.³⁶

The internal factors of the analysis, strengths and weaknesses, are related to the resource based model analysed earlier and the company’s core competence(s) can be identified here.

The external factors, opportunities and threats, are related to other environmental models such as the PEST analysis and Porter’s Five Forces and will therefore, in large, be used to summon up sub conclusions already drawn earlier in the thesis by using the other modes of analysis.

The relationship between the internal and external factors is shown below.

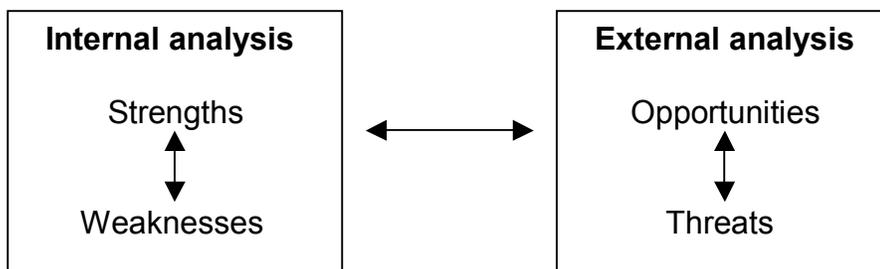


Figure 3.4: Relationship between internal and external factors as shown in the SWOT analysis

The SWOT approach is useful as it provides an overview of the company’s position and its environment within one framework, but it can also be difficult to ascertain whether a certain factor is a strength/opportunity or a threat/weakness. For instance, rising oil prices may be a

³⁶ B. E. Bensoussan & C. S. Fleischer: *Strategic Competitive Analysis: Methods and Techniques for analysing Business Competition*, Prentice Hall, New Jersey, USA, 2002

threat to the airline industry and a whole but an opportunity for some airlines as it may lead to consolidation within the industry as weaker airlines cannot survive the increased costs.

4. The low fare airline business model

4.1. Introduction

The first company ever to introduce the low fare airline business model to the market was Southwest Airlines (SWA) from Texas, USA. In 1971 it launched its first flights between Houston, Dallas and San Antonio at a price of \$20, which was unheard at the time.

It branded itself as *the* low fares airline and created a business model that would allow it to provide scheduled flights at a very low cost. It would specialise in short-haul flights of typically 600 km or an hour with high traffic frequency. Later as it grew from being a regional carrier operating in Texas to operating across the US they have altered this approach in order to offer services between different US states.

They also have the unrivalled achievement in the US airline market to have been profitable from every year from 1973 until present day, although there have been some very chaotic years in the airline industry in general caused by events such as the two Gulf wars and the terrorist attack in New York on Sep 11, 2001.

The model has also been implemented by other US carriers, such as JetBlue and America West and started off in Europe in the 1990'ies by Ryanair and easyJet. As mentioned in the delimitation this thesis will only analyse the role of this business model in Europe, so the airlines in other continents will not be included in this analysis – apart from SWA - but are only meant to give an overview of the geographical and historical development of this model. The reason SWA will still receive mention is that airlines such as Ryanair and easyJet have openly admitted that their strategy is built on the model of SWA and have made several study trips to its headquarters in Dallas, Texas and on its flights to study the model in detail and in practice.³⁷ The reason for this cooperation is, of course, that these airlines do not pose a threat to SWA as they operate solely on European short-haul flights, while the former operates solely on US short-haul flights, so they share no competitive environment. So as they can only learn from

³⁷ Siobhán Creaton: *Ryanair – How a Small Irish Airline Conquered Europe*, Aurum Press Ltd, 2004

each other without threat of mutual competition it is a win-win situation for all parties involved.

Hence, many of the elements of the LFA business model analyses below are derived from the initial model created by SWA.

4.2. Differences between the LFA model and the FSA model

Many strategic approaches to its operations distinguish the LFA business model from the more traditional model of full service airlines. I have identified 7 elements, which are illustrated below:

<i>Low fare airlines</i>	<i>Full service airlines</i>
Generally lower service levels, pre-flight, in-flight and post-flight	Generally higher service levels, pre-flight, in-flight and post-flight
Faster turnaround times	Slower turnaround times
Homogenous fleet	Heterogeneous fleet
Point-to-point system	Hub-and-spoke system
Higher seat density	Lower seat density
Secondary and regional airports	Primary airports
Online and direct booking and distribution of tickets	More emphasis on intermediaries such as travel agents

Table 4.1: Low fare airlines vs. full service airlines

These are general guidelines and these 7 elements will be discussed in more detail below.

4.2.1. The service factor

LFA’s lower prices are to some extent achieved by offering customers lower service levels. This phenomenon occurs both pre-flight and in-flight.

Pre-flight the option of business lounges is not possible and there are also no pre-assigned seats on the flight as passengers can take any seat they wish as they embark the aircraft. Regarding delays or cancellations, customers can also not expect that meals and/or accommodation will be

provided for them. Therefore passengers must carefully read the terms and conditions before purchasing a ticket. For instance, easyJet will provide meals and accommodation in case of such incident³⁸, while Ryanair categorically refuse to “provide meal vouchers or hotel accommodation for flights which are delayed or cancelled for reasons beyond Ryanair’s control”.³⁹

No free food and drinks are generally available in-flight but may be purchased at relatively high prices. This turns a cost into a potential source of revenue instead. There are some exceptions though as SWA always has complementary soft drinks and sponsored snack boxes and the German LFA Air Berlin also has a complementary soft drink and sandwich for its passengers⁴⁰. I was a little surprised to discover this, but my assumption is that these airlines have chosen to incur this extra cost hoping that an increase in goodwill would outweigh this.

4.2.2. Turnaround times

LFA’s generally aim to low turnaround times; typically the flight schedules are aimed at 25 minutes.⁴¹ This means that from the time the aircraft has arrived at the gate is must have disembarked passengers and baggage and then again embarked a new load of passengers and baggage within 25 minutes. The fact, that they do not use air bridges, also helps this as passengers walk straight out as the stairs pull up and they can use both the front and back exit/entrance. Also the fact earlier mentioned that there are no pre-assigned seats, makes it more likely that passengers are at the gate at boarding time in order to be able to choose a seat of their liking. As they do not serve free food and drink on-board this also speeds up the cleaning process between flights as the cabin crew does the quick cleaning during stops and thorough cleaning is only done at nights. This could not be done by full service airlines, because of more debris and possibly trade union resistance.⁴²

The low turnaround time also means that LFA’s can increase daily aircraft utilisation, which Doganis sees as one of the main cost advantages against full service airlines⁴³ as they will obviously be able to make more roundtrips between a given city pair than an airline with longer turnaround times.

³⁸ www.easyjet.com

³⁹ <http://www.ryanair.com>

⁴⁰ From own experiences with flying with these airlines

⁴¹ From own experiences and from studying flight schedules for Ryanair and easyJet on high-frequency routes.

⁴² Stephen Shaw: *Airline Marketing and Management*, Ashgate Publishing Ltd, 2004

⁴³ Rigas Doganis: *Survival lessons*, Airline Business, January issue, 2001

4.2.3. Homogenous fleet

LFA's are generally pursuing a strategy of a homogenous fleet with only one type of aircraft. Most often the Boeing 737 model has been chosen as the aircraft of choice by the LFA's.⁴⁴ Boeing has of course gradually upgraded their 737 aircraft from 737-200 to the latest 737-900, but the principal layout of the aircraft is still the same and that is important as it saves cost in pilot training and maintenance if you have a single-aircraft fleet. However, not all market participants choose Boeing. Easyjet in 2002 signed a contract for 120 Airbus A319, which will now gradually phase out the existing fleet of Boeing 737.⁴⁵ One must assume the deal offered was so attractive that the low cost of acquisition would outweigh the cost of operating a mixed fleet although easyJet also states that the wider aisles in the Airbus A319 will help keep turnaround times at a minimum.⁴⁶

Full service airlines like Lufthansa are of course forced to have a mixed fleet as they, oppose to LFA's, operate both short-haul and long-haul flights.

4.2.4. Point-to-point travel vs. hub-and-spoke travel

The two terms above constitute one of the big differences between LFA's and FSA's. these terms will be explained below.

Point-to-point travel means that the airline is only responsible from carrying you between point A and point B. To exemplify this let us assume that A is Copenhagen and B is Madrid. Where you to need a connecting flight to Copenhagen or an onward flight from Madrid, you were to book this separately and the airline would not be held responsible for a delay causing you to miss your onward flight as they simply carry you from A to B – no more and no less. They are strictly A to B although you are of course allowed to buy to purchase separate tickets (e.g. Aarhus-London/London-Dublin), but you will have to go through check-in procedures again in London, so you have to build in extra time in your travel itinerary. This also allows them to operate city-pairs by seat demand only as they have no responsibility for high frequency to accommodate passengers waiting for a connecting flight.

⁴⁴ Both SWA and Ryanair have a single aircraft fleet comprised of Boeing 737 models. See www.southwest.com and www.ryanair.com

⁴⁵ <http://www.easyjet.com>

⁴⁶ Ibid

The hub-and-spoke system consists of a hub (usually the primary airport) and spokes, which are secondary airports that feed the hub with passengers in order to fill up the aircraft. Passengers making a connection will often have several choices available for the destination as they are able to travel via many different hubs using different airlines. Taking our example you could travel Copenhagen-Madrid via Frankfurt (Lufthansa), Paris (Air France) and many more making it a competitive market with low yields. Traditionally airlines were able to compensate for these low yields by charging disproportionately high prices to passengers travelling point-to-point, effectively subsidising transfer passengers and were also often able to negotiate discounts at airports for their transfer passengers.⁴⁷

4.2.5. Higher seat density

Doganis also argues that higher seating density is an important element of the LFA business model and a source of potential cost advantages as the seat pitch of an LFA is normally 28 inches while an economy class seat of a full service airline usually has a seat pitch of 32 inches.⁴⁸ This obviously allows LFA's to fit more seats into their aircraft, increasing the maximum capacity of each flight. For example easyJet fits 149 seats into their Boeing 737-300 and Lufthansa fits 123 seats into their Boeing 737-300⁴⁹, which would – if assuming similar operating costs – translate into 17% lower costs for easyJet.

One must of course also consider that a reason for the smaller number of seats at Lufthansa is because of a number of Business Class or First Class seats and as they are considerably more expensive than their Economy seats, they also produce much higher yields, which off-set some of the cost of having a lower seat density.

4.2.6. Choice of airports

Airports are generally categorised in 3 categories⁵⁰ and that is primary airports such as Heathrow in London and secondary airports, which are smaller but still near major cities, like Stansted also in London. Thirdly, regional airports which are typically situated in the province

⁴⁷ Stephen Shaw: *Airline Marketing and Management*, Ashgate Publishing Ltd, 2004

⁴⁸ Rigas Doganis: *Survival lessons*, Airline Business, January issue, 2001

⁴⁹ See www.easyjet.com and www.lufthansa.com. When making this comparison it is important to not just compare between two random Boeing 737 fleets as the seating capacity of for instance the 737-300 and 737-800 is not similar and could then scower the result.

⁵⁰ Actually four categories as the smallest airport category is local airports, but they are too small to be considered in this thesis.

some distance from capital cities such as Aarhus airport in Denmark. The latter is typically the one with the least amount of traffic.

The primary airports are mainly used by the larger network carriers as the “hub” in their hub-and-spoke systems and are therefore in a good position with regards to bargaining power, as they have the size and infrastructure needed to process these large passenger numbers. An airport like Heathrow processes more than 63 million passengers p.a.⁵¹

Primary airports are the most expensive when it comes to aeronautical fees and charges, which include landing fees, a charge per passenger and/or tonne of freight handled, aircraft parking charge and other aeronautical charges such as airport traffic control and air bridges.⁵²

To lower these aeronautical costs low fare carriers like Ryanair and easyJet has followed a strategy of developing routes to secondary and regional airports, although they still maintain a presence in primary airports such as Dublin Airport (Ryanair) and Schiphol, Amsterdam (easyJet). The reason for this is also that because of the large amount of traffic in the primary airports (in Heathrow an aircraft land or takes off every minute 24/7 on average)⁵³ and therefore often become congested. This is not optimal for low fare airlines, who aim for low turnaround times, which would often be compromised by delays due to congestion on primary airports and by using less utilised secondary and regional airports they can solve this problem.

The downside for passengers is of course that particularly regional airports are far from the city center that is the destination and they must often be prepared for bus journeys of 100-120 km to reach their destination. This goes for Skavsta Airport to Stockholm and Charleroi Airport to Brussels, both operated by Ryanair.

4.2.7. Distribution system

Most LFA's no longer use travel agents to cut costs and therefore only distribute tickets through mostly the Internet but also through call centers. No paper tickets are issued. You receive a booking code, which must be presented upon check-in. This system reduces distribution costs to an absolute minimum.

⁵¹ Airline Business: *Airports*, Jun2004, Vol. 20 Issue 6, p 52

⁵² Graham Francis, Ian Humpreys & Stephen Ison: *Airports` perspectives on the growth of low-cost airlines and the remodeling of the airport-airline relationship*, Tourism Management 25, 2004, p. 508-520

⁵³ www.baa.com/heathrow

4.2.8. Frequent flyer programs

Lawton also argues that another element of the LFA business model is that it does not use the concept of frequent flyer programs and relates this specifically to the business models of SWA and Ryanair.⁵⁴ As I agree with him as so far as to the Ryanair business model, I disagree with respect to SWA as they operate a Rapid Rewards programs, where customers are given one free return flight for every 8 return flights being made. This, in my opinion, resembles the frequent flyer programs as it rewards customers for their loyalty. Air Berlin has a similar program in Europe called Top Bonus.⁵⁵

So although most LFA's do not use this approach towards customer retainment it is being used within the industry.

5. Analysis of the macro environment

5.1. Introduction to the theoretical framework – PEST Analysis

The literature on marketing and strategy provides one, particularly useful, model for the study of a firm's macro environment, namely the PEST model⁵⁶. This model proposes that the relevant factors should be divided into the categories of Political/legal, Economic, Socio-cultural, Technological and Environmental.⁵⁷

One should bear in mind that the categories are not mutually exclusive and that it might be appropriate to discuss a particular issue under more than one heading. However, the model still is a powerful tool, especially with regards to the European airline industry as airlines cannot develop sound strategies independently of a range of political decision, particular on EU-level. The industry has always been and still remains under political influence.

The fortunes of the world economy will also have a substantial impact as the economic trends are important in a price-sensitive industry such as the airline industry.

⁵⁴ Thomas C. Lawton: *Cleared for Take-Off*, Ashgate Publishing Ltd, 2002

⁵⁵ For details see their websites www.southwest.com and www.airberlin.com

⁵⁶ For instance, Stephen Shaw: *Airline Marketing and Management*, Ashgate Publishing Ltd, 2004

⁵⁷ Sometimes the model is also referred to as the PESTEL model as the environmental and legal factors are in a category of their own. However, I have concluded that within the European airline industry, the legal issues are better dealt with under the Political/legal heading, as the EU legislation, which I will discuss is often politically motivated. As for the environmental issues, I have found them not be of interest with regards to the issues being discussed in this thesis as this cannot be limited to the European airline industry but is a global issue.

Social issues such as those relating to demographic trends will also become significant. Finally, technology provides both exciting opportunities and difficult challenges today.

5.2. Political/legal issues

5.2.1. Liberalising the European airline industry

Historically the airline industry has been affected by political regulation, both in terms of operations and with regards to ownership as many airlines were and still are fully or partially owned by national governments.

As a consequence economic arguments favouring regulation were based on the concept that air transport was a public utility and the external benefits from civil aviation required the industry to be regulated in order to jeopardise these benefits, that were assumed to not only being economical but also strategic, social and political. As most countries in Europe concentrated on developing one major national airline, usually with direct government involvement as mentioned above the point of view was that free an unregulated competition on international air routes would endanger national interests, because it may adversely affect the national state-owned airline.⁵⁸

Other economists began questioning the benefits of regulation and argued the advantages of freer competition.⁵⁹ The then existing regulations limited pricing freedom and product differentiation, which restricted capacity growth and excluded new entrants. If these regulations were eased, a more competitive environment could provide benefits to the consumer in lower fares, innovatory pricing and greater product differentiation. The lower prices would force airlines to re-examine their cost structure forcing them to improve inefficiency and productivity and this could force inefficient airlines out of the market, but that is the cost of liberalisation.

The eight “Freedoms of the air” as shown on the following page are elements of the air transport principles that have evolved since the Chicago Convention in 1944.⁶⁰

⁵⁸ Alan P. Dobson: *Flying in the Face of Competition: Policies and Diplomacy of Airline Regulatory Reform in Britain, the USA and the European Community, 1968-94*, Ashgate, 1995

⁵⁹ Ibid

⁶⁰ S.V. Gudmundsson: *Airline alliances: consumer and policy issues*, European Business Journal, p. 139-145, 1999

First freedom	To fly over another state
Second freedom	To land an another state in emergency or for refuelling
Third freedom	To put down revenue passengers and freight from state of registry
Fourth freedom	To take on revenue passengers and freight to state of registry
Fifth freedom	To take on revenue passengers and freight in a second state to a third state
Sixth freedom	To take on revenue passengers and freight in a second state and fly via state of registry to a third state
Seventh freedom	To take on revenue passengers and freight in a second state, to which the aircraft can be domiciled, to a destination in a third state
Eighth freedom	To take on revenue passengers and freight in a second state to a destination within the state

Table 5.1: Freedoms of the air

This approach of the eight “Freedoms of the air” was adopted into EU legislation through three stages of liberalisation:

- The first "package" of measures adopted in December 1987, started to relax the established rules. For example, it limited the right of governments to object to the introduction of new fares. Some flexibility was allowed to enable airlines in two countries which had signed a bilateral agreement to share seating capacity. Until then, absolute parity had been the rule.⁶¹
- In June 1990 a second “package” of measures opened up the market further allowing greater flexibility over the setting of fares and capacity-sharing. Moreover, the extended the right to the fifth freedom and opened up the third and fourth freedoms to all Community carriers in general.⁶²
- The last stage of the liberalisation of air transport in the European Union was the subject of a third "package" of measures, which were adopted in July 1992 and applied as from January 1993. This package gradually introduced freedom to provide services within the European Union and led in April 1997 to the freedom to provide cabotage, i.e. the right for an airline of one Member State to operate a route within another

⁶¹ Excerpts from the EU Commission’s XVIIth Annual Report on Competition Policy, p. 43-45, 1987

⁶² Community Regulation 2343/90, OJ [1990] L 217/8

Member State.⁶³ This was confirmed by a European Court of Justice ruling in 2002 where 8 member states were ruled to favour national airlines regarding traffic rights.⁶⁴

The first four principles are generally accepted worldwide, but the last four are disputed and seen by many countries as infringement of national sovereignty, as per the discussion pro and contra regulation above. For instance the US does not allow cabotage (the right of an airline of one country to operate a route within another country), so with respect to liberalising the airline industry Lawton claims the EU has gone much further than any other country or region in liberalising its air transport.⁶⁵

This thesis does not agree in his comparison between the US and the EU as he does not have his proportions right. To compare the two, one must consider the EU as one entity and the US as one entity and not the former as a region and the latter as a country. As per the third “package” mentioned above the EU allows cabotage within Member States but not from non-EU member states, much like the US, which also allows cabotage within US States, but not from outside the US.

So, we have come a long way within the EU in liberalising the airline industry, but it cannot simply be concluded that we have surpassed the US in our liberalisation efforts as the European airline industry is still protected from non-EU competition with regards to cabotage.

However, government control of the airlines has diminished and the change in the competitive environment from tight regulation to relatively free competition opened great opportunities and as the rules of competition were redefined, different market segments emerged. Generally new airlines entered high-volume markets with 30-40% lower costs than the incumbent carriers, largely driven by low non-union labour costs and a wide variety of inexpensive second-hand aircraft, forcing incumbent carriers to reduce their operating costs and resulting in that average fares fell in real terms and demand for air service doubled over a decade after deregulation policy was introduced.⁶⁶

⁶³ Community Regulation 2407/92, OJ [1992] L 240/1 & Community Regulation 2408/92, OJ [1992] L 240/8 & Community Regulation 2409/92, OJ [1992] L 240/15

⁶⁴ ECJ/02/89 cases C-466/98 to C-476/98, Nov 5, 2002

⁶⁵ Thomas C. Lawton: *Cleared for Take-Off – Structure and strategy in the low fare airline business*, Ashgate, 2001

⁶⁶ David Chan: *The development of the airline industry from 1978-1998 – A strategic overview*, Journal of Management Development, Vol. 19, No. 6, 2000

5.2.2 State aid

The principles on this subject are laid down by the Articles 87-89 of the EC Treaty, while the Commission is governing the issue of state aid through Council Regulation 659/1999 laying down detailed rules for the application of Article 88 of the EC Treaty. I will not analyse the legislation in detail, but only comment on cases where it has been applied towards the European airline industry.

The EU has laid down strict control on state aid to discourage governments from supporting national flag carriers with state subsidies, also compared to legislation in other countries in general. For instance after the September 11, 2001 terrorist attacks, the US government provided subsidies – and still do - for large parts of the US airline industry, which was already ailing before the attack, while the EU would not subsidise any airline apart from allowing compensation for lost revenues directly involved with the terrorist attack e.g. from cancelled flights due to closed airports⁶⁷ and as a result of this the Belgium national flag carrier Sabena went bankrupt in November 2001 as the downturn in traffic broke the already ailing airline⁶⁸.

The EU stance in this case showed that they will leave it to market mechanisms to decide whether national flag carriers should survive and will not accept national interests to interfere with this through subsidies.

The next section will now focus on a case involving state aid that has implications to the European low fare airlines in particular, which has recently been settled by the Commission.

5.2.3. Commission vs. Ryanair/Charleroi Airport

The Commission in their decision⁶⁹ ruled against the agreement made between the Walloon regional government that operates Charleroi Airport and Ryanair. Specifically they declared the aid given to Ryanair as a reduction in aeronautical charges a violation of Article 87(1) of the Treaty as it is incompatible with the general rules made by the Walloon government for the use of airports in their region and is therefore discriminatory towards other airlines.

Further, the ruling states that aid, such as one-time incentives, provision of office space and marketing contributions, given for launching new air transport services which contributes to sustainable growth is acceptable, but under the condition that this aid is limited to a time period

⁶⁷ Sunday Business: *U.S. to Extend Post-Sept. 11 Airline Insurance Subsidies*, June 14, 2004

⁶⁸ The Guardian: *Belgian airline to suspend operations*, Nov 5, 2001

⁶⁹ Community regulation 393/2004 OJ [2004] 137/61

of 5 years⁷⁰ and must not be given to a route opened as a replacement for another route in the preceding 5 years.

