

Strategic analysis of Ryanair

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Executive Summary

During the past decades, Ryanair's strategies and continuous growth have successfully turned the company from a single route airline into the largest low cost carrier in Europe. However, Ryanair is currently facing a major disruption: Brexit. United Kingdom's decision to leave the European Union has created a great wave of uncertainty that is set to also impact the airline industry. With 30% of its revenues coming from flights within and connecting the United Kingdom, Ryanair is now facing a series of decision that need to be taken in order to ensure a smooth transition after Brexit.

The scope of this thesis is to provide Ryanair with a number of strategic options that could help it adapt to the impact of Brexit. In this regards, an in depth strategic analysis is conducted, with the results serving as a knowledge base for a scenario planning analysis. The scenarios developed are to present the issues Ryanair might encounter in different situations and it is on these issues that the strategic recommendations are based on.

The thesis mainly consists of three main parts: Company Overview, Strategic analysis of Ryanair and Scenario planning, with the latter being the main focus of the thesis. The Company overview presents and analyzes the history of Ryanair, its corporate structure and governance, its vision and mission alongside its business model and its competitors. The Strategic analysis consists of a few separate in-depth analysis that aim at examining Ryanair's micro and macro-environment, its competitive state, the industry it operates in and main industry indicators. Finally, in the scenario planning section, four different scenarios will be presented alongside the impact they have on Ryanair and the strategic options the company can opt for.

As a result, for Ryanair, the main decisions that need to be taken are regarding: aircraft orders, distribution of the available resources, the ideal number of routes, the regions in which they need to increase or decrease the flight numbers and the amount of hedging activities the company has to undergo in order to ensure an efficient risk-cost balance. The results obtained are scenario specific, with each scenario presenting an ideal mix of the factors mentioned above.

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Chapter 1 Introduction and problem statement

1.1 Introduction

Ryanair is currently the largest low-cost airline in Europe with a fleet of over 430 aircrafts and another 210 on order, operating in no more than 38 countries in Europe, North Africa and Middle East. The company is based in Dublin, Ireland and is listed at Dublin, London and at the NASDAQ stock exchanges. The current strategy suggests they aim for further expansion and internationalization, their aim being to move from 130 million passengers yearly to over 200 million in 2024 (Ryanair - Annual report, 2019).

Ryanair is currently facing a delicate issue: Brexit. Initiated in June 2016, after a majority of 51.9% of United Kingdom's citizens voted to leave the European Union (UK Electoral Commission, 2016), Brexit left room for plenty of uncertainty and speculation in all the domains tying the European Union and the United Kingdom, with the airline industry facing one of the highest risks of being impacted. With its United Kingdom flights representing 30% of its revenues and with the possibility of a part of its shareholders suddenly becoming non-EU citizens, Ryanair might not only be facing financial trouble but might also lose its license for flights within the EU (Ryanair - Annual report, 2019).

Facing uncertainty, the airline lies before a series of decisions that need to be taken in order to ensure a smooth transition regarding Brexit, avoid critical situations and ensure future growth and expansion. As the environment suddenly turned highly unstable, it is clear that Ryanair has now to develop a few alternative scenarios in order to be able to come up with custom made strategies. Regarding this matter, this thesis argues that scenario planning can be the perfect tool for doing so.

Scenario planning is a loose term and many have defined it yet, the description provided by Schwartz(1991, p. 45): "a tool for ordering one's perceptions about alternative future environments in which one's decisions might be played out." seems to best fit our thesis. Used initially for predicting military outcomes, the method has evolved and is currently serving corporations in their decision making process.

The reason for choosing this subject for the research consists of three parts. Firstly the genuine interest in the airline industry, especially in the low-cost carriers pushed me to select a company within this field. As Ryanair slowly grew and turned into an airline that seems to be “too big to fail”, I found them to be the perfect study case, especially now as they face a situation that is about to put that assumption to the test. Secondly, a strategic analysis of the company is a topic that fits perfectly with my academic background as a student of the Master of Science in International Business. At last, the focus on scenario planning came after realizing not only it is the ideal tool in the case of Ryanair and Brexit but also that the method has been neglected and not used in this matter yet. Overall, I consider that the subject is unique and intriguing, not only for Ryanair and the other companies that are impacted by Brexit but also for academics and fellow students that are interested in this subject.

The thesis commences with a literature review of the different schools and methods of scenario planning followed by a presentation of the methods used during this research. Further, an overview of Ryanair is laid out in order to better understand the company’s history, corporate structure and governance, its business model, financial situation and competition. A strategic analysis is then conducted by using different methods such as: Porter’s five forces analysis, PESTEL, key industry measure analysis and VRIO. Together with the section “4.1 Company overview” they set the bases for the last part, “4.3 Scenario planning”. The thesis’s final part consists of a discussion and concluding remarks.