Finally, the marketing contributions (in this case €4 per passenger) must only be made if it can be justified that it relates directly to the promotion of the route with the aim of making it viable without aid after the initial 5-year period and can also not be granted to already existing routes but only start-ups. The reason is that it must be an actual cost for the airline and not just a method for reducing its operating costs through public funds.

The Commission made the decision by reference to the “private investor principle”, namely by asking whether Ryanair could have obtained the same benefits from a private sector company under normal market conditions. In applying this test, it is necessary to examine whether a comparable private firm, in the same situation, would have entered into the same contract i.e. whether the level of anticipated profit is what a private firm would expect and whether the public body has taken advantage of the benefits arising from its status, for example easier access to finance, lack of risk of insolvency; and, whether it has had regard to considerations that would not affect a private investor, such as regional economic development and job creation.

The Commission ruled that no private investor in the same situation would have granted the same advantages to Ryanair and therefore held that some of the advantages afforded to the airline constituted state aid which could distort competition in favour of Ryanair.

Ryanair was ordered to pay back to Charleroi Airport the marketing contributions that did not fulfill the requirements mentioned above and the amount was set to €4 million.

While this amount seen in isolation is not financially damaging to Ryanair the implications of this ruling could be as it infringes with one of the cornerstones of the LFA business model, namely to use secondary or regional airports in order to lower operational costs. Therefore Ryanair has appealed the ruling to the European Court of First Instance.⁷¹

As the ruling only affects agreements made with public owned airports, it is likely that Ryanair will argue that they must be compared with privately owned airports, as they are not bound by restrictions when agreeing contracts with airlines, because it would be difficult for public owned airports to compete if they are not given the same options in regards to contractual agreements as privately owned airports.

⁷⁰ In the contract between Ryanair and Charleroi Airport the time period was 15 years

⁷¹ www.ryanair.com

If the Court of First Instance upholds the ruling it could be potentially damaging to Ryanair in particular and the LFA industry in general as it may be more expensive for them to use the regional airports, so a ruling in favour of the Commission's decision would strengthen the position of the traditional airlines as the cost gap between using primary and regional airports would be diminished.

It is a very difficult ruling because the EU is determined to increase competition in the airline industry and the model of using regional airports has been beneficiary to the consumers through low prices as well as the airline, airport and region as the former has attracted a large amount of passenger/tourists to an airport that was formerly underutilised. The question is how many incentives the publicly owned airport can give the airline as it may be evident that some of these incentives are not just given to attract passengers to the airport, but also to increase economic development through more tourism in the region and then it may be regarded as State aid.

This thesis assume the Court of First Instance will uphold the decision as the Commission is correct within the legal framework of State aid, unless the Court rules that a public airport must be compared with a private airport. This will only happen if Ryanair/Charleroi Airport can prove that their arrangement will lead to a sustainable economic development for the airport without State aid to cover losses incurred from giving Ryanair reduced charges and other incentives.

An argument in their favour is that they may use the "private investor principle" to argue that private airports also give discounts to generate more traffic through their airports and with regards to primary airports the discount is given although they have far exceeded their break-even point⁷². An example is the fact that Copenhagen Airport, Kastrup gives large discounts in aeronautical charges for e.g. SAS for transfer passengers in their hub-and-spoke system, which actually means that point-to-point passengers pay a surcharge to subsidise the transfer passengers.⁷³ Therefore Ryanair can argue that the "private investor principle" is upheld, as these discount agreements are also used in private airports to attract more passengers.

We will now look at another piece of EU legislation regarding the airline industry, which is also pending court challenges.

⁷² The issue of the airline/airport relationship including the break-even factor for airports will be discussed in more detail in my Industry Analysis in the next chapter.

⁷³ Børsen: *Lufthavn vil lokke SAS i offensiv*, April 12, 2005

5.2.4. Passenger rights in the EU

The EU has passed recently legislation that aims to improve rights for passengers travelling from EU countries⁷⁴. With regards to airlines the EU is particularly targeting the practice of overbooking⁷⁵. This practice is in effect because many customers on full service airlines, especially business passengers, have fully flexible tickets and often do not show up for a reserved flight, but when too many passengers show up anyway, some will be denied boarding due to the aircraft's limited capacity. The Commission has calculated that app. 250000 passengers are denied boarding every year and this legislation wants to increase compensation for inconvenienced passengers due deter airlines from using this practice indiscriminately. The new compensation scheme is set up as follows:

- €250 for flights of less than 1500 km.
- €400 for flights of more than 1500 within the EU and other flights of between 1500-3500
- €600 for flights of more than 3500 km outside the EU

The airlines must also re-schedule the flight for the customer or give a refund and must pay for their food and lodging if necessary until their next possible flight.

The issue which cause discussion and has caused IATA and the European Low Fares Airline Association to challenge the regulation in the Court of Justice⁷⁶ is the fact that this compensation shall also apply with regards to long delays⁷⁷ and cancellations, disregarding that the cancellation is not the fault of the airline, such as airport disruptions and weather.

One can agree with the airline industry that this regulation seems discriminatory towards airlines as other modes of transport such as rail and ferry have not been imposed the same compensation requirements, which could be regarded as anti-competitive as they claim in their court challenge⁷⁸. Furthermore, it is a very strict to hold the airlines liable and require compensation from them, even when cancellations are clearly beyond their control.

Also, the LFA's must feel particularly disfavoured as they generally do not use the practice of overbooking as they usually operate with non-refundable tickets and/or high fees for changing

⁷⁴ Community Regulation 261/2004 coming into force on February 17, 2005

⁷⁵ Which is selling more tickets on a flight than there are seats.

⁷⁶ C-344/04 IATA et al

⁷⁷ Community Regulation 261/2004 sets a "long delay" to 4 hours after planned time of departure

⁷⁸ C-344/04 IATA et al

a flight. They will still have passengers not showing up for flights as the fares are sometimes so cheap, that it is cheaper to buy a new ticket than paying the fee for changing it.⁷⁹ Therefore it cannot be concluded that they do not use the practice of overbooking at all.

However, it is reasonable to conclude that they do not use it as much as full service airlines, where it is general policy due to their large segment of fully flexible tickets and it is not likely that they will cease this practice even considering these new compensation rules as these fully flexible tickets (often business class) carry high yields, which should off-set the price of compensation.

Where the LFA's will really feel the consequences is through the fact that long delays and cancellations are also included of this legislation. As one will usually pay a higher fare with a full service airline than with a LFA there is no relationship between the fare paid and the compensation as the latter is set at a fixed amount indiscriminate of the price paid for the fare.

This means that an LFA will bear a much higher cost for the same cancellation, e.g. due to weather circumstances, than a full service airline, because its average fare of the former is lower than the latter, but the compensation per passenger is still the same. This puts the LFA at a serious economic disadvantage.

5.3. Economic issues

As the important interactions between the political world and the airline industry have now been shown, the PEST analysis will now continue by showing that economic issues have an equal or even greater importance to the industry.

5.3.1. The world economy

Demand for air travel is characterised by very high income elasticity. Research has shown⁸⁰ that there is a two-to-one relation between demand for air travel and world GDP. Therefore the airline industry is very dependent on the world economy and its trade cycles.

Particularly full service airlines are susceptible to up- and downturns as they rely heavily on the high-yielding Business Class/First Class passengers, who can be expected to drop in numbers

⁷⁹ Through own experience with Ryanair on the route Dublin-London, I concluded it to be cheaper to buy a new ticket at a total of €19 rather than paying the change fee of €30

⁸⁰ Rigas Doganis: *Flying off course*, HarperCollins, 3rd edition, 2002

when economic activity is low. LFA's on the other hand do better in years of downturn as they attract Economy or "no-frills" passengers, which also include passengers, who would usually choose Business Class, as they or their employees choose to lower their travel expenditures during a period of low economic activity. SWA exemplifies this trend as they have managed to stay profitable – as mentioned earlier - through world economic downturns in the early 1980's and early 1990's and again through the tumultuous times, particularly for the airline industry, after Sep. 11, 2001, where other airlines had serious economic difficulties. Former large carriers such as TWA and Pan Am went bankrupt in the 1990's and the second-largest carrier in the US, United Airlines, is still trying to reorganise itself and is still under bankruptcy protection after the effects of Sep. 11, 2001 which almost broke its already fragile back and it only stayed afloat because of US government subsidies.⁸¹ The same picture showed in Europe where LFA bellwethers such as Ryanair and easyJet showed healthy growth rates⁸² during that period, while many full service airlines struggled and Sabena went bankrupt as earlier mentioned.⁸³

Another problem with the airline industry in the relation to the trade cycle is that increasing capacity during upturns can be very difficult, as it often requires the purchase of new aircraft. However, the delivery time of an aircraft can be several years and if the airline, eager to prop up capacity, purchases a large amount of aircraft, the trade cycle may be in a downturn at the time of delivery, which means that these aircraft must stand idle as the capacity need is no longer there, or be sold at a significant cost because of the lack of demand.

Therefore long-term planning is important within the airline industry as the investment in aircraft is a significant financial burden, but of course predicting the development of the trade cycle is evenly difficult.

5.3.2. Labour costs

The level of labour costs usually also follow the level of economic activity. A higher level of economic activity puts upward pressure on the wages as demand increases. However, in countries with inflexible labour markets and/or strong unions, it is very difficult for airlines to reduce their labour costs again through lowering wages or reducing the workforce, when they

⁸¹ Chicago Tribune: *United again seeks more time to craft its reorganization plan*, April 9, 2005

⁸² According to financial statements from that period on www.ryanair.com and www.easyjet.com

⁸³ Statistical data from the Association of European Airlines (www.aea.be) showed that traffic among its members, which are full service airlines decreased by 31% from Sep. 11, 2001-Dec. 31, 2001

are hit by downturns, remembering from the research earlier mentioned that airlines generally are hit hard from a downturn in the economy through the two-to-one correlation between air travel and world GDP. Many LFA's such as Ryanair fiercely oppose unions and their employees are not unionised and the flexible labour rules that has attracted so many international businesses to Ireland has also helped Ryanair in reducing its labour costs.⁸⁴

5.3.3. Oil prices

The level of oil prices has a profound impact on airline economics as the fuel costs constitute 10-14% of an airline's operating costs.⁸⁵ This percentage obviously rises when oil prices rise sharply as is presently the case. Several measures can be taken by the airlines in order to lower these costs.

5.3.3.1. Fuel-efficient aircraft

Through purchasing newer, more fuel-efficient aircraft, airlines can decrease the consumption of fuel on their flights. Of course, airlines in financial peril often do not have this option as the purchase of aircraft is very costly, so they cannot enjoy the long-term benefits of these more fuel-efficient aircraft, as they would not be able to fulfill their short-term financial obligations associated with such an investment. Additionally airlines specialising in short-haul flights would benefit the most of more fuel-efficient aircraft as they use up more fuel, in relative terms, than a long-haul flight as the largest consumption of fuel takes place in the processes of take-off and landing. At cruising altitude (which is obviously longer on a long-haul flight) the consumption of fuel is much lower.

5.3.3.2. Fuel ferrying strategies

Secondly, recent research has shown⁸⁶ that the multi-stage fuel ferrying strategy is superior to the single-stage fuel ferrying strategy⁸⁷ from a cost-based point of view and concludes that the former strategy is particularly useful when operating with newer and more fuel efficient aircraft. The reason is that the airline uses only one airport to buy its fuel and can therefore

⁸⁴ Siobhán Creaton: *Ryanair – How a Small Irish Airline Conquered Europe*, Aurum Press Ltd, 2004

⁸⁵ Rigas Doganis: *Flying off course*, HarperCollins, 3rd edition, 2002

⁸⁶ Khaled Abdelghany, Ahmed Abdelghany & Sidharta Raina: *A model for the airlines' fuel management strategies*, Journal of Air Transport Management, 2005 (In press – only available online)

⁸⁷ Multi-stage fuelling is defined as fuelling the aircraft in one airport with enough fuel for two or more flights while single-stage fuelling strategy calls for refuelling after each flight.

avoid buying it at other airports, where it is proven to be more expensive. Furthermore, the airline may also receive a discount from purchasing all its fuel with one provider. The research conducted does not take all factors into consideration when calculating the result though as it is also evident that by using the multi-stage strategy the airline also lowers its turnaround time as it must not re-fuel after each flight segment. When also taking this factor into account, the conclusion of the multi-stage strategy outperforming the single-stage strategy should tilt even more into the favour of the former.

5.3.3.3. Hedging

Through using the strategy of hedging by purchasing futures contracts for oil, airlines may reduce their risk exposure regarding the oil price fluctuations, which has great influence on their earnings, given the large percentage of total operating costs fuel costs represents as mentioned earlier. A study⁸⁸ has indicated that using hedging can increase the unexplained volatility in the earnings of an airline by 23%. While the airline may incur opportunity costs when oil prices are in a downturn there are substantial advantages in having stable earnings over the long run. For financially weaker airlines it may be that they have difficulties in surviving in times of high oil prices and from a stock market point of view, a reason that airline stocks have low P/E ratios is because of the high volatility in earnings.⁸⁹ Further, the before mentioned study suggested that it was optimal to let the futures contract mature immediately after the financial quarter being hedged as oppose to maturing it at the beginning of this quarter. Also with regards to the timing of the hedging it was seen as optimal to initiate the hedge 3 months prior to the quarter being hedged and closing the position at the start of the quarter being hedged. One must keep in mind though, that hedging can only be used to decrease volatility and not as a tool for fuel savings as all participants will have to pay the higher fuel prices if the prices stay high long enough.

5.3.3.4. Fuel surcharges

Airlines may choose to off-set the costs of rising oil prices on to its customers, either by increasing fares in general or to introduce a “fuel surcharge” on top of the ticket prices as most full service airlines such as Lufthansa, British Airways and SAS have chosen to do over the last

⁸⁸ Vadhindan K. Rao: *Fuel price risk management using futures*, Journal of Air Transport Management, Vol. 5, 1999, p. 39-44

⁸⁹ James Adams: *Airlines struggle with fuel price turbulence*, Corporate Finance, Vol. 147, 1997, p. 25-26

year. The latter model has traditionally been used in the cargo business for many years where the price for transporting cargo follows the fuel prices.⁹⁰ LFA's in Europe have generally refrained from using this strategy as they are apparently trying to increase market share instead and off-set the higher fuel prices by luring more passenger on to their flights, increasing the load factor. In Europe Air Berlin, Sterling and Maersk Air are the only LFA's that have introduced a fuel surcharge at present.

5.4. Socio-cultural issues

5.4.1. Change in the perception of air travel

While air travel was earlier seen as an expensive cost and was not easily available financially for lower- and middle class income groups, the low cost revolution that has made air travel across Europe available to the larger public through lower fares. The surge of British residents purchasing real estate in France can be closely linked to the rise in cheap air travel between these two destinations. For instance, the French city of Carcassonne has estimated that the app. 235000 passengers coming to the city from LFA's have created €270 million worth of extra economic activity, including real estate trade.⁹¹

This will increase air travel as people who would not consider travelling by air – or at least not travel so often – now have the opportunity to travel, either as the VFF⁹² or the leisure segment, at low cost to most European countries.

5.5. Technological issues

5.5.1. The Internet and videoconferencing

The above mentioned factors are the most influential drivers of change in the airlines' macroenvironment regarding technological issues. However, as they influence the industry, it is found more relevant to explore these topics more in-depth in the Five Forces industry analysis in the next chapter under the sections of buyer power and threat from substitutes, respectively, in order to compare them with others factors influencing the industry.

⁹⁰ Peter Conway: *Oil, Airline Business*, Oct 1, 2004, p. 38-40

⁹¹ The Economist: *Low-cost founding fathers*, Jan. 29, 2005

⁹² Visiting Friends and Family

6. An industry analysis of the European airline industry

In using the Five Forces model by Michael Porter, this thesis will analyse the forces that influence the European airline industry and to what extent they influence it.

Below is the model where the components that are to be analysed are put in the five categories.

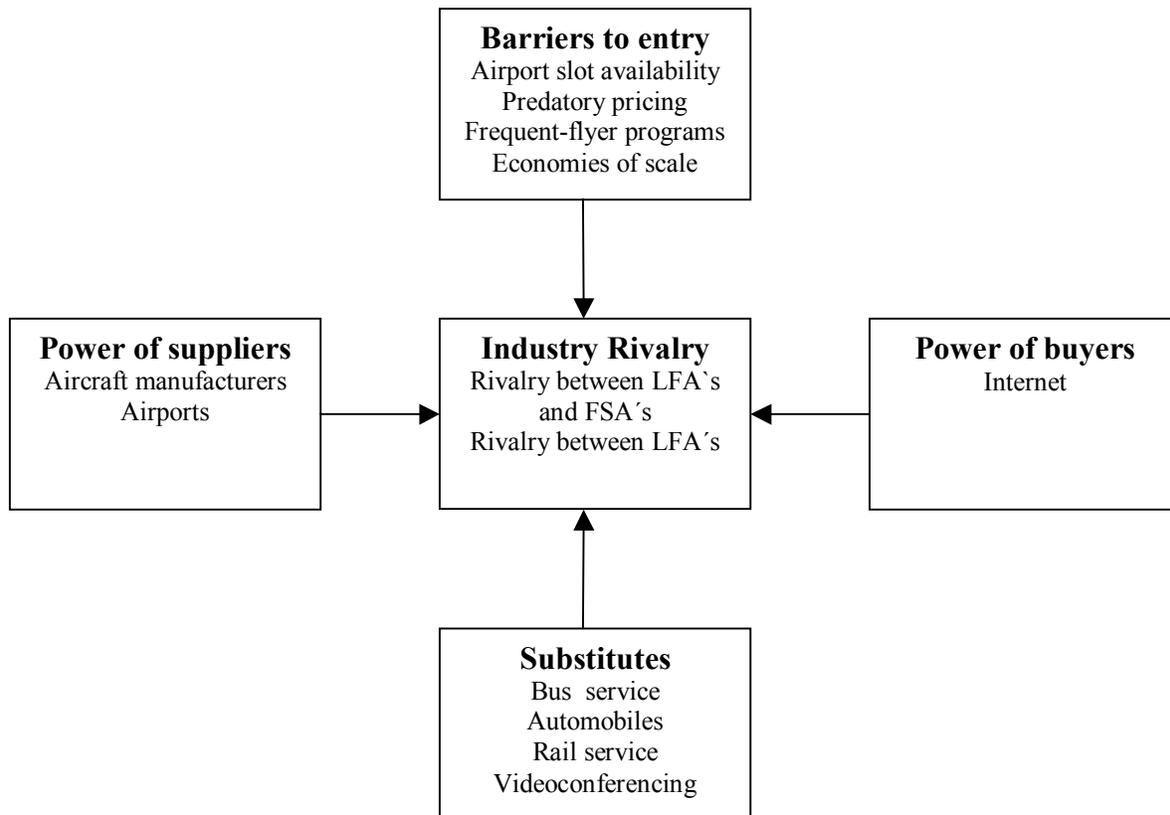


Figure 6.1: Porter's Five Forces model used on a industry analysis of the European airline industry

6.1 Threat of new entrants

6.1.1. Airport slot availability

The limited access to airport slots⁹³ has long been a barrier to the European airline industry as national airlines had access to the best slots in the major airport hubs⁹⁴ and new entrants to the

⁹³ According to PriceWaterhouseCoopers: *Study of certain aspects of council regulation 95/93 on common rules for the allocation of slots at Community airports*, final report to the European Commission May 20, 2000, p. 28-29, the definition of an airport slot is as

market would only have little success as they would be given none or off-peak slot allocations at the airports. In order to liberalise this market the European Commission introduced legislation regulating the allocation of airport slots in the EU⁹⁵.

The reasons for this legislation was the significant and consistent growth in air traffic in the EU and the delays and other difficulties experienced in this increase of airport capacity.

Creating more competition was also an explicit objective for this regulation and two key aims were “to facilitate competition and encouraging entrance into the EU market and to ensure that slots at congested airports are allocated on the basis of neutral, transparent and non-discriminatory rules”⁹⁶.

A study instigated by the European Commission⁹⁷ found that European airlines were generally satisfied with the approaches being implemented in most EU member states in relation to capacity assessment and airport slot allocations. The study came to the finding that apart from specific capacity constraint issues at the airport Barajas in Madrid and Charles de Gaulle in Paris, the airlines that participated in this survey did not report concerns about inappropriate constraints at any airport, indicating that airport authorities do not undermine or restrict the entrance or growth of new entrants through restrictive airport slot allocations.

There is still a problem with the so-called grandfather rights at certain airports. For instance in Heathrow Airport in London, British Airways can still control a slot although the flight number for this slot has been terminated and is therefore technically vacant.

This is rarely a problem for LFA’s though, as they rarely use these large hubs such as Heathrow, London or Schiphol, Amsterdam, because they are often congested due to the high frequency of long-haul flights and have high airport fees, although Easyjet uses the latter as one of its main continental airports.

6.1.2. Predatory pricing as a barrier to entry

The concept of predatory behaviour is based on incumbents in an industry squeeze out new entrants by temporarily lowering their prices to match the new competitor or even introduce

follows: “the ability to plan and operate at an airport within a specified time period with the expectation that all necessary resources will be available to accommodate that operation. These resources usually include most importantly runway, stand and terminal capacities.”

⁹⁴ The best slots are usually the ones with departures and arrivals at peak periods.

⁹⁵ Council Regulation 95/93

⁹⁶ Ibid

⁹⁷ A follow-up report on the PriceWaterhouseCoopers report mentioned above conducted by the same company, May 2000

prices below the levels of these new entrants, who often do not have enough capital to survive such a price war, until they have been driven out of the market. After the new entrant has lost this price war, the incumbent then increases its prices back to pre-competition levels.

Within the context of the airline industry allegations of predatory pricing is most often made when a low fare carrier enters a market or specific route serviced by a full-service carrier prior to its entry. The latter will then lower its prices attempting to cause the former to exit this market or route.

Theoretical models often have problems in factoring in predatory pricing as many traditional models are static in nature and can therefore not capture the predatory pricing behaviour, which relate to the dynamic evolution of market structures. The classic Chicago school attack on the rationality of predatory behaviour has been described as stemming mainly from the idea that a costly period of predatory pricing would be followed by recoupment of the incumbent through higher prices, which would then again lead to re-entry into the market by either the same competitor, which was first driven out or by another one.⁹⁸

This view fails to take into account several important elements of predatory pricing such as effect on reputation for the incumbent, financial resources or asymmetric information, but often this view has prevailed because of the inability to measure whether certain pricing strategies will have long-term impact on competition or whether it shows healthy competition.

Therefore policymakers have in general favoured the possibility of predatory pricing against the possibility of discouraging competition through strict or stifling competition laws.⁹⁹

With regards to the European airline industry it is particularly difficult to investigate charges of predatory pricing due to its constant dynamic evolution from fully connected networks prior to deregulation to partially connected networks through the hub-and-spoke system followed by international alliances such as OneWorld and Star Alliance and now the emergence of low fare airlines.¹⁰⁰

Within the European Union¹⁰¹ article 86 under the treaty of Rome originally governed issues concerning competition and fair trade. Therefore also the issue of predatory pricing falls under

⁹⁸ J. Church & R. Ware: *Industrial organization: A Strategic Approach*. Irwin McGraw-Hill 1999

⁹⁹ William G. Morrison: *Dimensions of predatory pricing in air travel markets*, Journal of Air Transport management 10, 2004 p 87-95

¹⁰⁰ D. Gillen & William G. Morrison: *Legacy carriers and upstarts: regulation, competition and evolution of networks in aviation markets*, School of Business and Economics, Wilfrid Laurier University, Waterloo, Work Paper 2003

¹⁰¹ Competition laws are different in the various member countries, but I choose to view only the EU laws as a country analysis would become too detailed and because my viewpoint is the European market as a whole.

its scope. During the implementation of the treaty of Amsterdam the articles were renumbered and the relevant article for the above is now article 82 under the treaty of Amsterdam, which was signed on October 2 1997 and came into effect on May 1999 after having been ratified by all Member States.

Article 82 states:

“Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part it shall be prohibited as incompatible with the common market insofar as it may affect trade between Member states.

Such abuse may, in particular, consist in:

- *directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;*
- *limiting production, markets or technical development to the prejudice of consumer; applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;*
- *Making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.”*

EU case law regarding predatory pricing is based on the AKZO case¹⁰², a Dutch based chemical business, which was ruled to have used predatory pricing in squeezing a smaller competitor out of the flour additives market. Indicating that not all forms of price competition was legal, the European Court proceeded to set out a twofold test for determining whether an undertaking has practises predatory pricing, stating:

“Prices below average variable costs (that is to say, those vary depending on the quantities produced) by means of which a dominant undertaking seeks to eliminate a competitor must be regarded as abusive. A dominant undertaking has no interest in applying such prices except that of eliminating competitors so as to enable it subsequently to raise its prices by taking advantage of its monopolistic position, since each sale generates a loss, namely the total amount of the fixed costs (that is to say, those which remain constant regardless of the quantities produced) and, at least, part of the variable costs relating to unit produced.

¹⁰² Case C-62/86, n.41 *supra*.

Moreover, prices below average total costs, that is to say, fixed costs plus variable costs, but above average variable costs, must be regarded as abusive if they are determined as part of a plan for eliminating a competitor."¹⁰³

This approach was affirmed by the European Court in the Tetra Pak case¹⁰⁴, but the additional observation was added, that it was not necessary for the purpose of establishing predatory pricing strategies to prove that the company had a realistic chance of recouping its losses subsequently, which is the main difference between EU and US legislation in this matter, where a company must have recouped its losses subsequent to its predatory pricing strategy.¹⁰⁵

It is therefore clear that the EU, contrary to the US, is moving away from the Chicago school thought of recoupment after having been involved in predatory pricing as mentioned earlier.

However many economists still argue that the Chicago school model of viewing predatory pricing is the correct approach. One of these is the Canadian economist Pierre Lemieux, who argues against involvement by the Canadian government against alleged predatory behaviour towards Air Canada, the semi-stateowned Canadian airline.

He argues: *"These losses (through predatory pricing) would be profitable only if they could later be recouped from higher monopoly prices. But this is prevented by the diseconomies of scale the predator would face after his competitors have been chased away (given no natural monopoly). And if the "predator" jacks up prices after gaining its monopoly, new competitors will start another price war. Private investors don't play yo-yo with their money.*"¹⁰⁶

Although his view is prevalent in the US¹⁰⁷ one can assume that a more legislative approach may be expected in the future in the EU, especially after the Tetra Pak case, that stated that it was no longer necessary for the purpose of establishing predatory pricing strategies to prove that the company had a realistic chance of recouping its losses subsequently. This could mean that new entrants may receive legal protection when being forced out of competition by other market participants. Not only by full-service airlines but also airlines like Ryanair or easyJet that may also have an interest in protecting their bases as the low fare leader on a particular city pair. The EU will have to tread carefully though as too much legislation may hurt or discourage healthy competition.

¹⁰³ As per p. 71-72 of judgment.

¹⁰⁴ Case C-333/94P, n.95, *supra*.

¹⁰⁵ Brooke Group Ltd vs Brown & Williamson Tobacco Corp, 509 US 224 (1993)

¹⁰⁶ Ottawa Citizen: *There are no predators*, Dec. 11, 2001

¹⁰⁷ Business Week: *Predatory pricing – cleared for take-off*, May 14 2001

6.1.3. Frequent-flyer programs

Frequent-flyer programs are marketing schemes by airlines giving customers a gift, usually free travel, when they have conducted a certain amount of business with the airline. These programs have made many customers, especially business travellers, prefer a certain airline or airline alliance as they would receive bonus flights, free hotel accommodation or other free gifts the scheme provides, although they may be able to buy a cheaper flight at another airline. The reason has often been that the company pays for the flights but the individual employee receives the bonus points.

It has also been widely stated that purpose of the programs is to offer commission on business purchases in the form of a gift to the agent, who does the buying for the business. When the buyer places an unusually high value on the bonus relative to the value he/she places on the marginal payments for the purchased travel, as results from this principal/agent problem, the effectiveness of the frequent-flyer program increases.¹⁰⁸ Thus, this fact may act as a barrier to entry for market entrants as they must overcome the embedded preferences by the agent towards the incumbent airline, which offers bonus incentives to the agent, making their services more lucrative for the agent, although the principal may benefit from using the new market entrant, which may offer cheaper flights.

6.1.4. Economies of scale

Classic industrial studies¹⁰⁹ have concluded that there are no significant economies of scale with regards to the airline industry, when looking at the whole system. Even when looking at the city-pair market economies of scale it was concluded that in a liberalised market it is impossible to use the economies of scale that exists in theory. This would be to use larger aircraft as studies have shown that the average cost per passenger is lower in a large aircraft such as the Boeing 747-400 than in a smaller Boeing 737-400¹¹⁰ and it would therefore be preferable to have larger aircraft serve a city-pair but with less frequency in order to increase the load factor, but this is of course impossible as travellers on high passenger-volume city-pairs like London-Dublin demand high frequency, which in turn means that economies of scale

¹⁰⁸ Severin Borenstein: *Hubs and high fares: dominance and market power in the U.S. airline industry*, RAND Journal of Economics, Vol. 20, no 3, 1989, p. 346-354

¹⁰⁹ R. Caves: *Air Transport and its regulators*, McGraw-Hill, 1962

¹¹⁰ Elizabeth E. Bailey & John C. Panzar: *The contestability of airline markets during the transition to deregulation*, Law and Contemporary Problems Vol. 44 No. 1, 1981

is no substantial barrier to entry. However, LFA's like Ryanair has countered traditional theory and have achieved economies of scale. Not by using larger aircraft, but through their low cost structure they are able to sell tickets at lower prices, thereby stimulating demand and increase their load factors, hence lowering their unit cost per passenger. This will be explored further in the Ryanair case study later in this thesis.

6.1.5. Empirical study on barriers to entry

A recent study was performed by doing a survey, where data was collected by airline managers in Australia/New Zealand, Canada, USA and Europe on their perception on the effectiveness of barriers to entry in the airline market.¹¹¹

The study showed that managers of low fare airlines perceived strategic barriers such as code-sharing, superior service and hub-and-spoke systems as significantly smaller barriers than other airlines, but found airport fees as a significantly higher barrier to entry than other airlines. This is easy to understand as the airport fees amount to a higher percentage of the total ticket price with low fare airlines as their prices are generally lower and the airport fees are most often fixed, meaning the fee remain the same regardless of whether the ticket price is €100 or €1000. Moreover, a strong cash position and/or large firm size is also seen to weaken the effectiveness of strategic barriers such as predatory pricing, code-sharing, brand name, customer segmentation and advertising.

The analysis of this survey also showed that the lack of airport slots is a more important entry barrier for airlines from the EU than other regions of the world, but airlines based on the periphery of the EU find it less important than core EU countries. The reasoning for this is, according to the author of the analysis, that the competitive modes in the centre of the EU can fall back on a better infrastructure with alternative transport and given the shorter distances between countries in the center of the EU, substitutes are more likely to offer comparable travel times. Elaboration on the subject of substitutes will be performed later in this industry analysis. Finally, the analysis of the data from the survey concludes that the effectiveness of strategic barriers to entry increase, when there is an unfavourable industry outlook as entrants may find it harder to achieve a satisfactory market share and profit level.

¹¹¹ Mirko C.A. Schnell: *What determines the effectiveness of barriers to entry in liberalised airline markets*, Journal of Air Transport Management Vol. 10 p. 413-426, 2004

6.1.6. Summary of barriers to entry

As the access to airport slots has been eased over the past decade combined with the increased use of regional and secondary airports, this has lowered the barriers of entry. The fact that there are no significant economies of scale, neither scientifically nor perceived, in the airline industry also helps lowering the barrier.

Strategic barriers such as predatory pricing strategies have also come under more legislative scrutiny in the EU and as the survey above showed, entrants with a strong cash position do not see this as a significant barrier to entry as they see themselves able to compete in a price war.

There is still some opposition to the level of airport fees in Europe and this will remain a barrier to entry, particularly for low fare airlines. An important aspect for considering entry in this market is also that the entrant has a strong cash position as competing against established incumbents with strong market positions will be very difficult without strong financial backing. Taking these different variables into consideration, I see the risk of entry to be moderately high due to liberalisation of the structural barriers and the lack of perceived significance of strategic barriers, but will refrain from stating that the risk of entry is high, due to the fact that a strong cash position is needed for entry combined with the perceived significance of the airport fees as a barrier to entry.

6.2 Bargaining power of suppliers

6.2.1. Aircraft manufacturers

Suppliers have a strong bargaining position if they are concentrated. This is, in particular, the case for the aircraft manufacturers because only a few companies are producing aircraft. There are effectively only two major global players in the aircraft business with regards to larger aircraft and that is Boeing of the US and Airbus, which is a European consortium. Other companies such as Bombardier of Canada are focusing on smaller regional aircraft and a company such as Gulfstream focuses mainly on business jet aircraft.

Airlines cannot substitute aircraft by any other products and these are therefore an important factor for the airlines, which strengthens the position of the aircraft manufacturers.

However, in the light of the recent downturn in air travel over the past few years demand for aircraft has fallen dramatically making the bargaining position of the aircraft manufacturers

weaker as the competition for airline contracts has been fierce. Airbus has recently overtaken Boeing as the worlds leading aircraft manufacturer for the first time and allegations of government subsidies against Airbus has brought the two main producers heavily at odds against each other limiting the possibility of any covert price-fixing between the two as classical game theory could suggest.¹¹²

The introduction of new airline business models focusing of cost savings and postponed aircraft orders e.g. through buying options instead of fixed contracts has forced the aircraft manufacturers to give up much of their remaining bargaining power by focusing on supporting these airline business models to secure their own survival during this recent recession in the airline industry.¹¹³ Thus, the global Airline Inventory Network was designed. Its aim is to attack costly inventory inefficiencies in the airline industry.¹¹⁴

An example of the decreasing bargaining power of the aircraft manufacturers can be exemplified by a deal in 2002 being made between Boeing and Ryanair regarding the purchase of Boeings 737-800 aircraft series. Ryanair set up a Dutch auction between Boeing and its 737-800 and Airbus and its A320 aircraft in order to strike the best deal. It was further stated that the winner of the Dutch auction would get preferential status in future purchases as Ryanair aimed for a single-type aircraft fleet. Boeing won this auction and has also later received a new order from Ryanair, but although neither Ryanair nor Boeing has disclosed any official figures in this contract, suggestions that Boeing had been forced to give a 30% discount from the official list price was not denied.¹¹⁵ This contract was extended in 2005, where Ryanair has exercised its option for more aircraft while also making an order for more of the same Boeing 737-800 series. The terms of the contract also stipulates that the aircraft still to be delivered from the 2002 contract will be governed by the 2005 contract, giving Ryanair and even higher discount as the Boeing has agreed to apply discounts given to both the new order and to the 83 aircraft that are still to be delivered according to the 2002 contract.¹¹⁶ Also Winglets¹¹⁷ will be installed in the entire fleet, which should result in a 2-4% reduction in fuel consumption.¹¹⁸

¹¹² The Economist: *America flies to war*, October 7, 2004

¹¹³ U. Bingeli & L. Pompeo: *Hyped hopes for Europe's low-cost airlines*, The McKinsey Quarterly, No 4, 2004

¹¹⁴ www.boeing.com

¹¹⁵ Siobhán Creaton: *Ryanair – How a Small Irish Airline Conquered Europe*, Aurum Press Ltd, 2004

¹¹⁶ Details of this contract can be found on www.ryanair.com

¹¹⁷ Winglets are devices installed on the tip of the wings resulting in better aerodynamics, hence also less fuel consumption.

¹¹⁸ Goodbody Stockbrokers: *Boeing drives costs lower*, Feb 25, 2005

This example helps suggest that the bargaining power between the aircraft manufacturers and the airlines has tilted towards the latter recently.

6.2.2. Airports

The supplier role of the airports is affiliated with the aeronautical services for which they provide for the airlines.

To lower these aeronautical costs low fare carriers like Ryanair and easyJet have followed a strategy of developing routes to secondary and regional airports which also provides faster turnaround times, as already mentioned in chapter 4.

Low fare carriers also place different demands on airport facilities than the main scheduled network carriers do. For example, low fare airlines do not have the same requirement for business lounges, high level of check-in service, preference for airbridges and baggage transfer services. These facilities are required by the main network carriers that take up terminal space. In contrast low fare carriers are efficient at using gate space with short turnaround times and typically do not demand high levels of service within the terminal. This could also lead to longer queues at check-in depending on the airlines' willingness to invest in check-in and ground handling facilities. Also low fare carriers often insist on parking stands directly adjacent to the terminal, in order to increase their turnaround time efficiency, but do not wish to incur the expense of e.g. the use of airbridges.¹¹⁹

Airports are often not able to complement both business models. They have entirely different focus on the level of airport services and as they must often operate in the same environment, primary airports, that already have a large amount of traffic, often choose not to do business with the low-yield low fare airlines, so the move to secondary and regional airports by low fare airlines are caused by both a “push-and-pull” effect.

Contrary to the primary airports, secondary and regional airports in Europe are hardly ever congested. In fact approximately 200 airports in Europe can be classed as underutilised with less than 1 million passengers per annum and the majority are loss-making.¹²⁰

Airports have large fixed infrastructure costs and studies¹²¹ have demonstrated that unit costs decline significantly as traffic increases up to 1.5 million Work Load Units (WLU is defined as

¹¹⁹ Graham Francis, Ian Humphreys & Stephen Ison: *Airports` perspectives on the growth of low-cost airlines and the remodeling of the airport-airline relationship*, Tourism Management 25, 2004. p. 510-514

¹²⁰ J. Scheers: *Attracting investors to European regional airports. What are the prerequisites?*, International Airport review 5, 2001, p. 56-59

a passenger or 100 kg of freight) per annum and continue to fall until traffic reaches 3.0 million WLU's per annum. This also helps explain why a primary airport like Heathrow with passenger traffic of more than 63 million per annum can do without the low-yield business the low fare airlines can provide them. The study also showed that for airport facilities of small scale, the fixed costs of providing airport facilities and providing staff are high. It found that the average unit costs for airports of less than 300,000 WLU's was \$15 compared to the average unit cost of \$9.4 for airports between 300,000-2.5 million WLU's and average unit costs of \$8 for airports handling 2.5-25 million WLU's. Once the initial investment in airport facilities had been made, the marginal costs of accommodating extra traffic are very low because additional traffic will improve the utilisation of spare capacity for which airport management has already paid.

Therefore it is in the interest of both the low fare airlines and the secondary and regional airports to cooperate as the former can increase traffic for the latter, thereby decreasing average unit costs, and the latter can provide airport facilities that are more accommodating to the low-cost model with less congestion, lower fees and charges, and they often do not have extra services such as business lounges, for which the low fare airlines generally have no interest anyway. There are many examples of low fare airlines stimulating airport growth upon entering the market. The secondary airport Stansted saw a growth of 25.6% in 2000¹²² largely through Ryanair traffic and the regional airport Liverpool Airport saw an annual growth of 32% in 2002 largely driven by easyJet and Bmibaby (a low-fare subsidiary of British Midlands).¹²³

Typically a contract between airport and airline states that the airport provides its aeronautical services, and often also ground handling facilities, at relatively low fees and charges. The airline in turn is then obliged to bring in a certain amount of passengers/WLU's to the airport business.¹²⁴ This could sound like a win/win situation for both participants in the airport/airline relationship.

However, although marginal costs can be considered low because of spare airport capacity and that additional passengers will add little to terminal costs, marginal cost could be higher as the airports must add or alter the mix of retail shops to maximise the revenue generated by the

¹²¹ A. Graham: *Managing airports: An international perspective*, Oxford: Butterworth Heinemann, 2001

¹²² Airports Council International: *Airport Traffic Data 2000*, Airports council International, Geneva 2001

¹²³ www.nottinghamema.com

¹²⁴ Graham Francis, Ian Humpreys & Stephen Ison: *Airports `perspectives on the growth of low-cost airlines and the remodeling of the airport-airline relationship*, *Tourism Management* 25, 2004. p. 510-514.

increased passenger numbers as they must now focus more on non-aeronautical services to offset lower charges for aeronautical services and also other marginal costs such as manning more check-in counters to accommodate the increasing passenger levels if ground handling is also part of the airport/airline contract. For instance Hahn airport near Frankfurt had to spend €27 million to accommodate the more than tripling of passengers from 450.000 not 1.5 million that came when Ryanair started serving this airport although part of this investment was also spent on increasing capacity, so the amount could not be fully accredited to increased marginal costs.¹²⁵

With regards to contract issues airlines generally have a strong bargaining position because they can threaten to take their business elsewhere unless reductions in charges or other commercial incentives such as favourable ground handling service fees are granted by the airport. Commercial pressure on the airports also lead them to seek increasing passenger/WLU numbers in order to reach the critical mass for their facilities. This adds pressure on the airport management to sell off marginal capacity cheaply forcing airports to reconsider their strategy (towards e.g. generating revenue from non-aeronautical services away from the classic strategy on basing revenue on aeronautical revenue) with respect to their relationship with the airlines.¹²⁶

Airports putting a lot of emphasis on attracting a single airline also face higher risk exposure, because of lack of diversification as a footloose carrier such as Ryanair may shift to another airport if it finds that it is not accommodating to its needs such as it did when terminating operations at Rimini Airport, although it must also be considered that there are fixed cost upon entry, which are sunk, such as long-term leasing contracts with the airport and must therefore carefully evaluate the option of terminating operations before making this decision.¹²⁷ Hence, one may conclude that airports with a dominant single low fare carrier are subject to more risk and low bargaining power.

¹²⁵ David Gillen & Ashish Lall: *Competitive advantage of low-cost carriers: some implications for airports*, Journal of Air Transport Management 10, 2004, p. 41-50

¹²⁶ A. Graham: *Managing airports: An international perspective*, Oxford: Butterworth Heinemann, 2001,

¹²⁷ David Gillen & Ashish Lall: *Competitive advantage of low-cost carriers: some implications for airports*, Journal of Air Transport Management 10, 2004, p. 41-50

6.2.3. Summary of the bargaining power of suppliers

Overall the bargaining power of the industry suppliers is reasonably low and the recent economic downturn in the industry has helped decrease it along with more market liberalisation and competition. With regards to airports, primary airports still have more bargaining power than smaller airports as they have reached critical mass and are not as susceptible to contract demands like low airport fees and fees and charges, which particularly low fare airlines are likely to air, as secondary and regional airports, who have not yet reached critical mass.

With regards to the theoretical aspects in the Five Forces model said to influence the bargaining power of suppliers one may also conclude that the threat of forward integration in the airline industry is low, as it seems unlikely that neither aircraft manufacturers nor airports are likely to acquire or create an airline.

6.3 Threat of substitutes

6.3.1. Alternative modes of transportation

Very little research has been done on the impact of automobiles, buses and business/corporate aviation as an alternative mode of transport vis-à-vis scheduled air transport. Therefore I will only make a few general comments with regards to them.

6.3.1.1. Bus service

There is basically only one major bus service operator on a pan-European level that has scheduled routes in a European network and that is Eurolines. It is not one entity though, as it is comprised of 30 independent bus companies operating a network together.¹²⁸ Pan-European coach service is in my opinion only a substitute for air travel, when you travel short distances and have little concern as to the time consumption or when purchasing a pass and making many stops (travel a short distance numerous times). Senior management at leading European low fare airlines such as Ryanair have argued that airlines cannot compete with other modes of transport for journeys of less than approximately 400 km.¹²⁹ The product would target groups from the lower echelon of society such as students and shoestring travellers. The advantage is

¹²⁸ www.eurolines.com

¹²⁹ Thomas C. Lawton: *Cleared for Take-Off*. Ashgate Publishing Ltd, 2002

that one may choose to travel on the same day as ticket prices are usually flat through a season, unlike air travel where one may pay dearly for same day travel¹³⁰.

6.3.1.2. Automobiles

Regarding automobiles one must intuitively argue that the price of fuel is an important determinant of its role as a valid substitute for air travel. The lower the fuel price is for your automobile, the more likely you are to use it more, both for short- and long-distance travel. As one knows from the US the use of the automobile for long journeys across states is fairly common, but the price of fuel is also approximately 1/3 of the price in Europe, mainly due to higher taxes in the latter. A recent paper discussing the automobile as a substitute for rail or air travel also concludes that there is a group of potential passengers, that consider their automobile as an alternative mode of transport and make their decision considering the variable costs like fuel etc. of using the automobile.¹³¹ Given the high fuel prices in Europe, although higher fuel prices in the airline industry has also led to a surcharge there, is putting a limit on the automobile as a viable alternative for air transport in long-distance travel (more than 400 km as was mentioned earlier as the lower limit for feasible competition between airlines and alternative modes of transportation) combined with the longer time consumption of using the latter mode of transport. Only when car-pooling can it be viable on a cost basis.

6.3.1.4. Rail service

More research has been conducted with respect to rail service as a substitute mode of transportation with the introduction of the high-speed trains in Europe such as the TGV and Eurostar.