1.2 Problem Statement

The current thesis intends to examine the various internal and external factors that impact Ryanair, analyze how they developed and can further develop according to Brexit and what specific strategic decisions can the company implement based on the possible future scenarios. The research question has therefore been defined as:

“How scenario planning could have helped and can still help Ryanair anticipate and adapt to the impact of Brexit? “

As the subject is complex, in order to be able to answer the main research question, I have decided to split it into different sub-elements. The research will be based on the following sub-questions:

- -What is “scenario planning” and what method should be used in order to determine the possible future outcomes?
- -How does Ryanair operate?
- -How do the micro and macroeconomic factors impact the airline industry and Ryanair?
- -What is the outlook of Ryanair’s competitive environment?
- -How does Ryanair compare to its competitors?
- -What are Ryanair’s competitive advantages?
- -How can Brexit impact the future of Ryanair?
- -What are the possible future scenarios Ryanair might find itself in?

1.3 Thesis structure

As depicted in Figure 1, the thesis is split into five distinct chapters. The main focus of the thesis will be “*Scenario planning*”, with the other chapters and sub-chapters preceding being essential for its development.

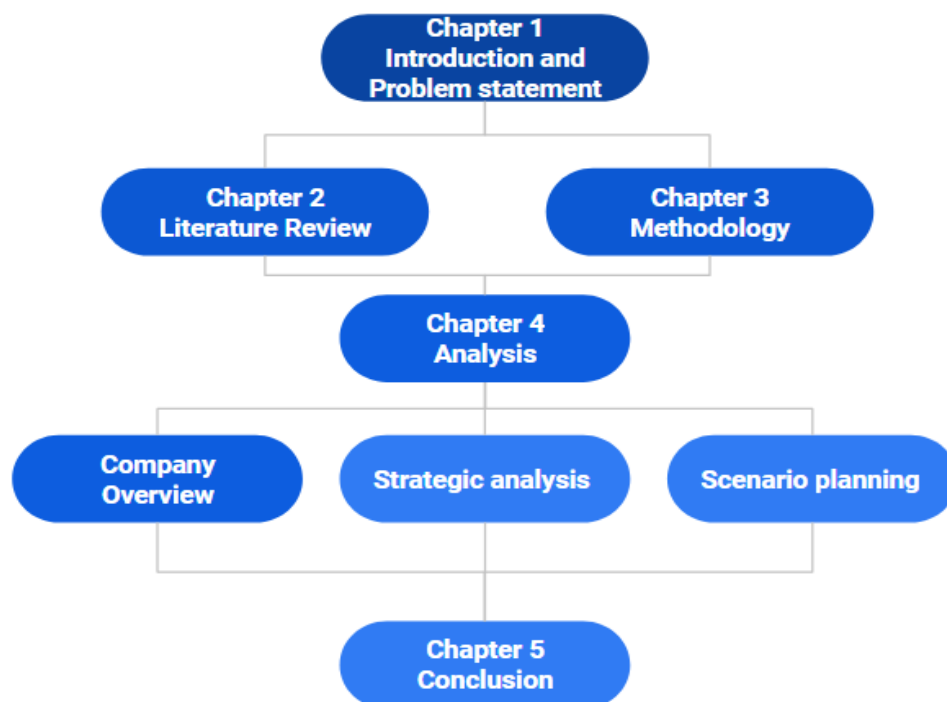


Figure 1: Thesis structure
Source: Own creation

The thesis commences with a thorough “Literature review” in which different scenario planning schools are critically analyzed, and based on the different characteristics selected, a specific one is chosen. As the school itself is further composed of different methodologies, presented by different scholars and companies, an outlook of these methods is laid out and a specific one is selected and analyzed further. The advantages and limitations of this method are explained and modifications are implemented in order to turn it into a better fit for this specific research.

Further, the “Analysis” chapter commences with a “Company overview” that is necessary in order to understand where Ryanair came from, where it is heading, the way it operates, on what principles it is based, how its business model and the environment it finds itself in is impacting their ability to adapt to changes. In order to analyze this matters, Sub-chapter 4.1 will be presenting Ryanair’s history, corporate structure and governance, its vision, business model and competition.

The thesis goes forward with a “Strategic analysis” aimed at identifying the most important factors that have an impact on Ryanair and the low cost carrier airline industry. In order to do so, the company has to be analyzed through a micro-economical and macro-environmental point of view. The chapter contains four in-depth analyses: PESTLE, Porter’s five forces, key airline industry measures and an internal analysis. The key findings are summarized at the end of the chapter through a SWOT matrix.