It can be argued¹³² that shorter average travel distances and competition from the high-speed train services will mean that air route density in Europe will not reach US levels, where the rail network is much less developed and has no high-speed trains apart from The Acela Express that runs between Boston and Washington D.C. in the densely populated Northeast Corridor. This service shares the problem of the Eurostar in the UK part of its network that the railtracks

¹³⁰ See Appendix 1 for a comparison of coach/air/train travel

¹³¹ Gernot Sieg: *Competition by low cost air carriers and price and quality strategies for long-distance passenger transport by rail*, Institut für Wirtschaftswissenschaften, Braunschweig, 2004

¹³² G. Burghouwt and J. Hakfoort: *The European aviation network 1990-98*, Air Transport Research Group, Amsterdam 2000

cannot support high-speed trains and must be modernised for the Eurostar to achieve the high-speed performance that the trains are capable of.¹³³

J.M. Feldman counterargues that the concern that high-speed rail service might actually replace some air traffic is not well founded. He states that although it is true that when the TGV high-speed train was introduced on the busy Paris-Lyon 400 km route, flights between the two cities dropped by 35% and air passenger traffic dropped an estimated 60-70%, few other air routes can actually be replaced by rail service. Almost $\frac{3}{4}$ of all passenger seats offered within Europe are on flights of distances greater than 400 kms and nearly 24% of the rest are on routes that offer fewer than 800 passenger (the minimum amount estimated to justify rail service), over water or on routes where there is already existing rail competition through high-speed or express services, leaving only 2-3% of Europe's air traffic potentially vulnerable to competition from high-speed rail services.¹³⁴ There are also areas in Europe where inter-modal competition is not viable due to geographic constraints such as the Alps (although this obstacle is being overcome by the construction of two tunnels linking Zurich-Milan and Bern-Milan scheduled for completion in 2015)¹³⁵ and the lesser developed areas in Eastern Europe, where it would take enormous investments in rail infrastructure to accommodate high-speed rail service. Also cross-border high-speed rail service is limited. The TGV and the German high-speed/express ICE only operate domestically leaving only the Thalys and Eurostar.

In an effort to determine whether high-speed rail service of Eurostar could move beyond its core business the relative short routes of London-Brussels and London-Paris, an analysis of four routes beyond Paris and three routes beyond Brussels indicates that, even after all high-speed rail extensions are complete (Channel Tunnel Rail Link, Brussels-Amsterdam, Brussels to Cologne), the journey by air is still quicker. This assumes that passengers require an extra 30 minutes to reach Stansted or Luton compared with central London for Eurostar, and need a further 45 minutes between arriving at their destination airport and reaching the city centre.¹³⁶

With respect to the difference in fares between rail travel and air travel, the former also does not have a competitive advantage in cross-border travel; only on a short route such as Frankfurt-Paris is the rail service competitive on parameters such as time of travel (as one must also consider travel time to/from the airport to the city center) and price with full service

¹³³ www.trainweb.org

¹³⁴ J. M. Feldman: *Winning strategies for airports – a look at developments in Europe*, Airline Business, Vol. 10, Issue 2, 2000

¹³⁵ Jyllands-Posten: *Under Alperne i ekspresfart*, Dec 14, 2004

¹³⁶ Adam Simmons: *No rail threat*, Vol. 18, Issue 7, 2002

airlines, whereas the LFA's have chosen not to service this route altogether as it is below the 400 km threshold set earlier in this section and is therefore probably deemed unprofitable.¹³⁷

Even assuming that leisure passengers will tolerate a longer journey time to avoid air/rail or air/bus interchanges, rail is unlikely to pose a major threat until leisure fares are adjusted to the new reality of low-cost airlines. Rail is effectively hampered by having international fares set by two or more national rail companies. It therefore cannot begin to compete successfully until a significantly more flexible tariff structure is developed and it moves away from the condition-laden system that currently prevails e.g. compulsory Saturday night stay and mandatory return ticket on their lowest fares as mentioned in Eurostar's Value-fare above and as Appendix 1 shows, one-way tickets on the Eurostar are actually more expensive than return tickets.

In domestic traffic rail service offer strong inter-modal competition in Europe, apart from the UK, where railways has offered less of a competitive challenge to airlines than for instance France's high-speed rail service¹³⁸.

In Germany, which is both geographically and population-wise the largest country in Europe, a study¹³⁹ has showed that that the air fares have remained marginally higher than rail fares and that low fare airlines such as Germanwings, Hapag-Lloyd Express and Gexx has a market share of less than 10% giving rise to the thought that rail services can compete in a domestic market, although Deutsche Bahn is receiving large government subsidies as are still most of Europe national rail companies and therefore does not operate strictly on market conditions. Summarising the arguments above it is not likely that rail service will have a serious impact on air travel in Europe in the near future, although future efforts of deregulation and innovation in the European rail industry might narrow the competitive gap. This gap is somewhat smaller when comparing high-speed rail travel with full-service airlines as the former may provide the same high service standards e.g. baggage handling and on-board meals, but when comparing with the low fare airlines the rail service is still not a serious contender as an alternative mode of travel as the former can still provide much cheaper and faster travel than the latter for journeys over the 400 km threshold.

¹³⁷ See Appendix 1 for a comparison of coach/air/train travel

¹³⁸ Thomas C. Lawton: *Cleared for Take-Off*. Ashgate Publishing Ltd, 2002

¹³⁹ Gernot Sieg: *Competition by low cost air carriers and price and quality strategies for long-distance passenger transport by rail*, Institut für Wirtschaftswissenschaften, Braunschweig, 2004

6.3.2. Videoconferencing

The increased use and developments of technological innovations such as videoconferencing may limit the need for face-to-face meetings, which would require air travel if these individuals are geographically far apart.

Earlier studies from the US on the impact of videoconferencing and other advanced telecommunications on air travel¹⁴⁰ showed that particularly within intra-company business some substitution already occurred and overall one-third of actual travel business respondents (who represented firms of all sizes) noted that telecommunications had taken the place of at least some air travel in their respective companies and there was a consensus that improved telecommunications equipment quality and lower transmission costs could result in increased substitution in the future. Another study in Canada supports the findings that videoconferencing could be seen as a potential substitution to air travel.¹⁴¹ Through a survey they concluded that 29.6% of the respondents (as in the previous study also business travellers) answered that their organisations used videoconferencing. These travelers then estimated the potential substitution rate with respect to travel motives and by weighing these substitution rates with respect to the number of trips reported for each motive a substitution rate of 4.1% was obtained for external motives (e.g. meeting customers) and 10.4% for internal motives (e.g. internal company meetings), concluding that the estimated long-term potential substitution rate of videoconferencing to approximately 14.5% given that 100% of the total population may use videoconferencing. At the time of the study the short term substitution rate was only $14.5\% \times 29.6\% = 4.3\%$, but the authors believe this number would rise as the technology became advanced and transmission costs fell in the future.

Studies analysing the impact of videoconferencing on air travel for the European market have not been found, but a recent study made on the Norwegian market helps to put the earlier studies in a more recent perspective as they were made in 1998 and this latest study was conducted in 2004.¹⁴² This concludes that there has not been much change since the studies of 1998. The substitution rate has been estimated to 2.5-3.5% much in line with the short-term findings of the Canadian study, considering also that Norway is much smaller than Canada,

¹⁴⁰ Alan R. Bender & Frederick J. Stephenson: *Contemporary issues affecting the demand for business air travel in the United States*, Journal of Air Transport Management, Vol. 4, 1998, p. 99-109

¹⁴¹ Jacques Roy & Pierre Filiatrault: *The impact of new business practices and information technologies on business air travel demand*, Journal of Air Transport Management, Vol. 4, 1998, p. 77-86

¹⁴² Jon Marting Denstadli: *Impacts of videoconferencing on business travel: the Norwegian experience*, Journal of Air Transport Management, Vol. 10, 2004, p. 371-376

diminishing the incentive for videoconferencing instead of air travel. So the long-term projections of increased substitution rates seem to have been too optimistic as to the future of videoconferencing although it is hard to compare these results, but as there have not been made any new research available neither in Canada nor in Europe, we must trust the findings that the substitution rate has not increased dramatically over time despite rapid technological progress in advanced telecommunications in this period. The author of the latest Norwegian study helps explain this by arguing, that travel and personal contact is still regarded as the most effective way of conducting business and the emphasis that people put on networking and social communication reduces the possibility of travel being substituted by videoconferencing.

Given that the use of videoconferencing is used primarily as a substitute by business travellers and does not affect the leisure and VFF travel segments as the purpose of their travels is to be physically present at the destination in question, it should be evident that low fare airlines will be less vulnerable to the potential of videoconferencing as the business travellers constitute a smaller segment of their passengers than they do with full service airlines. One could argue that VFF travel can be substituted by videoconferencing instead of social interaction but it is unlikely that people start substituting visiting friends and relatives with videoconferencing on a large scale, simply because social interaction is too important to us, but it may instead complement each other, so that we may supplement our social interaction with advanced telecommunications such as videoconferencing, webcam and instant messaging.

Summarising the threat of substitutes from alternative modes of transportation it may be regarded as relatively low from the viewpoint of the low fare airlines as their prices are still very competitive with other modes of transportation combined with the fact that air travel is the fastest mode of transportation over distances beyond 400 km. Even high-speed trains cannot make the journeys faster and are also much more expensive, although they could become a serious threat to full service airlines as the price gap is smaller; especially if they can streamline operations with more flexible pricing schemes and build effective cross border high-speed rail services, so they can become competitive on an international level as the TGV have shown it can on the domestic level in the Paris-Lyon route.

6.4. Bargaining power of buyers

Buyers have historically had low bargaining power in the airline industry, since customers purchasing flight tickets are neither concentrated nor do they generally purchase large quantities. Their single purchases from the industry do not represent a significant fraction of the amount offered and further is the threat of backward integration very low as customers are very unlikely to consider purchasing an airline.

Recent technological developments have changed this picture though. The rise of the Internet has increased the bargaining power of the consumer as it has made it easy for a potential buyer of a flight ticket to search for the cheapest available fare between dozens of airlines; either by visiting the airlines' websites individually or using price comparison sites such as Orbitz, Travelocity, MrJet or Priceline, where the latter has a concept of looking for a price set by the consumer, but not revealing the name of the airline until the flight is booked and paid. Only the date and points of travel are fixed. This protects the airline from being portrayed as dumping vacant seats and the consumer can actually test his/her own level of bargaining power as they may set a given price for the flight, but the price has no guarantee of being accepted.¹⁴³

These developments has made prices of air travel more transparent, and along with the liberalisations within this market over the last decade combined with the low switching costs for buyers in this market, has helped push down prices of air travel.

A study¹⁴⁴ has also concluded that intermediaries such as travel agents may get caught in the middle and squeezed out as the increased bargaining power of the buyers comes at the cost of the travel agent as they are actually doing the job themselves that travels agents used to do for them.

The emergence of low fare airlines has obviously encouraged this trend of increasing bargaining power as the consumers could also argue that the huge price gap between these airlines and the full service airlines could not be justified by the extra services provided, thus forcing the latter to also lower their fares in order to hold on to market share. This is possible because there are hardly any switching costs for the buyer in air travel between two given points.

¹⁴³ Details of the concept and the terms for booking can be found at their website: www.priceline.com

¹⁴⁴ Keith J. Mason & Richard Gray: *Short haul business travel in the European Union: a segmentation profile*, Journal of Air Transport Management, Vol. 2, No. 3, p. 197-205, 1995

6.5. Rivalry among existing firms

Rivalry among existing firms in this industry has increased over the last 15 years as market liberalisation has led to increased competition. The low fare airlines have been able to lower the prices of airfares through their business models focusing on price leadership forcing full service airlines to also lower their prices to avoid losing more market share.

Competitive rivalry in the European low fare industry can be split up in two parts:

- Rivalry between low fare airlines and full service airlines creating subsidiaries or other methods to compete with the prices offered by the former.
- Internal rivalry between low fare airlines

The issue of competition will not be explored more in-depth in this section as it will be analysed more comprehensively in the competition analysis later in this thesis.

7. Ryanair – a recipe for success in the LFA industry?

7.1. Brief history of Ryanair

The second-largest and most profitable of the European LFA's is Ryanair. It was established as an Irish regional carrier in 1985 and was having some very turbulent years with massive losses until Michael O'Leary took the helm as CEO in 1991 and re-established the airline as the first European carrier following the low fare strategy first implemented by Southwest Airlines and first used this strategy on a large scale when entering the Dublin-London market with success as mentioned in the previous section. It only operated on the Irish and UK markets until 1997, when it entered the Continental market with flights from Ireland and the UK and it has expanded ever since and now operates from 100 airports around Europe achieving aggressive passenger growth illustrated in the figure on the following page showing the development from 1995-2004.

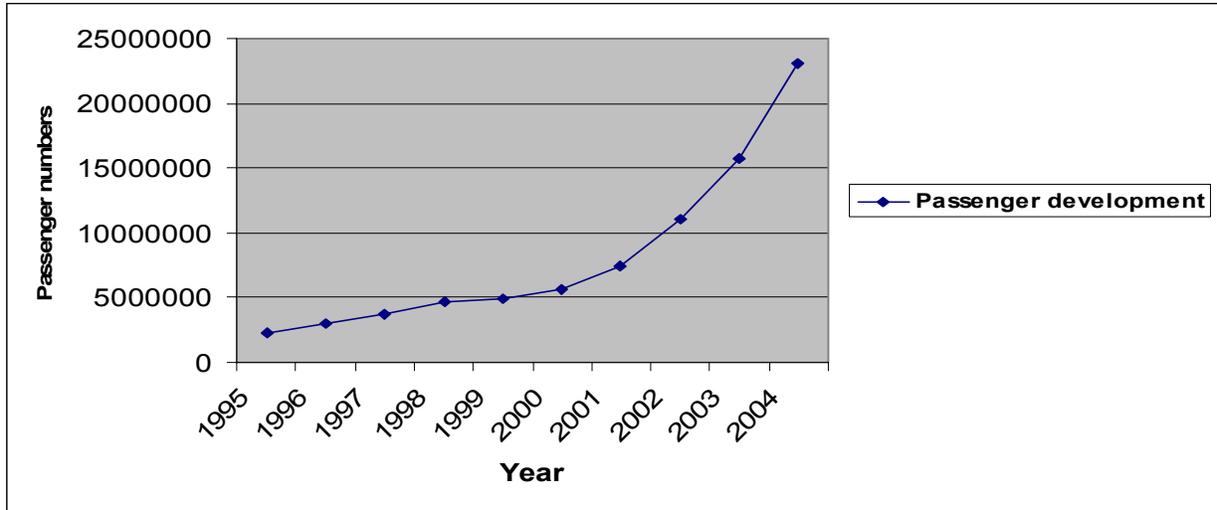


Figure 7.1: Passenger development from 1995-2004

7.2. Financial analysis

7.2.1. Risk management

The main financial risk factors for Ryanair are oil prices, foreign exchange and interest rate fluctuations.

With regards to foreign exchange Ryanair hedges forward its US\$ exposure (primarily from fuel and aircraft purchases) on a 12-month basis against € and £ and with respect to interest rate risk issues in relation to financing the aircraft contract with Boeing, Ryanair has entered a series of cross currency interest rate swaps and forward starting interest agreements resulting in locking away interest rates for this investment at app. 5%.¹⁴⁵

Ryanair's strategy for hedging by purchasing future contracts for oil has been to hedge 70-90% of the forecasted rolling annual gallons required to ensure that the future cost per gallon of fuel is locked and for the 4th quarter of the fiscal year 2005 they have hedged almost 100%, but for the fiscal year 2006 they remain unhedged.¹⁴⁶ This can be related to the discussion earlier on hedging in the PEST-analysis, where it was established that hedging is only a tool for decreasing volatility and not for fuel saving as the whole market will have to pay the higher prices if these prices stay high long enough as is the case for the current oil market. One can

¹⁴⁵ Stephen Furlong & Mark Hannon: *Low-cost airlines – Growing top and bottom lines*, Davy European Transport and Leisure, Feb 15th, 2005

¹⁴⁶ See 3rd quarter results, 2005, p. 1 at www.ryanair.com

therefore assume that Ryanair have assessed the current oil prices to be at a level that they would not purchase future contracts at the prices offered. This viewpoint is also underpinned by comments from CEO Michael O’Leary when announcing 3rd quarter, 2005 results¹⁴⁷: *We still see value in hedging to remove uncertainty from our business and will continue to review our hedging policy as forward oil prices return to more “normal levels.”*

Apart from this latest choice of leaving their fuel costs unhedged one can conclude that they follow a rather conservative policy of no speculative trading in financial instruments.

7.2.2. Key financial data

As shown above Ryanair has shown large growth in passenger numbers and below it will be shown how the other key financial data has developed in the fiscal years 1999-2004.¹⁴⁸

Fiscal year	Total revenue	Total operating cost	Profit after tax	Load factor ¹⁴⁹	Earnings per share ¹⁵⁰
1999	295759	227898	57471	73	34.88
2000	370137	286082	72518	73	21.48
2001	487405	373394	104483	77	29.26
2002	624050	461117	150374	81	20.32
2003	842508	579034	239398	84	31.24
2004	1074224	803196	206611	81	29.61

Table 7.1: Key financial data 1999-2004 as derived from Ryanair annual reports. All figures are in €’000

As is evident Ryanair has shown annual revenue growth every year and more importantly, they have shown a profit every year, which is unusual in the airline industry as we established in the PEST analysis that this industry is very dependent on the development of the world economy and its trade cycles, e.g. most airlines suffered heavy losses during the turbulent times after Sep 11, 2001.

¹⁴⁷ Ibid

¹⁴⁸ The Ryanair fiscal year runs from April 1-March 30. This time spans has been chosen as a 6-year period should be sufficient to show a pattern of development and also the annual reports on www.ryanair.com, where these data are derived from, only dates back to the fiscal year 1999. The annual report of the fiscal year 2005 has not yet been released.

¹⁴⁹ The load factor represents the number of passengers in percent as a proportion of the number of seats available for passengers. The figures here are based on so-called “earned seats”, disregarding whether the passengers shows up or not, as Ryanair passengers are not entitled to a change of flight or a refund as soon as the flight has departed.

¹⁵⁰ These figures are in absolute numbers in € and not in €’000. The lower earnings per share in 2000 and 2002 can be explained by the 2-1 share splits being carried out in these years.

Also, as is important for a market participant with a low-cost strategy, Ryanair has managed to continuously lower its operating costs expressed as a percentage of its operating revenue, effectively increasing profits, apart from the fiscal year 2004.

Below the relationship between revenues and costs is illustrated.

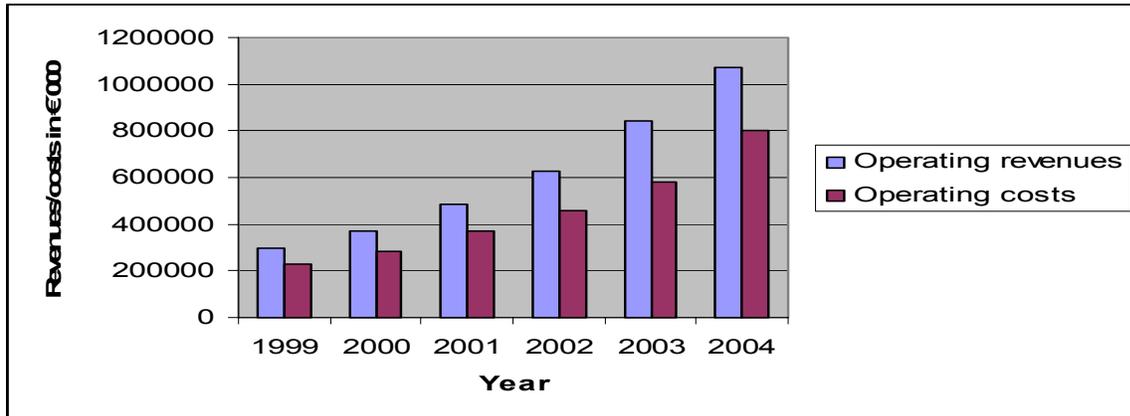


Figure 7.2: Relationship between Ryanair operating revenue and operating costs

. The reasons for the downturn in 2004 can be related to several factors.

- Ryanair has increased capacity dramatically in 2004, investing in opening up two more bases in Rome and Barcelona and adding 73 new routes to a total network of 150¹⁵¹.
- Continued sharp rise in oil prices.
- A 14% decline in average fares which relates to the expansion in the form of lower prices to attract new customers, e.g. through introductory campaign prices.

7.2.2.1. Profit margins

For the period of 1999-2004 the profit margins as a percentage of total revenue are illustrated on the following page.

¹⁵¹ Number of routes at the end of the fiscal year 2004, see annual report 2004, p.4 at www.ryanair.com

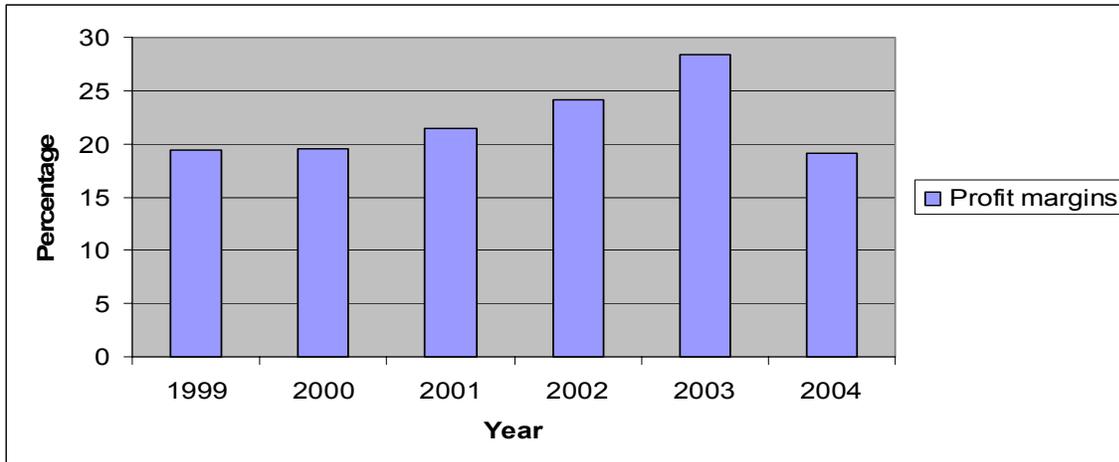


Figure 7.3: Ryanair profit margins after tax 1999-2004 as derived from key financial data shown earlier

Profit margins after tax follow the same path as the revenue/cost trend as they have risen continuously until 2004 and the rising costs, for which the reason where explained above, obviously also put the profit margin under pressure.

However, the profit margins shown by Ryanair, while lower due to cost pressure, can still be viewed as the envy of the European airline industry as profit margins have generally been very slim or unprofitable. For instance was the profit margin of easyJet in 2004 3,8% and SAS has not seen a profit since 2000.¹⁵² As per the 3rd quarter of the fiscal year 2005, Ryanair has been profitable for the 31 consecutive quarters¹⁵³ even through tumultuous times for the airline industry during Sept 11, SARS and excessively high oil prices, which is unique in Europe.

So, despite the slight slump of 2004, Ryanair still remains by far the most profitable airline in Europe measured in profit margins. Also, it seems as if profit margins have stabilised as the profit margin for the first half year the fiscal year 2005 is 27.8, compared to 28.3% for the same period in the previous year.

Behind the high profit margins is also the factor that Ryanair is legally based in Ireland, which has for years been creating an advantageous business environment e.g. with low company tax to attract international investment to the country. This has, of course, also benefited Ryanair that has a tax burden of only 9.5% in 2003 and 9.6% in 2004¹⁵⁴. Comparing to easyJet, legally

¹⁵² Stephen Furlong, David Jennings, Mark Hannon & Robert Gardinger: *Airline earnings – The impact of oil and yields*, Davy European Transport and Leisure, April 25th, 2005

¹⁵³ See Ryanair 3rd quarter results, 2005, p. 1 at www.ryanair.com

¹⁵⁴ Calculated based on figures from Ryanair annual reports 2003, 10 and 2004, p. 8 at www.ryanair.com

based in the UK, they had a tax burden of 37.1% and 33.9% respectively¹⁵⁵. This tax factor of course provides Ryanair with a competitive advantage towards its competitors as they can have lower pre-tax profits but still achieve higher post-tax profits due to the Irish tax regime.

7.2.2.2. Operating costs

Ryanair still managed to lower unit costs by 6% even though fuel prices reached near record highs.

Continuing the focus on its operating costs these costs will now be broken down in cost segments to further analyse how and where these costs have been minimised by illustrating below how the operating costs are distributed.

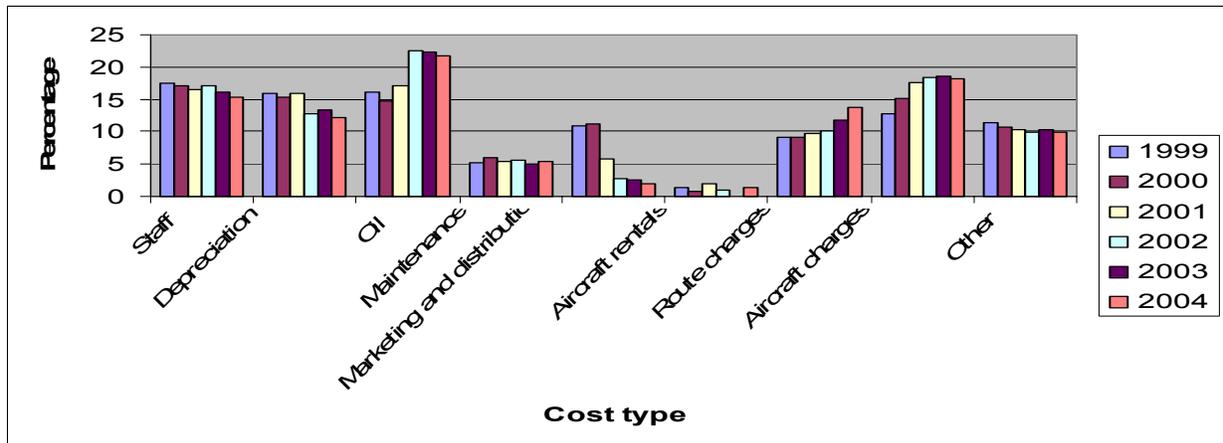


Figure 7.4: Breakdown of Ryanair operating costs, 1999-2004 as derived from Ryanair annual reports

The graph shows that Ryanair has been successful in consistently reducing proportional costs relating to staff and marketing and distribution, which has helped off-set the increased oil costs, which is a macroeconomic factor that Ryanair cannot avoid as even hedging oil future contracts will result in higher oil costs if the prices stay high long-term as earlier established, although the more fuel-efficient Boeing 737-800 and the Winglets that are to be mounted on these aircraft reduces the fuel burn rate.

But as most other airlines have chosen to add fuel surcharges to their ticket prices, Ryanair has instead chosen to absorb this cost and instead focusing on reducing costs internally through proportional reductions of costs in staff, marketing and distribution.

¹⁵⁵ Calculated from figures in easyJet annual reports 2003, p. 19 and 2004, p. 17 at www.easyjet.com

Although staff costs in absolute terms increased 7.5% in 2004 on a year-on-year basis this was off-set by the employee efficiency ratio, which is an industry record of 10049 passengers per employee, almost doubling efficiency from 2001, where the ratio was 5455 passengers per employee¹⁵⁶. As concluded in the PEST analysis, labour productivity is a very important component in airline profitability.

Ryanair has also been able to substantially reduce their proportional marketing and distribution costs and this has partially been achieved by totally abandoning the use of travel agents to eliminate commission to intermediaries and limit telephone sales. As of Nov 2004 their sales through their www.ryanair.com website stands at 97% and as this is by far the cheapest method of selling tickets, as the customer does everything from ordering to printing out the ticket, this helps reduce distribution costs. As they get so close to the 100% though the cost-reducing opportunities here are saturated as they are unlikely to completely abandon their call center reservation, where the costs are minimal as customers call toll numbers with surcharges, which probably can off-set the extra cost of this offline sales channel.

A threat of Ryanair's cost reducing effort with regard to marketing is the decision made by the Commission against Ryanair and Charleroi Airport, which was discussed in detail in the earlier PEST-analysis, as they set limits to the period in which airports could give marketing incentives to airlines for launching new routes. As Ryanair has engaged in a strategy of letting the airports pay for a substantial percentage of marketing costs, such legislative measures could prove to be costly for Ryanair.

7.2.2.3. Stock price

The development of the stock price reflects the market's expectation to the company's future earnings, but within the airline industry "*there is greater emphasis on the short-term trading focus, focusing on short-term variable factors such as quarterly profit margins and earnings per share, rather than long-term fundamental valuation metrics*"¹⁵⁷.

Hence, there was a noticeably drop of 29.6% in the share price in one day in January 27, 2004 from €6.75 to €4.75¹⁵⁸, when Ryanair issued a profit warning prior to releasing its annual report for 2004, announcing a drop in annual profits caused by the factors mentioned earlier in this

¹⁵⁶ See annual report 2004, p. 4 at www.ryanair.com

¹⁵⁷ Penelope Butcher, Menno Sanderse & Pablo Morales de Labra: *Ryanair change in earnings forecast – upgrades fuelled by better pricing environment*, Morgan Stanley Equity Research Europe, January 31, 2005

¹⁵⁸ Source: The Irish Stock Exchange at www.ise.ie

section, which meant that earning per share also dropped. It has since recovered as the market realised that this short-term setback may not affect long-term profitability and the stock currently stands at €5.67.¹⁵⁹

Investment house analysts at Morgan Stanley and Goodbody puts the price target for the stock for a 12-18 month time period to €7.00 and €7.30 respectively.¹⁶⁰

The highest risk factor to the stock is likely to be higher fuel costs as Ryanair remains unhedged. If the price per barrel remains around \$50 or higher this will affect profits and hence also put downward pressure on the stock price. This is a very real threat though. Merrill Lynch analysts do not expect the prices to drop below \$50 per barrel in 2005, mainly due to lack of investments in new oil wells and oil refineries.¹⁶¹

7.2.2.4. Load factor

The load factor has also been rising steadily apart from 2004, where it fell 2%. This drop is also related to the drastic increase in capacity mentioned earlier. Such an increase will lead to lower overall load factor, at least short-term, until these markets start to take off and grow. However, the load factor is still very high compared to the estimated European average load factor of approx. 66%.¹⁶² Also, the load factor has again increased to 87% for the first half year of the fiscal year 2005 compared to 83% for the same period in the previous year.

7.2.2.5. Break-even load factor

The achieved load factor is important but in itself it says nothing about the performance of an airline as one can achieve high load factors but if the yields are too low it can still produce an operating loss. Therefore one must use the break-even load factor¹⁶³ to measure the operating performance of an airline as it both operating costs and revenue. It is calculated as shown on the following page¹⁶⁴:

¹⁵⁹ As per May 6, 2005

¹⁶⁰ Penelope Butcher, Menno Sanderse & Pablo Morales de Labra: *Ryanair change in earnings forecast – upgrades fuelled by better pricing environment*, Morgan Stanley Equity Research Europe, January 31, 2005 & Joe Gill: *Ryanair – Boeing drives costs lower*, Goodbody Stockbrokers, February 25th, 2005

¹⁶¹ Børsen: *Olie over 50 dollar resten af året*, May 9, 2005

¹⁶² Thomas C. Lawton: *Cleared for Take-Off*, Ashgate Publishing Ltd, 2002

¹⁶³ In this thesis only the passenger break-even load factor will be calculated as most LFA's do not have cargo operations which is often calculated into the BELF with FSA's as an overall BELF (both cargo and passenger operations)

¹⁶⁴ Stephen Holloway: *Straight and Level: Practical Airline Economics*, Ashgate Publishing Ltd, 2003

Break-even load factor (BELF) = (total operating cost/available seat kilometres)/(operating revenue/revenue passenger kilometres)

Or in a simpler version: BELF = (cost per available seat kilometre/revenue per passenger kilometre) x 100

The break-even load factor for Ryanair is shown in the table below, where the load factor is also shown again for comparison.

Year	1999	2000	2001	2002	2003	2004
Load factor	73	73	77	81	84	81
Break-even load factor	58	54	57	58	57	62

Table 7.2: Ryanair break-even load factor as derived and calculated from Ryanair 20F statements 1999-2004

As is evident, Ryanair has been able to keep its break-even load factor substantially below the load factor. This gap has increased annually, apart from 2004 due to reasons already explored, which has allowed Ryanair more latitude in price-cutting against competitors and continued increased in profits in absolute numbers. Hence, although the airline may temporarily experience declining yields, they also achieve falling costs, keeping the break even load factor low – lower than its competitors¹⁶⁵ - creating profits consistently.

As an example of this competitive strength, the airline Go in 2001 tried to commence operations from Ryanair’s “home ground” at Dublin Airport with routes to Glasgow and Edinburgh with fares of £45 and £50 respectively. Ryanair immediately cut the prices to its existing route to Glasgow to £29 and opened a route to Edinburgh offering the same price. After four months Go had to surrender its routes as it did not have the same low cost base as Ryanair.¹⁶⁶ While they are undercutting a competitor’s price, Ryanair cannot be accused of using predatory pricing, as per the discussion in the industry analysis, as they are not selling below average total costs. They simply have very low total average costs.

This fact translates into a major competitive advantage, which can be considered sustainable if none of the competitors is able – or willing to – operate with such a low cost base.

¹⁶⁵ See appendix II for comparison

¹⁶⁶ Siobhán Creaton: *Ryanair – How a Small Irish Airline Conquered Europe*, Aurum Press Ltd, 2004

7.2.2.6. Ancillary revenues

Ancillary revenues are not related to the break-even load factor and are therefore not part of its calculation¹⁶⁷. Hence, ancillary revenue should generate additional profit, further increasing an airline's competitive advantage. Below the ratio between ancillary revenues and scheduled revenues from the total revenues is illustrated.

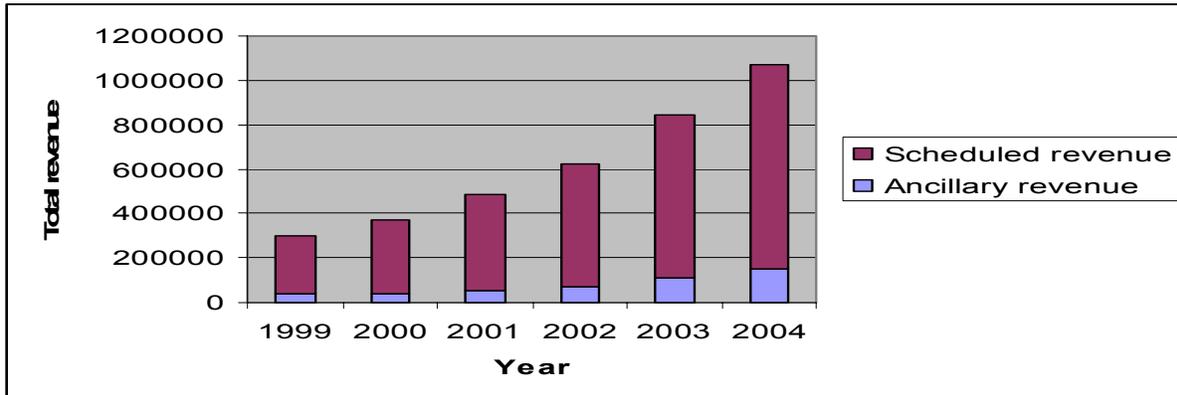


Figure 9.5: Ratio between ancillary revenues and scheduled revenues from total revenues as derived from Ryanair annual reports 1999-2004

It is only natural that a rise in scheduled revenue also brings a rise in ancillary revenues as the passenger base increases. However, Ryanair has managed to increase the ancillary revenues as a percentage of total revenues slightly from 12.5% in 1999 to 13.8% in 2004. From the latest half year report of 2005 this number has increased to 14.3%.

The ancillary revenue stream stems from several sources¹⁶⁸:

- Commission from the train and bus tickets sold to/from the various airports they serve.
- In-flight catering of food and drinks.
- Ryanair travel shop with various merchandise.
- Travel insurance.
- Ryanair creditcard issued in cooperation with MBNA Europe Bank Limited.
- Commission from hotel bookings through their website
- Commission from car rental through their websites

¹⁶⁷ Ancillary revenue can be defined as revenue generated by non-core activities, in the case of airlines non-scheduled revenue.

¹⁶⁸ Information found on www.ryanair.com

Another potential ancillary revenue stream, namely a fee-based in-flight entertainment system, is likely to be scrapped as the trial period showed disappointing results, but the trial period has been extended.¹⁶⁹

For an airline such as Ryanair, which operates with low yields per passenger, focusing instead on passenger volume, it is important to bring in extra profit through ancillary revenues to take advantage of this larger passenger base and in this way increase the yield per passenger.

7.3. Strategy and positioning

Ryanair has all the trademarks of an industry participant pursuing the generic strategy of cost leadership as per the discussion in the earlier section on the theoretical framework. This is supported by official statements on strategy from Ryanair, e.g. the following statement from their CEO Michael O’Leary¹⁷⁰: *“These quarterly results are a testimony to the strength of the Ryanair “lowest cost” model which – even during the most difficult trading conditions (including record fuel prices and intense competition) – delivers strong passenger growth and profits.”*

Based on the elements of the cost leadership strategy, it will now be shown how Ryanair has approached the implementation of this strategy in practice.

7.3.1. Efficient facilities

The element of the aggressive construction of efficient facilities has been done using various approaches to its airline operations aimed solely at reducing costs through increased operational efficiency.

Through their low turnaround times scheduling flights with 25-minute turnaround times, they achieve increased efficiency in aircraft utilisation, being able to generate more revenue from the aircraft as it is able to make more flights than airlines with higher turnaround times and due to higher levels of service, use of congested airports, lengthier baggage handling due to the hub-and-spoke system etc. full service airlines cannot achieve such low turnaround times.

¹⁶⁹ 3rd quarter results 2005, p. 2 at www.ryanair.com

¹⁷⁰ Ibid

Ryanair has consistently kept increasing their aircraft utilisation year-on-year fueling the strategy of aggressive construction of efficient facilities. The table below illustrates this development.

Year	2000	2001	2002	2003	2004
Average daily flight hour utilisation(hours)	6.37	6.82	7.28	8.02	8.37

Table 7.3: Aircraft utilisation as derived from Ryanair annual report 2004

The rigorous strategy of using only regional and secondary airports also fuels this efficiency as they nearly never suffer from congestion problems as they have abundant capacity to for traffic to proceed with little or no delays and the short distances between the gate and the terminal makes embarking and disembarking passengers and luggage faster. Further Ryanair’s dominating position in these airports makes it easier to negotiate preferable slot allocations, which suits Ryanair’s overall traffic network. In primary airports it might not be possible to receive slots, which matches Ryanair’s overall network and would therefore result in higher turnaround times, hence also lower aircraft utilisation.

This gradual increase in aircraft utilisation, its increasing employee per passenger ratio and proportionate decrease in sales and marketing costs as per the earlier financial analysis constitutes cost reductions from experience, as per the theoretical teachings from Porter, as Ryanair, in these areas, has learned to reduce costs and increase efficiency over time. The lower sales and marketing costs is also in line with the fact the Porter’s generic strategy on cost leadership requires cost minimisation is these areas. Its approach to the latter has been explained in the financial analysis.

7.3.2. Tight cost and overhead control

One of the ways that Ryanair operates with tight cost control is through its “no-frills” approach towards its customers. They strictly operate point-to-point travel with an absolute minimum of service. All food and drink on board is only offered at premium prices and even the menu card is attached to the ceiling above the passenger to save this cost. This cost consciousness is evident all through the organisation exemplified by an example from 1998 where Ryanair refused to pay the caterer for delivering ice, so while the catering company and Ryanair was in

a stand-off the passengers were left with no ice for their drinks and their CEO Michael O’Leary has underscored their no-frills concept with many comments such as: “No, we shouldn’t give you a bloody cup of coffee. We only charge €19 for the ticket”.¹⁷¹

Also customers are charged a fee of €2.50 per passenger per flight segment when purchasing by creditcard – although creditcard purchase is the only payment option¹⁷². The revenue can be calculated as follows:

The passenger number (23.1 million) x €2.50¹⁷³ = €57750000

It is not possible to calculate the pre-tax profit incurred from this revenue stream as it is not possible to retrieve information from Ryanair as to its transaction costs per booking and the average amount of flight segments purchased per booking (to calculate the amount of transactions), but it can be assumed that this is a major cash cow for the airline and these fees are not reflected in the listed prices (and neither are taxes and airport charges), so the consumer must be aware that – although still being cost leaders – the total ticket price is significantly higher than the prices listed on their website.

Also regarding baggage allowance, Ryanair has a limit of 15 kg per passenger, which is below the industry standard of 20 kg. They then allow more baggage, but an excess charge of €7 per kg is being levied, generating another engine for increased revenue.¹⁷⁴

Ryanair also generates other kinds of “covert” revenue. Ryanair generally made contracts with the airports they use, which are more favourable than other airlines due to the traffic they can bring to the airport. An example is Esbjerg Airport in Denmark where Ryanair reached an agreement of paying DKK 38 in airport tax per passenger instead of the list price of DKK 90.¹⁷⁵ But when one books a flight from Esbjerg and analyses the details of the term “taxes, fees and charges”¹⁷⁶, one will notice that one pays DKK 90 in airport tax although Ryanair only pays DKK 38, meaning that Ryanair skims off the rest as revenue. While the method might be morally questionable it is not illegal, although Danish Air Authorities have criticised the contract¹⁷⁷, but it helps to show that not all the low prices are what they seem.

¹⁷¹ Siobhán Creaton: *Ryanair – How a Small Irish Airline Conquered Europe*, Aurum Press Ltd, 2004

¹⁷² www.ryanair.com

¹⁷³ As Ryanair only operates a point-to-point service the passenger number equals the number of flight segments.

¹⁷⁴ www.ryanair.com

¹⁷⁵ Børsen: *Jyske lufthavne ligger i åben strid*, May 19, 2004

¹⁷⁶ www.ryanair.com

¹⁷⁷ Børsen: *EU på jagt efter Aarhus lufthavn*, Feb 10, 2005

In addition all tickets are non-refundable and the taxes and airport charges that the consumer pays are not refunded either although Ryanair only pay taxes and charges for passengers actually travelling on the flight, so this amount translates directly to a pre-tax profit as there are no additional costs related to a passenger that does not show up to its flights. The seat is empty but it is already paid for.

7.3.3. Avoidance of marginal customer accounts

The fact that Ryanair has refrained from setting up any frequent flyer programs or similar customer retainment schemes, although other LFA's like SWA and Air Berlin has schemes with similarity to the frequent flyer air miles programs used by full service airlines, may have resulted in losing a certain segment of customers for whom rewarding their loyalty is important, but awarding customers with free seats is costly and so is the administration of these schemes and as a cost leader, such schemes are not relevant as their objective is to attract customers by offering uniform low prices irrelevant of the loyalty of the single customer.

Offering air miles to customers to reward loyalty is in fact very costly. It has been calculated that the amount worldwide of unredeemed air miles is app. 8.5 trillion and when the miles can be worth between 2-9 cents towards purchasing an air ticket, the value of the air miles may be worth almost \$500 billion.¹⁷⁸ As it is estimated that 8% of airlines' revenue miles are free tickets bought with frequent flyer miles¹⁷⁹, one can then conclude that 8% of the load factor for airlines using these schemes are non-revenue generating seats, while the load factor generated by airlines like Ryanair, which does not use these schemes, is comprised 100% by fare-paying passengers.

7.3.4. Influence with regards to industry forces

7.3.4.1 Buyer power

The Ryanair price/cost leadership strategy is in line with Porter's claim that a low cost position defends against powerful buyers as they can only use their power to the level of the lowest price in the market. Although it was established in the industry analysis that the Internet has increased transparency in the market of air travel, if Ryanair manages to offer the cheapest air

¹⁷⁸ The Economist: *Frequent-flyer economics*, May 2, 2002

¹⁷⁹ The Economist: *Fly me to the moon*, May 2, 2002

fare, customers cannot use their buyer power to achieve lower prices. Compared to its nearest, largest and only LFA rival on a pan-European level, easyJet its 2004 average fare was €43.52 compared to easyJet’s €62.48.¹⁸⁰

7.3.4.2. Supplier power

A good example to support the generic strategy claiming that the cost leadership approach is a good protection against suppliers as the company is more flexible in fighting costs is the relationship Ryanair has with most of the airports, which they serve. As shown in the industry analysis it usually caters to underutilised airports below their break-even point, meaning that any business that Ryanair brings in puts the airports closer to its break-even point giving Ryanair a substantial negotiating advantage as they can play underutilised airports in close proximity out against each other, achieving the lowest costs possible.

7.3.4.3. Economies of scale

As shown in the industry analysis, traditional airline economics conclude that the airline industry does not provide substantial economies of scale. However, Ryanair has challenged this school of thought as they do not follow the traditional airline approach to focus on yield per seat, but instead keep increasing capacity and try to stimulate demand and achieve a higher load factor by offering these seats at relatively low prices and due to their low break-even load factor they can still maintain profitability, which is rare in the European airline industry at the moment. Below is shown how Ryanair the average passenger fare has decreased over time, but as shown in the financial analysis they have increased profits every year, apart from 2004 due to circumstances mentioned there.

Year	2000	2001	2002	2003	2004
Average fare	60.09	58.23	54.01	50.73	43.52

Table 7.4: Average passenger fare 2000-2004 in € as shown in the Ryanair 20F statements 2000-2004

As shown in the financial analysis, Ryanair has also achieved economies of scale through a rising passengers per employee ratio and that the rise in overall operating costs is off-set by the increase in passenger numbers.

¹⁸⁰ As derived from Ryanair 20F statement 2004, p. 8 and easyJet annual report 2004 p. 8

8. Competition analysis

8.1. Introduction

This section will focus on the competitive environment of Ryanair and it will be divided into 5 elements. First, the position of the European full service airlines as a whole in the European airline industry will be performed, as a break-down of every airline and its market position would be too complex as my objective is to show how these airlines in general perform vis-à-vis low fare airlines.

The position and performance of 3 selected low fare airlines will then be performed. There are now a wide array of LFA's including Eastern European start-ups such as SkyEurope and Wizz and LFA's focusing more on one country such as Air Berlin out of Germany. Analysing all these would be too comprehensive and I have therefore chosen to focus on easyJet, Sterling and Maersk Air as they have chosen three different approaches to the LFA business model, all different to the Ryanair approach and I have concluded that they are suitable for a comparable analysis of the implementation of the LFA business model in Europe.

Finally an overview of the total competitive environment will be performed.

8.2. The full service airline sector

8.2.1. Overview

The last 5 years in the European full service airline sector has been marked by huge losses suffered by most major carriers including the collapse of two national carriers, Sabena in 2001 and Swissair in 2002, although the latter was re-constructed through Swiss government investment into Swiss, but they continued to suffer huge losses and has in 2005 been acquired by Lufthansa, in large part because they hold valuable slots at their hub in Zurich, which is a major city for banking services and industrial giants such as Nestlé.¹⁸¹

¹⁸¹ Financial Times: *Lufthansa has almost completed takeover of Swiss*, June 6. 2005

This trend towards consolidation has been evident recently as Air France in 2004 acquired KLM in a similar way, meaning that the respective airlines still operate under their own names.¹⁸²

Prior to this, the full service airlines has focused on more loosely based cooperation through strategic airline alliances, the largest ones being Star Alliance and OneWorld¹⁸³. The motives concerning strategic alliances exist regarding international business relations. Cultural, political, competitive and economic differences among countries can create barriers for companies to enter foreign markets and by joining a strategic alliance these barriers can be overcome with fewer problems.¹⁸⁴ For airlines specifically alliances can also help reducing costs by exploiting synergy effects¹⁸⁵. These can include sharing ground facilities such as check-in counters and airport terminals and through code-sharing¹⁸⁶ to achieve critical mass on a flight that may otherwise not be lucrative. They also intend to serve as an incentive to customers as air miles can be both earned and redeemed on any airline in the alliance.

Although these alliances are still strong these recent developments indicate that many airlines are moving towards mergers resulting in increased consolidation in the industry.

This consolidation has been costly for Air France and Lufthansa though, as they took over KLM and Swiss, respectively, which were both heavily debted and have decided to only take over airlines that can show a profit and many of the large carriers in Europe including bellwethers such as SAS, Alitalia and Olympic Airways cannot live up to this criteria.¹⁸⁷

8.2.2. Strategies and positioning

The original generic strategy by the full service airlines is the one of differentiation as they want to offer exclusivity, particularly with Business and First Class passengers, and therefore they are compensated by a premium price for these seats. Before the emergence of the LFA's in Europe, one of the ways the airlines tried to gain a competitive advantage was by trying to convince consumers, that their product held more exclusivity than other airlines in term of

¹⁸² See www.airfrance.com and www.klm.com

¹⁸³ See www.staralliance.com and www.oneworld.com

¹⁸⁴ John D. Daniels & Lee H. Radebaugh a.o.: International Business – Environments and Operations, 10th edition, Pearson Higher Education, 2003

¹⁸⁵ Synergy effects can be defined as that the outcome of two or more companies collaborating is greater than the sum of the individual outcome.

¹⁸⁶ Code-sharing can be defined as two or more airlines make bookings on the same flight with their individual flight code. For instance Lufthansa and SAS may both book on an SAS aircraft from Copenhagen to Frankfurt as if it was their own, thereby increasing efficiency of the flight schedule as that they do not have to have two flights at the same.

¹⁸⁷ Borsen: *Konsolidering giver synergier for milliarder*, May 30, 2005

seating, food etc.¹⁸⁸ This was also the case for its Economy Class to a lesser degree and although the LFA's began to emerge in the late 1990's, the full service airlines still held on to premium prices, although the service gap between the LFA service and the Economy Class is obviously lower than in Business and First Class and the premium price gap – if too substantial - is therefore harder to defend.

This could possibly have given the LFA's the extra momentum as many consumers are likely to choose a cheaper airline for short-haul flights as they may not need a meal for a 2-hour flight or free drinks and the extra legroom if they are able to save an amount that to them has more value than these extra services provided.

Many full service airlines created their own subsidiaries to combat the threat of the low fare airlines such as British Airways launching Go and KLM launching Buzz. These were to operate independently from the parent company offering flights at rates comparable to the low fare industry. It seems though that the airlines had problems operating these two business models parallel to each other, perhaps fearing that the subsidiary might cannibalise on the parent company. Research on the reasons for the failure in operating these subsidiaries have not been published, but it is a fact that they have now both been sold off (Go to easyJet and Buzz to Ryanair)

Other full service airlines such as Aer Lingus, which is Ryanair's largest competitor on European short-haul routes out of Ireland, has adopted a more cost-conscious approach within their own airline entity and has introduced a "no-frills" concept with cheaper fares on their European routes and ceased serving free meals and drinks.¹⁸⁹

The problem is, of course, that they may become more cost-conscious but they have not streamlined their whole organisation to the goal of cost leadership as Ryanair¹⁹⁰, which is one of the reasons why the latter was able to fend off Aer Lingus in the 1990's when they began operating from Ireland.¹⁹¹ This is why the full service airlines, that start introducing low fares to compete with LFA's risk getting "stuck in the middle" as per Porter's generic strategies, since they are neither a differentiator nor a cost leader.

¹⁸⁸ Simon Calder: *No Frills – The Truth behind the low-Cost Revolution In The Skies*, Virgin Books Ltd., 2002

¹⁸⁹ www.aerlingus.com

¹⁹⁰ Peter Kangis & M. Dolores O'Reilly: *Strategies in a dynamic marketplace – A case study in the airline industry*, Journal of Business Research, Vol. 56, 2003, p. 105-111

¹⁹¹ Siobhán Creaton: *Ryanair – How a Small Irish Airline Conquered Europe*, Aurum Press Ltd, 2004 and see comparison in Appendix II

If an airline cannot be taken over by another airline, as per the fact that they must be profitable, or will not, they still have the option of following what Porter calls a focus strategy serving a narrow strategic niche market. Austrian Airlines has, according to their CEO Vagn Sørensen, adopted such a strategy, where they intend to serve Eastern- and Central Europe and the Middle East and he believes that Swiss has tried too much to aim globally instead of specialising, leading to their collapse and subsequent take-over by Lufthansa.¹⁹²

8.3. easyJet

8.3.1. Overview

easyJet is the second major European LFA and with regards to the passenger numbers, number of aircraft and revenue, it is larger than Ryanair¹⁹³ by a small margin, but they are not as successful in making a profit as Ryanair. In 2004 the former generated revenue worth €1627.4 million they only managed to make a profit of €31.5 million, while Ryanair made a €206.1 million profit from total revenue of €1074.2 million. This better ability in turning out a profit from their LFA operation is probably the reason why Ryanair's market capitalisation is almost 4 times higher than easyJet with the former valued at €4895.5 million and the latter being valued at €1291.9 million.¹⁹⁴

8.3.2. Strategy and positioning

While easyJet is an LFA, its cost-consciousness approach is not as aggressive as Ryanair. While they follow the LFA business model in its "no-frills" for customers, low distribution costs through ticketless Internet booking etc. it does generally not use underutilised secondary or regional airports like Ryanair, but instead often uses primary airports like Schiphol, Amsterdam and Kastrup, Copenhagen¹⁹⁵, which results in higher airports fees and higher turnaround times due to more congestion. So while they still follow a strategy of keeping it low-cost, they still cannot achieve the generic strategy of cost leadership as Ryanair through its aggressive focus on keeping costs low everywhere in its operation holds firmly on to this

¹⁹² Børsen: *Lufthansa får Swiss – men ikke Austrian*, March 23, 2005

¹⁹³ See appendix II

¹⁹⁴ Figures derived from the closing market value on June 10 at www.londonstockexchange.com for easyJet and the Irish Stock Exchange at www.ise.ie for Ryanair

¹⁹⁵ See route map on www.easyjet.com

leadership, while easyJet must aim for being second-best in the European airline industry at keeping costs low. This is also reflected in their financial reports where easyJet, while generating more revenue, has its profit margin under pressure compared to Ryanair. This would also suggest that while they actually had a higher passenger load factor in 2004 than Ryanair (84.5% compared to 81%), their break-even load factor is higher than that of Ryanair. Using the calculation shown in the financial analysis it can be shown that the break-even load factor for easyJet in the fiscal year 2004 was 77.74%¹⁹⁶ compared to Ryanair's 62%.

While easyJet is in itself an entity, it is also a part of the easyGroup holding company, where the owner Stelios Haji-Ioannou is a stakeholder in several companies with the easy name e.g. easyHotels, easyBus, easyCar etc. and of course the jewel in the company easyJet¹⁹⁷. Where Ryanair seems to create more revenue through the entire value chain by commission based cooperation with hotels and car rental companies etc. easyGroup are aiming to a sort of forward and backward integration as they would like customers to use easyGroup services, not just for the flight with easyJet, but for the entire duration of their journey. Pre-flight it could be easyMoney (creditcard and insurance) and easyBus (airport bus service), in-flight obviously easyJet, and post-flight also the two already mentioned complimented by other elements of the value chain represented by easyCar (car rental), easyHotel (accommodation) and easyCruise (sea holiday packages).

While the business model of several companies through the value chain of travelling delivering an integrated solution for the entire process of travel is interesting, because easyGroup can reap the entire revenues down the value chain as it is not commission based but integrated under the same umbrella, is also poses greater risks. While Ryanair may stand to lose a profit from ancillary revenue if a hotel or a car rental company suffers losses or goes out of business, the airline does not incur any losses as these are only affiliated with their operation and not an integrated part of it.

¹⁹⁶ Figures for the calculation were derived from the easyJet annual report 2004, p. 16

¹⁹⁷ www.easy.com

8.4. Sterling

8.4.1. Overview

Sterling was originally founded as Sterling Airways in 1962 as a charter airline in Denmark. It went bankrupt in 1993, but was re-structured in 1995 and was in 1999 fully owned by the Norwegian companies Ganger Rolf ASA and Bonheur ASA, which had previously had part ownership. From 2000 Sterling changed its strategy towards the LFA business model and has since expanded from its bases in Scandinavia. In 2005 it was bought by the Icelandic company Fons Eignarhaldsfelag, which also owns its alliance partner Iceland Express.¹⁹⁸ Although it has changed its strategy since its re-structuring in 1995 it has not yet posted a profit and its loss for the latest fiscal year 2004 was €16 million, which its CEO at the time blamed partly on the high oil prices and a lack of hedging against this.¹⁹⁹ This is an example of the earlier discussion of how important hedging can be as a tool for reducing risk exposure to oil price fluctuations.

8.4.2. Strategy and positioning

As the only LFA in my competition analysis Sterling has ventured into the same strategy as full service airlines with regard to establishing strategic alliances for the same reasons as mentioned earlier in the full service airline section. They have formed alliances with Norwegian based in Norway, Iceland Express as already mentioned, and Sky Europe, which is a Slovakian airline with bases in Bratislava, Budapest, Krakow and Warsaw.²⁰⁰ Although Sterling has been taken over by the owners of Iceland Express, they will still remain separate entities in the same way as Lufthansa/Swiss and Air France/KLM.

One must assume that the relative small domestic market of Scandinavia would not give Sterling alone enough of a passenger base to achieve critical mass in order to break even forcing them into alliances, unlike Ryanair and easyJet, which now have enough passenger volume in their markets and the financial strength to take over ailing LFA's, Buzz and Go respectively, instead of joining alliances with them.

Another different perspective in the LFA strategy, which has never been implemented by an LFA before is its plan of offering long-haul routes to the US on top of the short-haul routes

¹⁹⁸ www.sterlingticket.com

¹⁹⁹ Børsen: *Intet løfte om overskud*, Feb 16, 2005

²⁰⁰ www.norwegian.no, www.icelandexpress.com and www.skyeurope.com

already offered using the same strategy of offering low fares undercutting incumbent airlines by app. 50%.²⁰¹ Not even the founder of the LFA business model Southwest Airlines has ever ventured beyond its US domestic market into transatlantic routes.

There are also some real dangers for LFA's attempting to expand into long-haul routes. The cost advantages on short-haul, high traffic routes – low input costs and cheaper product and process design will weaken on long haul routes. In particular, the advantage gained through product or process design will lessen as passengers are likely to demand better in-flight service and more leg room etc., when they are on a longer flight and the benefits from fast turnarounds are not important as one aircraft is only likely to make one long-haul flight per day. So advantage through utilisation will be more difficult to sustain.²⁰²

Also other advantages from focusing on LFA short-haul travel will be lost such as cost advantages from operating a single-aircraft fleet as Sterling does now with its fleet consisting of 10 Boeing 737-800²⁰³. This aircraft does not have the range to reach long-haul destinations. Hence, Sterling must invest in a new type of aircraft and although these can be purchased relatively cheap as per our earlier discussion on supplier power, other elements such as higher maintenance and training costs due to a dual-aircraft fleet will reduce its cost advantage.

Therefore the strategy is risky and Sterling cannot expect to maintain its relative low cost base when implementing its long-haul routes and as they offer lower fares than its long-haul competitors it must achieve high load factors to be profitable on the routes.

Here one could also worry whether they will end up in a “caught in the middle” strategy, where they neither achieve cost leadership nor achieve a successful niche strategy if they cannot become profitable on neither their short-haul nor the future long-haul routes.

8.5. Maersk Air

8.5.1. Overview

Maersk Air is a wholly owned subsidiary of the Danish A.P. Moller Group. It started operations in 1970 with both scheduled and charter operations, of which both are still part of their operation. It operated as a full service airline until February 2004, where it changed its

²⁰¹ Børsen: *Sterling flyver til USA*, April 26, 2005

²⁰² Thomas I. Barkin et al: *Facing low-cost competitors: lessons from US airlines*, McKinsey Quarterly, no 4, p. 86-99, 1995

²⁰³ www.sterlingticket.com

strategy towards the LFA business model with its “fly as you like” concept, where it is possible to buy cheap seats with “no-frills”.²⁰⁴

The airline has not been able to earn a profit since 2000. Below is a table showing the development in its annual results.

Year	2000	2001	2002	2003	2004
Annual result	16.66	-41.81	-26.46	-83.56	-67.05

Table 8.1: Annual results from 2000-2004 in million € as derived from Maersk Air annual reports 2000-2004

8.5.2. Strategy and positioning

As mentioned its new strategy on its scheduled flights divides the cabin into 3 classes: Large, Medium and Small, where Large is the equivalent of a Business Class seat, Medium offers more leg-room than Small and Small is the equivalent of an LFA seat in general.²⁰⁵ As the seats are also in three different widths it makes their seat management per flight very inflexible.

The strategy concept is still too recent to be able to make any empirical study as to whether it is a success or a failure. But in order for the airline to become profitable, they must be able to cut costs more, but their concept makes it almost impossible to achieve cost leadership as they also want to cater to business passengers through their Large concept and this requires the cabin to cater to 3 different service segments, which is a cost as well as more staff as business passengers require more service as they pay more and Maersk Air must also fly to primary airports as secondary or regional airports are not attractive to customers with Business Class preferences. So to off-set these high costs they must attract a lot of high-yield Large (or Medium) passengers as low-yield Small passengers cannot cover their higher costs compared to a full-fledged LFA. As an example of its higher costs and/or lower efficiency, its employee to passenger ratio is 1184 passengers per employee²⁰⁶ in 2004 compared to Ryanair’s 10049 passengers per employee. Also on the distribution side they still operate with paper tickets instead of customers printing out their own ticket online as is customary with LFA’s nowadays and this also increases distribution costs.²⁰⁷ Unlike most LFA’s they also offer free tea/coffee and newspapers for all three classes on board, which also incurs a cost.

²⁰⁴ www.maersk-air.com

²⁰⁵ Ibid

²⁰⁶ As derived from its employee and passenger figures in Maersk Air annual report 2004

²⁰⁷ Own experience from travelling Copenhagen-Rome on Maersk Air on May 16, 2005

In my opinion Maersk Air is also likely to get “caught in the middle” as they can probably not attract enough business passengers as they here fight head on with the full service airlines and as their cost base is too high, they cannot compete with the LFA’s either. Its situation can be resembled with Debonair that went bankrupt in 1999. It also had multi-class seating with more legroom etc. to also attract business passenger offering it at lower fares than FSA competitors. The problem was that it was not sustainable from a cost perspective because the lower fares could not cover the higher operational costs brought on by a higher service level.²⁰⁸

Its owner the A.P. Moller group in 2004 had to inject €53.7 million into Maersk Air to strengthen its reserve fund and has had to do this over the last few years to cover its losses.²⁰⁹

A.P. Moller has recently sold out of business segments, which is not part of its core business – shipping²¹⁰ – and it is likely that they would also be interested in selling Maersk Air as it is not part of its core business and is a financial burden. There were rumors that Sterling and Maersk Air might merge before Sterling was sold off to consolidate the Scandinavian market, which is troubled by overcapacity, but after the sale of Sterling this is not relevant short-term.²¹¹

It is possible though that the owners of Sterling may purchase Maersk Air within 6-12 months as the problem with overcapacity still remains and the two airlines share many city-pairs in their networks²¹², so they would benefit from either code sharing or simply terminating some flights. It is unlikely though that A.P. Moller would allow the Maersk name to continue under a different ownership, so a takeover like Ryanair/Buzz or easyJet/Go is more likely than i.e. Lufthansa/Swiss as they will be able to buy its intangible assets such as airport slots and tangible assets like its aircraft and be run under the Sterling name.

8.6. Overview of the competitive environment

8.6.1. Competition between FSA’s and LFA’s

The effects of competition by the entry of LFA’s can be exemplified by the London-Dublin route which Ryanair entered in 1986. Since then demand has quadrupled pushing down the market share of former incumbents British Airways and Aer Lingus. Unfortunately the yield

²⁰⁸ Thomas C. Lawton: *Cleared for Take-Off – Structure and strategy in the low fare airline business*, Ashgate, 2001

²⁰⁹ Maersk Air annual report 2004

²¹⁰ Børsen: *Nye Mærsk-frasalg vil følge i kølvandet på Diva*, April 18, 2005

²¹¹ Børsen: *Salget af Sterling lægger pres på Maersk Air*, March 15, 2005

²¹² As per the route maps on www.sterlingticket.com and www.maersk-air.com i.e. Copenhagen-Barcelona and Copenhagen-Rome

level fell to one-fourth during the same period.²¹³ This suggests that the macroeconomic “willingness to pay” has remained stable. As soon as more efficient and cheaper supply entered the market, the demand was boosted. So clearly this rivalry has been intense as the decreasing yield level helps show and as for the FSA’s it has also resulted in declining market shares. It has even been suggested that the market share for the latter as whole may drop to 40-50% in Europe and stabilise within this range²¹⁴ so clearly rivalry from LFA’s pose a serious threat to the existence of many FSA’s.

As the appendix shows though, LFA’s only reach this formidable competitive advantage when using point-to-point service as the example above or the Frankfurt-Rome route. If a passenger has to make a transfer with an LFA it loses most of its price advantage and also results in (too) long travel times although one will notice the inflexible ticket policies of many FSA’s were a one-way ticket is often more expensive than a return ticket. But the extensive network operated by LFA’s like Ryanair and easyJet with hundreds of point-to-point routes gives them a good platform for creating sustainable competitive advantage.

8.6.2. Competition between LFA’s

The emergence of low fare airlines has given rise to more competition in the entire industry, but also given more rivalry within the LFA’s as an increasing number of entrants are trying to obtain a share of the market for low-price air travel. Ryanair was the first to offer low-priced travel, when opening its route²¹⁵ between London and Dublin, but particularly in the last 5 years many more have followed; usually with bases in certain regions such as Sterling and Maersk Air in Scandinavia, Air Berlin in Germany and airlines like Wizz and Sky Europe in Eastern Europe. However, only Ryanair and easyJet can be perceived as Pan-European LFA’s as they are the only ones with multiple-country bases across Continental Europe as well as the UK and Ireland, but if one compares their route network it is noticeable that only one very few routes, they are actually direct rivals (e.g.) London Stansted-Valencia. On a number of destinations they are indirect rivals e.g. London-Rome, but although they both fly to Ciampino

²¹³ Markus Franke: *Competition between network carriers and low-cost carriers – retreat battle of breakthrough to a new level of efficiency?*, Journal of Air Transport Management 10, 2004, p. 15-21

²¹⁴ Michael W. Tretheway: *Distortions of airline revenues: why the network airline business model is broken*, Journal of Air Transport Management 10, 2004, p. 3-14

²¹⁵ In my analysis of the Ryanair business model, I will do a more in-depth competition analysis of this market. In this section I will merely determine the level or rivalry.

airport in Rome, Ryanair flies from London Stansted and London Luton while easyJet flies from London Gatwick.²¹⁶

This shows that although there are an increasing number of participants on the LFA market, many of these operate from bases in certain regions of Europe instead of a Pan-European network, which limits direct rivalry between these airlines. The set-up of the route networks of the two largest LFA’s in Europe – Ryanair and easyJet – also seems to suggest, they may try to avoid direct rivalry. However, the appendix – although not covering their entire network – suggests that Ryanair is still the dominant price leader when examining their similar routes Frankfurt-Rome and Paris-Barcelona.

The table below shows the strategic approach of the four LFA’s analysed above and an overview of how they are positioned.

Criteria	Ryanair	easyJet	Sterling	Maersk Air
Simple product “no-frills”	Genuine no-frills offerings	Genuine no-frills offerings	Genuine no-frills offerings	3-class product More frills
Low operating costs	Sec. airports, homogeneous fleet, minimum costs	More major airports, hence lower aircraft utilisation and higher fees	More major airports, hence lower aircraft utilisation and higher fees	Only major airports, complex distribution, low passenger per employee ratio
Positioning	Aggressive low-cost, cost/price leader, pan-European	Low-cost except major airports, pan-European	Low-cost except major airports, bases in Scandinavia	Unclear with low fares and high costs. Maybe stuck in the middle. Based in DK

Table 8.1: Overview of the four LFA’s in the competition analysis

8.6.3. Competition between air, rail, bus and automobile transport

In this section the above alternatives that have been analysed in the industry analysis and competition analysis will be compared across 4 dimensions in the model on the next page²¹⁷.

²¹⁶These observations are made by comparing their route networks as published on their respective websites www.ryanair.com and www.easyjet.com

²¹⁷ The model is based on journeys of more than 400 km as we established earlier that this is the lower threshold of air travel as a viable option. The rankings of the price and travel time dimensions are drawn from Appendix I (apart from automobiles which is a subjective opinion) while rankings of the other two dimensions are drawn from earlier analysis in this thesis and a subjective assessment. As for FSA’s and trains the ranking is based on travel on Economy Class or 2nd Class, respectively

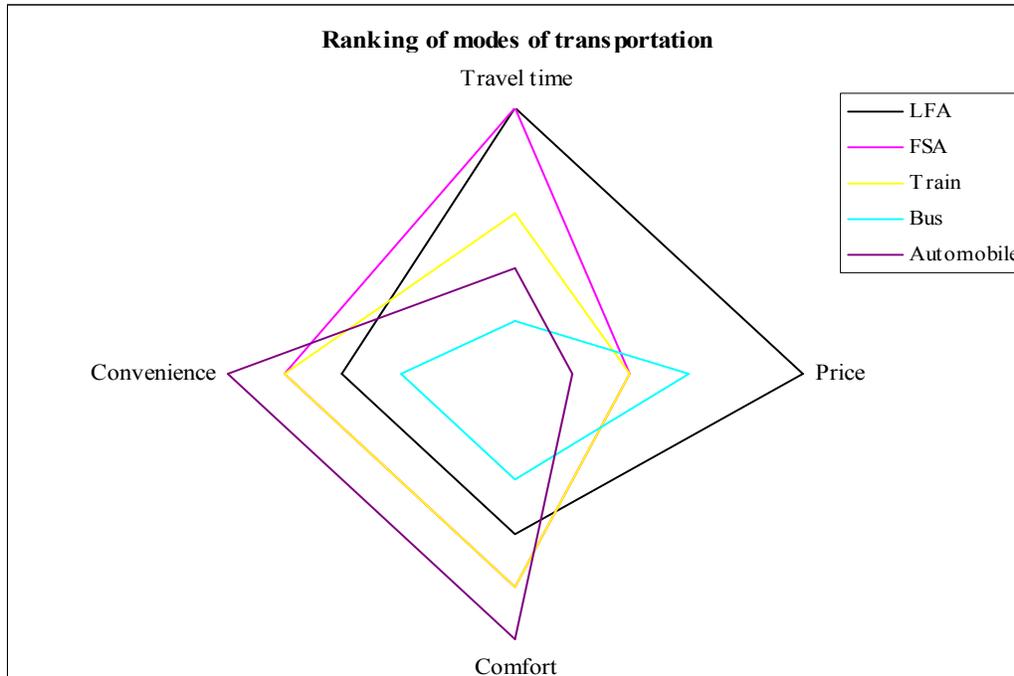


Figure 8.1: Ranking of alternative modes of transport

In the price dimension LFA's clearly have a competitive advantage compared to the other alternatives and scores the highest while automobiles are rated low due to high maintenance and fuel costs. The latter can be altered and giving a higher score when more people travel together.

When considering that this model attempts to show the competitive environment for journeys of more than 400 km, the airlines have a clear advantage regarding travel time, but when one approaches this threshold or goes below the advantage tilts towards train travel (when also considering travel time to/from the airport)²¹⁸.

Regarding convenience automobiles and trains rank the highest as it is a convenient way of travel. The automobile is usually parked outside the house and is readily available and the train station is often not far away either. LFA's are here ranked lower than FSA's as they often use secondary and provincial airports that are more inconvenient to reach and they generally do not offer the same high flight frequency as FSA's as they do not have to cater to the business segment as much as the latter and they require higher flight frequency to increase their flexibility.

²¹⁸ See for instance the routes Paris-London or Frankfurt-Paris in Appendix I

With regards to comfort automobiles rank the highest in my assessment as one has all the amenities you need, personalised for you if it is your own automobile. Busses rank the lowest followed by LFA's due to their narrow seat pitch. One could choose to rank them equal or busses higher according to ones own subjective view of comfort between busses and LFA's.

9. SWOT Analysis

The purpose of this analysis is to show the position of Ryanair and its future outlook within the theoretical framework of Strengths, Weaknesses, Opportunities and Threats. Although the main objective is to show the perspective of Ryanair this analysis will, through the fact that Ryanair is part of the European LFA industry, also reflect how the future outlook is for the entire industry as a whole; particularly the sections of opportunities and threats. Part of the findings are based on previous sub conclusions in the thesis but part of it will also cover subjects within the four themes mentioned, which have not previously been explored.

9.1. Strengths

In this section the focus will be on the internal resources, competences and core competences that Ryanair possesses as per the theory from the Resource-based School.

9.1.1. Resources

9.1.1.1. Large route network

Their extensive route network, particularly from its bases in London and Dublin but also ever increasing in Continental Europe, provides it with a resource not available to all its competitors as its customers can reach an airport close to almost any European destination at a price below the competition. Although it was established in the previous section that most of their cost advantage is lost when having to make a transfer on a point-to-point service like Ryanair, one may still obtain a cheaper ticket than competitors for longer journeys between smaller such as Aarhus-Palermo via London, where at least one transfer would also be needed on any other airline increasing costs (at least from more airport fees and taxes) and travel time.

9.1.1.2. Network of business partners

This network provides Ryanair with substantial ancillary revenue as shown in the financial analysis through the mainly commission based partnerships with hotels, hostels, car rentals etc. extending its value chain from just the traditional revenue stream of selling seats in an aircraft to generating revenue both up and down the value chain from pre-flight revenue (e.g. commission from airport buses) and post-flight (e.g. commission from car rentals).

9.1.1.3. Financial resources

As shown in the example of its price war with Go in 2001 they have the financial resources to force its competitors to retreat in price wars, which is a huge materialistic resource for an airline as it enables it to defend its routes – and conquer other promising city-pairs.

Its low break-even load factor is also proof of the fact that Ryanair can sustain a prolonged period of time with lower-than-average load factors and still remain profitable, where many other airlines will sustain losses.

9.1.1.4. Human resources

The efficiency of its human resources, reflected in employee to passenger ratio of 10049 passengers per employee is very competitive and not available to airlines in general²¹⁹.

9.1.2 Competences

9.1.1.1. Non-scheduled revenues

Ryanair has achieved to bring in substantial ancillary revenue and profits through low-cost ventures with various partners based on commission, which limits its risk exposure. Furthermore they have achieved it solely by offering these services online through their website, reducing the costs of providing the services to a minimum.

Other airlines are also beginning to offer these services (easyJet even as an integrated part of their overall holding company as explained earlier), but Ryanair still has a competence here, which other airlines have not yet been able to imitate with the same success.²²⁰

²¹⁹ See appendix II for comparison

9.1.1.2. Cost leadership

Ryanair's obvious competence is its ability to achieve cost leadership via its tireless efforts in cutting costs throughout the organisation.

These efforts conform to Porter's theory on achieving overall cost leadership as analysed in the Ryanair case study, but it also conforms with other theories.

With regards to its aim to achieve high market share and achieve economies of scale they also conform with the PIMS (Profit Impact on Market Strategy) findings from where it may be concluded that high volume and particularly high market share leads to lower overall costs and is hence, related to higher profitability.²²¹ Classical theory on the economies of scale per product specification²²² and production design and techniques²²³ as well as more recent theory on lowering cost of input through bulk purchasing and standardisation²²⁴ (e.g. homogenous fleet) and maximising capacity utilisation (e.g. low turnaround time) supports Ryanair's approach to cost leadership

9.1.3. Core competence

Although Ryanair has created a competence in generating ancillary revenue, which is higher than the industry in general and has therefore achieved a competitive advantage, I do not assess this as a sustainable competitive advantage, making it a core competence, as this competence can be duplicated with relative ease by its competitors as I cannot identify any significant barriers to entry. Ryanair has a certain first-mover advantage that puts it higher on the learning curve, but if the competition focuses on generating ancillary revenue as Ryanair has done, I assess it as very feasible to reach the same competence, although Ryanair has an advantage in its economies of scale and can therefore generate higher volume for its partners in their network.

²²⁰ This can be exemplified with the fact that SAS and Maersk Air in their annual reports for 2004 has not even specified non-scheduled revenues and easyJet in 2004 had non-scheduled revenues of 5.7% of total revenue compared to 13.8% for Ryanair (€61.7 mio compared to €148.7 mio in absolute numbers).

²²¹ R.D. Russel & B.T. Gale: *The PIMS principles*, Free Press, New York 1987

²²² Boston Consulting Group: *Perspectives on experience*, Boston Consulting Group, Boston, 1968

²²³ Robert. M. Grant: *Business strategies for adjusting to low-cost international competition in mature industries*, In J. McGee and H. Thomas Strategic Management Research: A European Perspective, John Wiley, 1986.

²²⁴ D. E. Hussey: *Strategic Management*, Pergamon, Oxford, 1994

Regarding its competence in achieving overall cost leadership it can be discussed whether this represents a core competence. It has been argued²²⁵ that Ryanair can be relatively easily duplicated as they seek cost/price leadership offering lower prices that shall translate in lower overall costs through economies of scale. This view is a little simplified in my opinion though. Ryanair's competitive advantage from its cost leadership derives largely from the fact that its activities fit and reinforce each other. The cost of one activity is lowered because of the performance of other activities in the production process (e.g. the lack of airbridges and external cleaning crew between flight leads to lower turnaround times which again leads to higher staff efficiency etc) and similarly, the value for the customer of one activity can be increased by other activities (e.g. Ryanair's cooperation with partners like hotels and car rental companies). This fit among activities substantially reduces costs or increases differentiation and this process helps to hinder duplication by creating a chain that is as strong as its strongest link.²²⁶ Both British Airways and KLM tried to duplicate this process through their subsidiaries Go and Buzz, respectively, as mentioned earlier but both failed.

It is obvious that the model does not hold any elements, patents or secrets that are impossible to replicate, so it does not fall under the term: *"A core competence can be so rare, that it cannot be neither purchased nor duplicated"* as explained in the earlier section of the theoretical framework. The key is to create a process of interlinking activities as above with a clear focus of keeping cost at a minimum but this requires the drive, discipline and desire to be the lowest cost and price provider. This desire is best illustrated by Ryanair's mission statement:

*"Ryanair will become Europe's most profitable, lowest cost scheduled airline by providing its low fares/no frills service in all markets in which it operates to the benefit of our passengers, people and shareholders"*²²⁷.

Other airlines may not be as determined e.g. the Maersk Air approach with 3 seating classes attempting to capture the entire market instead of aiming at a segment.

Therefore the conclusion is that Ryanair's core competence is its ability to live up to its mission statement while other airlines cannot, as this falls under the second leg of the theoretical approach towards the definition of a core competence as per the theoretical framework section:

²²⁵ David Gillen: *Competitive advantage of low-cost carriers: some implications for airports*, Journal of Air Transport Management, Vol 10, 2004, p. 41-50

²²⁶ Michael E. Porter: *"What is Strategy?"*, Harvard Business Review, Nov-Dec 1996, p. 61-78

²²⁷ Ryanair annual report 1999

“A core competence can be a rare competence, meaning that it requires at least a certain time period to duplicate”. It is assessed that Ryanair is currently in that position.

9.2. Weaknesses

9.2.1. The service factor

As duplication is not an imminent threat or weakness as analysed above, one must consider the scenario where customers may opt for other LFA's where the no-frills approach is not as bare bone as that of Ryanair. As mentioned earlier Southwest provides free soft drinks and snack boxes on its flights as does Air Berlin and as the market matures passengers may consider using an airline with a minimum of service. From its strategy of outsourcing customer related functions such as call centers and check-in desks and the fact that it cannot be contacted by neither phone (except for bookings) nor e-mail it is obvious that Ryanair puts little emphasis on customer service and although I realise this is a part of their production design that leads to lower costs one may consider options, which could create ancillary revenue to the company but also give customers increased service value. A possibility would be to give customers access to lounges, where this is possible as many of the airports services by Ryanair are secondary airports without these facilities. However, at the airports with lounges operated by e.g. Servisair, like Stansted and Dublin Airport customers could have the option at the time of booking to buy an optional access to this lounge at a fee. This would generate commission-based ancillary revenue for Ryanair and at the same time help terminate a potential weakness, while giving passengers wishing to “upgrade” their service level this option.

Also, Ryanair prides itself for being “no. 1 for fewest complaints”²²⁸ but this does not necessarily mean they have the most satisfied customers. The fact is that you cannot contact Ryanair's customer service by neither telephone, e-mail or letter correspondence. The only way of contacting them is by fax and therefore many customers may refrain from contacting the airline as it would be too much hassle for people not owning a fax and Ryanair also allow themselves 7 working days to respond. They do, however, have contact phone numbers for each airport they serve in case of lost baggage inquiries on arrival at the airports.

²²⁸ www.ryanair.com

9.2.2. Secondary and provincial airports

As it is an integral part of Ryanair's strategy to use these airports as they are cheaper and less congested it is also a double-edged sword as these airports are sometimes a significant distance from the destination many passengers aim for. Airports that on Ryanair's website are named Brussels/Charleroi, Stockholm/Skavsta and Paris/Beauvais refer to the former being the terminal destination for most travellers but the latter being the airport and passenger can expect bus travel times of 1-2 hours to reach their terminal destinations from these airports. Ryanair, of course, has concluded that their low fares off-set this inconvenience, but it is a drawback that is unfortunately not to be remedied if the fares must stay low, but some travellers might be discouraged by the slightly rural locations of these airports.

9.3. Opportunities

The full service airlines are under pressure from the low fare airlines. It has been estimated that the market share for the latter will grow from 5% of intra-European short haul travel in 2000 to 25% in 2010 while the market share of the former will go down from 75% in 2000 to 60% in 2010 with the remaining 15% travelling with charter carriers.²²⁹ Some scholars even suggest that their market share may drop to 40-50% in Europe and stabilise within this range²³⁰.

Other researchers, while still believing in huge growth potential for LFA's, doubt they will reach 25%, which is also the current market share for the more mature low fare airlines in the US, in 2010.²³¹ They base this on an assumption that their long-term growth "*will bump up against the ceiling of a European market in which the contestable low-cost segment is smaller than it is in the United States and well-established packaged-tour operators and national-flag carriers can block deeper inroads into the leisure- and business-travel segments. Europe's business market is more limited, too: fewer routes have enough traffic to sustain the frequency of low-cost departures that could attract business passengers.*"

One does not necessarily have to agree with this position. Below the opportunities facing both Ryanair and the LFA industry as a whole will be explored.

²²⁹ Dieter Schneiderbauer & Olivier Feinsilber: *Low cost airlines gaining momentum in Europe*, Mercer Management Group, 2002

²³⁰ Michael W. Tretheway: *Distortions of airline revenues: why the network airline business model is broken*, Journal of Air Transport Management 10, 2004, p. 3-14

²³¹ Urs Binggeli & Lucio Pompeo: *Hyped hopes for Europe's low-cost airlines*, McKinsey Quarterly, Issue 4, 2002, p. 87-98

9.3.1. Industry consolidation

As already described, there has been a tendency for consolidation in the full service airline business as airlines such as KLM and Swiss has been acquired by Air France and Lufthansa, respectively, and Sabena went bankrupt. This has also been the case within the European LFA industry where many airlines have gone bankrupt the last 5 years including Debon Air in UK, Color Air of Norway and Volare of Italy. Other like Sterling and Maersk Air are operating with significant losses. These airlines were/are operating from a limited geographic area and therefore they struggle with reaching critical mass. Something that Ryanair and easyJet have achieved due to their extensive network with bases placed strategically around European airports. The collapse of these airlines open opportunities for the larger airlines and Ryanair has not been reluctant in using the collapse of Volare to enter the Italian market by increasing its number of routes from Rome and opening a new base in Pisa, having a total of 3 bases in Italy (the last one being Milan) and has started to offer domestic flights in Italy.²³²

Regarding the low fare airlines, consolidation is also likely as the high oil prices keep margins low and in relation to this Ryanair CEO recently stated²³³: *“Only the lowest cost airlines like Southwest in the US and Ryanair in Europe will prosper over the medium term and we expect further casualties, cut backs and withdrawals among out loss-making competitors”*.

9.3.2. Introducing the “Eighth freedom of the air”

The interesting development with taking on domestic flights in Italy is that Ryanair, as the first LFA in Europe, started to invoke the eighth “Freedom of the air” as described in the PEST analysis “To take on revenue passengers and freight in a second state to a destination within the state”. Previously they only carried domestic passenger in the UK, where they are licensed. This obviously opens a new dimension of opportunities for LFA’s in countries which are geographically relatively large like Italy, Germany, France and Spain and in face of the domestic competition from Ryanair it is likely that the financial perils that Alitalia is already in will not diminish, so the consolidation process is not likely to cease anytime soon among both LFA’s and full service airlines.

²³² www.ryanair.com

²³³ Ryanair 3rd quarter, 2005 result as released on www.ryanair.com

9.3.3. Expansion

I also still see further opportunities for geographical expansion towards Eastern Europe for LFA's. This can also be seen by the emergence of two new LFA's based in Eastern Europe; Wizz Air which operates from bases in Budapest, Hungary and Katowice and Warsaw, Poland and Sky Europe, which is headquartered in Bratislava, Slovakia but also has bases in Budapest, Hungary and Cracow and Warsaw in Poland²³⁴. Looking at their base set-up they are more or less fighting head-to-head over the LFA dominance in Eastern Europe and in that game, I favour the latter as they have strong financial backing to endure a price war as they are financed by a financial consortium that includes ABN AMRO, the largest Dutch bank and one of the largest in Europe.²³⁵

Ryanair and easyJet has also eyed Eastern Europe as they have opened several routes to the Baltic's, Poland, the Czech republic, Slovakia and Hungary but has not yet opened bases there. If that happens they could be serious competition to Wizz Air and Sky Europe as they have a extensive network and strong financial muscle. Both Ryanair and easyJet may also use some of its first-mover advantage against LFA challengers as they have built a strong brand for low fare air travel.

There is also a largely untapped market in the rest of Eastern Europe including the Balkans, Romania and Bulgaria. Particularly the former has good potential as countries like Croatia and Slovenia are popular tourist attractions but also many expatriates from the Balkans live in Western Europe and cheap travel to their home countries could increase VFF air travel to these areas as Ryanair did when they started offering cheap air travel between Ireland and the UK. Research has shown that many customers are organising their holidays indendently booking flights at hotels on the Internet using LFA's, also putting charter carriers under pressure and holiday destinations in Bulgaria and Turkey have the same potential for LFA holiday travel as already seen in e.g. Spain and Italy.²³⁶ Also Turkey with its large and generally low-income expatriate population in Western Europe has a potential for LFA travel as it can also be reached with short-haul aircraft like the Boeing 737.

So I still see growth opportunities for the LFA industry in Europe and I do not see the ceiling mentioned in the article mentioned as being reached anytime soon. A recent survey by

²³⁴ See www.wizzair.com and www.skyeurope.com

²³⁵ Sunday Times: *European dogfight for budget airlines*, May 17, 2004

²³⁶ George Williams: *Will Europes' s charter carriers be replaced by "no-frills" scheduled airlines*, Journal of Air Transport Management 7, 2001, p. 277-286

Goldman Sachs seems to support this as it shows that the expected share for LFA's in the intra-European aircraft fleet is 19% in 2005 and 21% in 2006²³⁷ and as they generally have large load factors as shown earlier, a large share of the aircraft fleet (= seat capacity) this should also translate into a larger share of the passenger market.

9.4. Threats

9.4.1. Oil prices

Rising oil prices will obviously have an impact on the bottom line of all airlines, but LFA's will be hit harder if they do not introduce a fuel charge to off-set the rise, as their average fare price is lower, hence the will the fuel cost be a higher percentage of the total fare price than airlines with higher fares. As earlier stated Ryanair does not have fuel charges (as well as easyJet) but are instead trying to off-set the rising costs by luring customers from other airlines to their flights, increasing load factors as that will obviously lower the fuel cost per passenger on their aircraft.

9.4.2. EU legislation

9.4.2.1. Airport fees

As explained in the PEST analysis EU legislation may put an end to the policy of Ryanair of negotiating preferable contracts for their airline with publicly owned airports, which risks increasing its costs as the airports are no longer allowed to give marketing incentives for more than 5 years and other methods preferential treatment to attract airlines like Ryanair.

Also their negotiating position with airports may become weaker the more successful its operations from this airport becomes. This may sound odd, but when Ryanair comes to an underutilised airport it can more or less state its own terms, but as this airport grows with Ryanair's success it may attract other airlines and turn its relationship with Ryanair from a dependency relationship to an interdependency relationship as Ryanair also does not want to lose a profitable route. A good example of this is Stansted Airport. As Ryanair began its first operations there 15 years ago, they paid just £1 in airport fees as oppose to the £6 official fee,

²³⁷ Borsen: *Har Swiss vist SAS vejen?*, April 4, 2005

in turn committing themselves to bring in passengers²³⁸. Over the years the fees have gone up during re-negotiations although still being below official fees contractually, obliging Ryanair to bring in a certain amount of passengers. This win-win situation could become reality for some of the airports that become Ryanair bases as contracts are re-negotiated, but most must airports with just one route like Esbjerg or Aarhus must not expect Ryanair to soften their deal and be satisfied with the fact that Ryanair brings in revenue to get them closer to the break-even level. If they threaten to increase fees or if the EU or national governments demand it (as they are publicly owned) they are likely to cease operations in this region entirely or move to another airport as was done with Rimini Airport.²³⁹

9.4.2.2. Passenger rights

Community Regulation 261/2004 coming into force on February 17, 2005 giving passengers a right for food and lodging as well as compensation²⁴⁰ is also a threat to Ryanair in particular as they are adamant in their “no-frills” concept. An example was an incident at Beauvais airport outside Paris where a flight was cancelled and all Ryanair offered was army bed cots in an airport hangar with no food.²⁴¹ This policy will not be allowed with the new regulation.

9.4.3. Air disaster

An air disaster in itself is a catastrophe, but for a LFA it is also financially potentially worse than for a FSA, because there will always be more focus on a LFA as there will always be speculation that its cost-cutting approach also involves making “short-cuts” with regards to safety issues. Ryanair CEO has stated: “*There are two threats to us not achieving long term growth targets – an air accident, which could affect air peoples travel habits in short term and management indiscipline, where we all took our eyes off the ball*”²⁴². Safety and maintenance is also an area where Ryanair is not interested in compromising on costs as this could potentially put the airline out of business if an accident were to occur.²⁴³ Other LFA’s concur. Stelios, the founder of easyJet, has also stated: “*If you think safety is expensive, try an accident*”.²⁴⁴

²³⁸ Siobhán Creaton: *How a Small Irish Airline Conquered Europe*, Aurum Press, 2004

²³⁹ As per the Airport section in the industry analysis.

²⁴⁰ As per the section on EU passenger rights in the PEST analysis

²⁴¹ Community Regulation 261/2004 coming into force on February 17, 2005

²⁴² R. P. Costa, S. D. Harned & J. T. Lundquist: *Rethinking the aviation industry*”, The McKinsey Quarterly, No. 2, 2002

²⁴³ Siobhán Creaton: *How a Small Irish Airline Conquered Europe*, Aurum Press, 2004

²⁴⁴ Ibid

10. Conclusion

The overall principles behind the LFA business model are low operational costs and high aircraft utilisation.

The former is reflected in the use of cheaper secondary and regional airports with strict point-to-point service to eliminate the cost of transferring passengers and being able to operate each city-pair based on seat demand only as they have no responsibility for high frequency to accommodate passengers waiting for a connecting flight. They also achieve low distribution costs as they have a high rate of Internet bookings, where the customer generally prints out the ticket themselves, which is the cheapest distribution method as the customer basically does all the work. Finally, their "no-frills" approach with low levels of customer service helps lower operational costs as well as a homogeneous fleet that keeps maintenance and training costs lower.

The high aircraft utilisation is achieved through low turnaround times of as low as 25 minutes, partly also achieved by using the above mentioned airports as they are also less congested but also their efficient disembarkment and embarkment procedures for passengers helps achieving these low turnaround times which means the aircraft can perform more daily flights. Finally higher seat density also increases aircraft utilisation.

Several factors in the macroenvironment has influenced the emergence of the LFA's in Europe. Firstly, the European airline industry has been liberalised over the last decade through a series of pan-European legislative measures taken by the EU to strengthen competition.

This includes the adoption of the eight "Freedoms of the air" through the three stages of liberalising the European airline industry but also the EU has laid down strict control on state aid to discourage governments from supporting national flag carriers with state subsidies.

In order to ease entrants for new airlines the EU has also introduced legislation regulating the allocation of airport slots in the EU in order to facilitate competition and encourage entrance into the EU market by removing the monopoly the national airlines held on the best slots and instead allocate them in a neutral, transparent and non-discriminatory manner and according to studies European airlines have generally been satisfied with the implementation of this regulation.

The EU has also eased market entry by issuing regulations and court rulings which takes a strict stand on the use of predatory pricing in order to prevent industry incumbents from using this method to curb competition easing access for LFA's entering a market without the risk of predatory pricing by a financially stronger incumbent.

As there is a two-to-one relation between demand for air travel and world GDP and economic downturn has put pressure on particularly full service airlines combined with other events with worldwide effects such as the Sep. 11 attacks. LFA's have often thrived during these tumultuous times as the demand for air travel is still there but during economic downturns travellers are more likely to choose cheaper ways of air travel which they can offer and therefore airlines like Ryanair did well, even during the 4th quarter of 2001 where most airlines were in peril with plummeting passenger numbers.

As most airlines were in financial perils there was only little demand for aircraft purchases, which meant that low fare airlines such as Ryanair, which were successful and wanted to increase capacity could make lucrative deals with aircraft manufacturers, which were only too eager to sign contracts for producing new aircraft.

Secondary and regional airports have also been only too eager to attract more business to cover their high fixed costs, as accomodating more traffic can be done at very low marginal costs, and have been willing to both give incentives such as marketing contributions to LFA's like Ryanair and as well as giving discounts on their airport charges. This has helped the airlines operating out of these airports to keep their costs low and also given them a good bargaining position as the airports can accomodate more passengers with low marginal costs per extra passenger until a certain ceiling with very low marginal costs but must in order to cover its fixed costs give these airlines preferential treatment to attract this extra revenue.

Within its macroenvironment it has been shown that there are also no alternative mode of transport that can substitute air travel in the dimensions of travel time and price for distances of more than 400 km and while travel time is the same comparing LFA's and FSA's, the former offers significantly lower prices than the latter. Alos it is not assessed that videoconferencing can be a significant substitute for low fare airlines as it cannot substitute social and psysical interaction but it can supplement it. The potential for substitution is greater regarding FSA's as videoconferencing is a viable option for business meetings as social interaction is of less

importance in the business segment than the leisure or VFF segment and the former are typically key customers for FSA's.

Finally, the Internet has had a significant influence on the emergence of LFA's as it has lowered their distribution costs but more importantly; it has also given more transparent prices as a consumer can now within seconds search for the cheapest flight at home without at intermediaries like travel agents and this transparency has attracted more passengers to the low fare airlines as they often offers the cheapest travel option.

Ryanair's strategic approach to implementing the LFA business model has been a strict focus on achieving cost leadership by keeping costs to a minimum everywhere in the organisation and its operations. They have a minimum of customer service and its point-to-point service is strictly "no-frills"

Ryanair's core competence is simply its ability to live up to its mission statement: *"Ryanair will become Europe's most profitable, lowest cost scheduled airline by providing its low fares/no frills service in all markets in which it operates to the benefit of our passengers, people and shareholders"*. It sounds simple but other airlines have not been able to fulfill a similar mission statement.

The weakness of Ryanair's strategic approach is basically born out of its strength, namely its strict cost focus which also leads to an aggressive "no-frills" approach, not only in-flight but also with the use of often far-away secondary/regional airports and low customer service, which may deter some travellers from using Ryanair.

This thesis assesses that the two existing pan-European LFA's will grow as consolidation in the airline industry continues. Particularly invoking "the eighth freedom" will open new opportunities for these pan-European LFA's as they can start providing cheap point-to-point domestic service to geographically large countries putting competitive pressure on national airlines domestic market. These two airlines have gained so much first-mover advantage that it is unlikely that we will see a third pan-European LFA as market entrance may be difficult as both easyJet, and Ryanair in particular as earlier shown with the Go example, can win a price war without being accused of predatory pricing as they have such a low cost base that they can sell tickets at very low prices and still make a profit due to their low break-even load factor.

There should also be room for smaller regional LFA's, but it is unlikely that two or more LFA's can survive in the same region long-term as it will be hard to reach critical mass. For

instance Scandinavia has Sterling, Maersk Air and Fly Nordic and consolidation in this market is likely.

One can also expect this consolidation to continue as the oil prices stay high as both FSA's and LFA's will struggle as higher oil prices puts their profit margins under more pressure and the airlines, which maintain the lowest costs will survive while other airlines with higher costs are likely to become victims of these sustained high oil prices and collapse.

It can be concluded that in order to be a successful low fare airline, it is also necessary to be a low-cost airline because in order to offer lower fares than the competition one must also have lower operational costs for it to be profitable. This goes in tandem with maximising utilisation of aircraft capacity as one needs to have high load factors in order for off-set the lower fares, thereby achieving economies of scale.

Ryanair has proved it to be successful showing a profit for 31 consecutive quarters while other LFA's like Maersk Air will not show a profit unless they choose a focused strategy of being either a low fare airline and trimming its organisation for also being cost effective or being an FSA where higher costs can be tolerated when attracting high-yielding passengers such as customers travelling Business. One cannot have it both ways.

Also easyJet with its "softer" approach to the low-cost concept compared to the bare bone approach of Ryanair i.e. by using primary airports cannot sustain the same profit margins as Ryanair due to its more expensive cost structure and as its average fare is almost 50% higher than that of Ryanair it cannot compete on price leadership either, but it will still attract a large market segment as they rarely operate on similar routes and often fly into primary airports, which attracts more business passengers while still adhering to the LFA strategy offering lower fares than the competing FSA's as they are still low-cost and "no-frills".

It will be difficult for the FSA's to duplicate these lower fares as their organisations are still not trimmed to low-cost as was seen with Go from BA and Buzz from KLM, which were both sold off and the approach taken by others like Aer Lingus is also dangerous as they are challenging the LFA's on their home turf offering low fares without an organisational structure to support the low costs needed to compete with them.

Overall this thesis expects the LFA's to increase their market share and reach the 25% market share of short-haul traffic in Europe by 2010 as projected by some scholars as there is still a large growth potential, both in Western Europe but also in Eastern Europe and Turkey.

Threats to the growth could be the new EU legislation increasing passenger remuneration for delayed or cancelled flights as it affects the LFA's disproportionately as the remuneration fee is flat and their fares are lower making the fee a larger percentage of the total fare.

EU legislation restricting airports' rights to give preferential treatment to certain airlines in order to increase passenger volume could also affect passenger numbers as the increased cost for the airlines, particularly Ryanair which to the largest extent uses the secondary and regional airport with low passenger volume offering these incentives, could reflect in higher fares to offset this cost making this travel option less desirable.

An air disaster is a real threat to the growth of LFA's as this could give passengers the perception that their low-cost approach also involves safety issues and therefore LFA's are focused on safety as this is vital to their survival as an air disaster could potentially mean a loss of a large number of passengers and potential bankruptcy. It is also likely that other LFA's might suffer at least short-term as there may be an anxiety about using LFA's due to safety concerns, so it is beneficial for the entire LFA industry to avoid any safety issues.

The growth rate of the LFA's is also influenced by macroeconomic factors. If a recession in Europe sets in, their market share should increase, hence the earlier macroeconomic analysis that shows a 2-1 correlation between demand for air travel and the world economy but as full service airlines are harder hit by economic recessions as they rely heavier on Business and First Class passengers this is likely to affect LFA market share positively. Vice versa an economic boom is likely to affect the LFA market share negatively as business (and leisure) passengers may choose to pay more and travel with a full service airline.

However, even an economic boom cannot stop the LFA's as they can provide cheap "no-frills" point-to-point travel, which will attract a large market segment.

11. Epilogue

As mentioned in the limitation this final section will mention the important developments in the European low fare airline industry, which have happened after the June 15 deadline set for developments to be included in this thesis.

Ryanair has chosen no longer to stay unhedged in the fuel market and are now only unhedged in August while being 90% hedged in September at \$57 per barrel and 90% from October 2005-March 2006 at \$47 per barrel²⁴⁵. This means that Ryanair has returned to its conservative policy of not using financial instruments for speculative trading and with the current oil prices being at \$66.25²⁴⁶.

Ryanair has also surpassed Lufthansa to become the largest European airline based on market capitalisation valued at €5.03 bn²⁴⁷ and in August 2005 Ryanair's passenger numbers for the first time surpassed that of British Airways underlining its growth.²⁴⁸

Finally, the owner of Sterling and Iceland Express, Fons Eignarhaldsfelag, has also decided to acquire Maersk Air. This thesis expected this to happen eventually but it was expected to happen within 6-12 months and not already as Fons Eignarhaldsfelag had only recently acquired Sterling and the thought was that they would spend more time in its turnaround of Sterling in an effort to make it profitable before taking on the task of merging these two airlines, but they must have reasoned that the sales offer from A. P. Moller was too good to pass up on while also giving them more control in reducing the overcapacity in the Scandinavian market. The terms of the contract have also been favourable for the Sterling owners. While the details of the agreement is secret, sources²⁴⁹ say that A.P. Moller had to inject another €40 million into the airline and offer a lucrative leasing agreement (Sterling does not want to purchase the aircraft) for Sterling to take over the company. The task ahead will now be to merge these two airlines and company cultures that were once fierce competitors and this may be a challenge.

²⁴⁵ Ryanair 1st quarter results, 2006

²⁴⁶ www.bloomberg.com at August 26, 2005

²⁴⁷ Børsen: *Ryanair er Europas lufthavskæmpe*, August 8, 2005

²⁴⁸ Jyllandsposten: *Ryanair overhaler British Airways*, Sep. 6, 2005

²⁴⁹ Børsen: *Mærsk sender flere penge til luftfart*, July 7, 2005

13. Summary

The research problem in this thesis evolves around the European low fare airline industry and its outlook for the future. Based on a theoretical framework that starts off at the macroenvironmental level analysing the external environment regarding the European airline industry the thesis will move on towards microenvironmental aspects when analysing particularly the low fare airlines with focus on Ryanair.

The overall aim of this thesis is to provide and assess the range of strategic options available for airlines implementing the low fare airline business model after having analysed both the macro- and micro environment and assess the outlook for the European low fare airline industry.

The theoretical framework of this thesis begins by defining the concepts of strategy and competitive advantage as these issues are at the core of the aim of this thesis; namely to establish the strategic position the low fare airline business model holds in Europe.

First, the thesis introduces the concept of the low fare airline business model and the more traditional full service airline business model, which will provide an understanding of the different strategic approaches

Afterwards the thesis commences with an analysis at the macroenvironmental level of the European airline industry, which also has an impact on the low fare airlines. For the purpose of this analysis the framework of the PEST-analysis (political-legal, Economic, socio-cultural and technological) and therefore these four elements will be the cornerstones of this chapter.

The next step of the framework moves one step down towards the microenvironmental level by introducing the Porter's Five Forces model, which is a tool for an industry analysis.

A Ryanair case study is then performed. This consists of a financial and strategic analysis of Ryanair, which has chosen to implement the low fare airline business model. Porter's generic strategies will be introduced, which will help us understand which generic strategy Ryanair has used and the tools they use to achieve this strategy.

Afterwards a competition analysis shows the competitive environment of the European airline industry and the strategic approaches other FSA's and LFA's are using. The thesis then continues by using the SWOT-model analysing the Strengths, Weaknesses, Opportunities and Threats of Ryanair within the frame of the earlier macroeconomic analysis. The sections

opportunities and threats also provide an outlook for the European low fare airline industry deduced from the findings made in this thesis.

This thesis concludes that the overall principles behind the LFA business model are low operational costs and high aircraft utilisation.

It is further concluded that the main factor in the macroenvironment that has influenced the emergence of LFA's in Europe is legislation on EU-level liberalising various aspects of the airline industry such as access to airport slots and allowing cabotage. The rise of the Internet have also had a significant influence on the emergence of LFA's as it has lowered their distribution costs but more importantly; it has also given more transparent prices as a consumer can now within seconds search for the cheapest flight at home without at intermediaries like travel agents and this transparency has attracted more passengers to the low fare airlines as they often offer the cheapest travel option.

Ryanair's strategic approach to implementing the LFA business model has been a strict focus on achieving cost leadership by keeping costs to a minimum everywhere in the organisation and its operations. They have a minimum of customer service and its point-to-point service is strictly "no-frills"

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It can be concluded that in order to be a successful low fare airline, it is also necessary to be a low-cost airline because in order to offer lower fares than the competition one must also have lower operational costs for it to be profitable. This goes in tandem with maximising utilisation of aircraft capacity as one needs to have high load factors in order for off-set the lower fares, thereby achieving economies of scale.

Overall this thesis expects the LFA's to increase their market share and reach the 25% market share of short-haul traffic in Europe by 2010 as projected by some scholars as there is still a large growth potential, both in Western Europe but also in Eastern Europe and Turkey.

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Appendix I

A comparison of alternative modes of transportation in the EU

This appendix shows a comparison between travel by bus, trains, FSA's and LFA's by using three major European cities as departure points, across all the alternative modes of transportation, to various destinations points in the EU, which are also major cities.

Specifications:

All tickets are bought for the same period (outbound August 25 and homebound August 29 for return journeys) with a 14 day advance booking, purchasing the cheapest ticket available on each mode of transportation. For trains and FSA's this means 2nd class or Economy Class, respectively, with a non-flexible one-way or return ticket. With regards to FSA's the cheapest of the two dominant airlines on each city pair (e.g. Air France and Lufthansa on the Frankfurt-Paris city pair). All prices are in € and they include all taxes and fees.

Route	Mode	Carrier	Travel time	Number of transfers	Fare return	Fare oneway
Frankfurt-Paris	Bus(1)	Eurolines	09:00	0	67.00	37.00
Frankfurt-Paris	Train(2)	EC	06:22	0	163.20	81.60
Frankfurt-Paris	FSA(3)	Air France	01:15	0	261.00	424.00
Frankfurt-Paris	LFA	Ryanair	N/A	N/A	N/A	N/A
Frankfurt-Paris	LFA	easyJet	N/A	N/A	N/A	N/A
Frankfurt-Rome	Bus	Eurolines	20:45	0	158.00	89.00
Frankfurt-Rome	Train(4)	ICE/EC/ES	13:40	2	325.40	164.20
Frankfurt-Rome	FSA(5)	Lufthansa	01:45	0	213.84	575.35
Frankfurt-Rome	LFA(6)	Ryanair	01:45	0	66.63	27.18
Frankfurt-Rome	LFA(7)	easyJet	09:40	1	399.17	150.65
Frankfurt-London	Bus	Eurolines	15:30	0	136.00	76.00
Frankfurt-London	Train(8)	ICE/Eurostar	06:25	1	254.10	309.30
Frankfurt-London	FSA(9)	British Airways	01:35	0	138.87	138.87
Frankfurt-London	LFA(10)	Ryanair	01:15	0	43.26	17.18
Frankfurt-London	LFA(11)	easyJet	01:20	0	67.17	34.99
Paris-Copenhagen	Bus	Eurolines	20:10	0	159.00	84.00
Paris-Copenhagen	Train(12)	Thalys/NZ	15:13	1	324.40	169.70
Paris-Copenhagen	FSA(13)	SAS	01:50	0	128.99	60.72
Paris-Copenhagen	LFA(14)	easyJet	07:55	1	317.99	127.04
Paris-Copenhagen	LFA(15)	Maersk Air	01:50	0	140.99	66.72
Paris-Copenhagen	LFA(16)	Sterling	01:45	0	212.00	113.00

Paris-London	Bus	Eurolines	09:00	0	59.00	33.00
Paris-London	Train(17)	Eurostar	02:36	0	90.00	223.50
Paris-London	FSA(18)	British Airways	01:25	0	108.04	126.04
Paris-London	LFA(19)	Ryanair	11:10	1	118.16	58.48
Paris-London	LFA(20)	easyJet	01:10	0	127.17	61.99
Paris-Barcelona	Bus	Eurolines	14:45	0	155.00	84.00
Paris-Barcelona	Train(21)	Elipsos	11:52	0	140.00	70.00
Paris-Barcelona	LFA(22)	Ryanair	01:35	0	92.38	29.11
Paris-Barcelona	LFA(23)	easyJet	01:35	0	229.98	81.99
Paris-Barcelona	FSA(24)	Air France	01:45	0	545.00	241.16
Copenhagen-Stockholm	Bus	Eurolines	08:30	0	99.00	44.50
Copenhagen-Stockholm	Train(25)	X 2000	05:04	0	235.08	117.54
Copenhagen-Stockholm	FSA(26)	SAS	01:10	0	159.89	79.88
Copenhagen-Stockholm	LFA(27)	Sterling	01:10	0	256.78	131.74
Copenhagen-Stockholm	LFA(28)	Fly Nordic	01:10	0	110.00	55.00
Copenhagen-Stockholm	LFA(29)	Ryanair	11:05	1	302.24	149.19
Copenhagen-Frankfurt	Bus	Eurolines	14:45	1	170	85.00
Copenhagen-Frankfurt	Train(30)	EC/IC	11:26	1	276.80	138.40
Copenhagen-Frankfurt	FSA(31)	SAS	01:30	0	379.01	595.19
Copenhagen-Frankfurt	LFA(32)	Ryanair	07:45	1	158.67	105.81
Copenhagen-Frankfurt	LFA(33)	Maersk Air	01:25	0	182.67	93.28
Copenhagen-Brussels	Bus	Eurolines	13:45	2	143.00	71.50
Copenhagen-Brussels	Train(34)	EC/ICE/Thalys	12:42	2	206.39	157.20
Copenhagen-Brussels	FSA(35)	SN Brussels	01:35	0	162.97	83.23
Copenhagen-Brussels	LFA(36)	Maersk Air	01:25	0	146.89	82.56

(1) All bus fares are obtained through www.eurolines.com

(2) Fare obtained through www.bahn.de

(3) Fare obtained through www.airfrance.com. Departing airport used is Frankfurt International Airport arriving at Charles de Gaulle

(4) Fare obtained through www.bahn.de

(5) Fare obtained through www.lufthansa.com Departing airport used is Frankfurt International Airport arriving at Rome Ciampino.

- (6) All Ryanair fares are obtained through www.ryanair.com. Departing airport used is Frankfurt/Hahn arriving at Rome Fiumicino.
- (7) All easyJet fares are obtained through www.easyjet.com. Departing airport is Cologned Airport through Luton Airport, London arriving at Rome Fiumicino.
- (8) Fare obtained at www.bahn.de and www.eurostar.com
- (9) Fare obtained at www.ba.com. Departing airport is Frankfurt International arriving at Heathrow.
- (10) Departing airport is Frankfurt Hahn arriving at Stansted.
- (11) Departing airport is Cologne arriving at Gatwick
- (12) Fare obtained at www.sncf.com (13)
- All SAS fares are obtained at www.scandinavian.net departing from Charles de Gaulle arriving at Kastrup.
- (14) Departing from Charles de Gaulle through Luton, London arriving at Kastrup
- (15) All Maersk Air fares are obtained at www.maersk-air.com. Departing from Charles de Gaulle arriving at Kastrup.
- (16) All Sterling fares are obtained at www.sterlingticket.com. Departing from Paris/Beauvais arriving at Kastrup.
- (17) Fare obtained at www.eurostar.com
- (18) Fare obtained at www.ba.com. Departing from Charles de Gaulle arriving at Heathrow.
- (19) Departing from Paris/Beauvais arriving at Stansted.
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- (28) Departing from Kastrup arriving at Arlanda.
- (29) Departing from Malmö/Sturup through Stansted arriving at Skavsta.
- (30) Fare obtained at www.dsb.dk
- (31) Departing from Kastrup arriving at Frankfurt International.
- (32) Departing from Malmö/Sturup through Stansted arriving at Frankfurt/Hahn
- (33) Departing from Kastrup arriving at Frankfurt International.
- (34) Fare obtained at www.dsb.dk
- (35) Fare obtained at flyn.com. Departing Kastrup arriving at Zaventem.
- (36) Departing Kastrup arriving at Zaventem.

Abbreviations

ICE: InterCityExpress
 EC: EuroCity
 ES: Eurostar Italy
 NZ: NachtZug

Appendix II

Key figures from 4 major LFA's and FSA's from their annual results of 2004. Revenue and profit/losses are in million €'s and passengers are in millions

	Revenue	Profit/Loss	Passengers	Employees	Pas./emp.(1)	Load factor	BELF(2)
Ryanair	1074	207	23.1	2302	10049	81%	62
easyJet	1627	32	24.4	3345	7265	85.5%	77.74%
Sterling	216	-16	1.8	612	2982	n/a(4)	n/a(4)
Maersk Ai	259	-67	2.0	1202	1184	n/a(4)	n/a(4)
SAS	6361	-99	32.4	32481	998	63.7%	65.2%
Lufthansa	16965	404	50.9	92743	549	74%	81.4%(5)
BA(3)	11088	191	36.1	51939	695	73%	69%
Aer Lingus	907	1	7	3906	1782	82	n/a(6)

(1) Passengers per employee

(2) Passenger break-even load factor

(3) British Airways

(4) The data for calculating load factors and BELF is not available

(5) As the BELF is higher than the load factor Lufthansa should make a loss but they make a profit due to its better performance in non-passenger revenue activities such as cargo and in this thesis only the passenger BELF is calculated and not the overall BELF as not all airlines have cargo operations.

(6) The data for calculating the BELF is not available