Based on the previous chapters, which acts as basis for the next chapter, a scenario planning analysis will be conducted. After choosing the main focus of the scenarios, the main factors that impact the company will be identified, listed and ranked. Following the result of the ranking, the main impacting factor will be then selected and together with the preselected factor will be used to determine the axes of a 2x2 matrix as the one illustrated in *Figure 2*. The spread will result in four scenarios that will be elaborated and discussed. The final step of the scenario planning analysis will present indicators and signposts that the company should keep under observance.

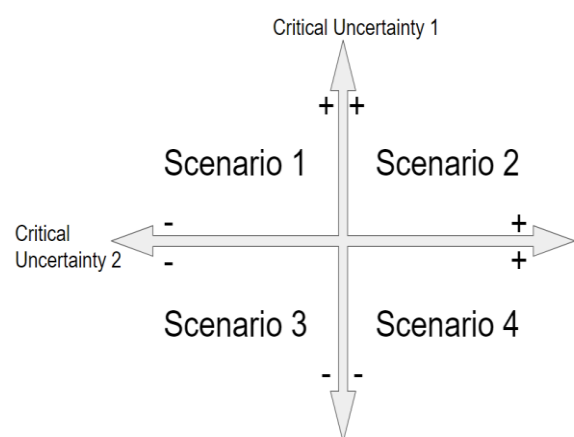


Figure 2: Scenario matrix
Source: Own creation

Chapter 2 Literature review

2.1 History of scenario planning

According to Schwartz(1991, p. 45), scenario planning is “ a tool for ordering one’s perceptions about alternative future environments in which one’s decisions might be played out”. The idea of scenario thinking dates back to the 16th century when Luis de Molina introduced “conditional future contingents”, a concept that refers to future knowledge and predestination (Alfonso-Lasheras, 2011). Even though the idea existed for centuries, it is only in the 1940's that an actual method with practical applicability was developed by Herman Kahn. Considered one of the founders of scenario planning, Khan developed and described the idea of “Future-Now” which was initially developed for military use for the US Department of Defense (Chermack, 2001).

It is the 1960’s and 70’s that linked scenario planning and corporations, mainly due to the involvement of Hudson Institute with sponsors such as GM, Royal Dutch/Shell and IMB, proving that scenario planning can be used not only for military appliances but also for aiding companies adapt to what the future can bring (Chermack, 2001). Shell turned out to be the first successful story proving the necessity of scenario planning within the company as when the 1973 oil crisis struck, Shell was the only company in the oil industry that was prepared. The company continues to use the method to this day and has previously successfully predicted the fall of the Soviet Union and the financial crisis of 2008 (Shell, n.d.).

Mainly due to Shell’s continuous successes, nowadays, scenario planning is a common used tool. From large consultancy firms to SMEs, from well-known business schools to online courses, scenario planning is widely known and used and with the future becoming more and more unpredictable, the technique seems to be as useful as it has never been before.

2.2 Classification of the main scenario planning schools

Available literature suggests that scenario planning is a subject that has been given plenty of attention, resulting in several methodologies, many with common characteristics. Many scholars such as: Lindgren (2003), Van Der Heijden (2005), Schwartz (1996) or Duus (2016) have come up with their own approach on scenario planning. Only Bishop (2007) on its own managed to synthesize more than a dozen different methods, looking at them from different perspectives such as utility, strengths and weaknesses. It is not only scholars that developed and adapted different

methods of approaching scenario planning but as the technique became more and more business oriented, corporations and consulting firms also started providing their own approaches.

Even though there are plenty of different methodologies, it is argued that they all fall under three main schools of techniques regarding scenario planning: Intuitive logics school, Probabilistic modified trends (PMT) school and “La prospective”-the French school (Muhammad Amer, 2012).

2.2.1 Intuitive logics school

Firstly described by Wack (1985) and developed and used by SRI, Shell and Global Business Network, the Intuitive logics school is an efficient way of using every available information regarding the future. It is used for its potential of identifying patterns and generating new ideas (Mietzner D., 2005). Out of the three approaches, the Intuitive logics school is the most known and received the most attention from researchers (K. Van Der Heijden, 2005). It is under this school that the Global Business Network method used during this thesis falls. A more detailed explanation of the method will be provided in the “*Global Business Network (GBN) method*” section.

The intuitive logics school considers that decisions made by businesses are to be made based on a set of complex relationships between different factors affecting the business such as: political, economic, social, technological, environmental and resource based factors (Huss, 1987). An important characteristic of the approach is the fact that it does not involve mathematical algorithms (Pillkahn, 2008). The lack of models based on data can be considered a disadvantage as compared to the other schools yet, the methods under the intuitive logics school also possesses an advantage: possibility of including in the analysis factors that are not quantifiable, especially unexpected events and would be impossible to analyze through methods falling under the other two schools. Important to mention is that the intuitive logical school does not completely oppose the use of data for creating scenarios, as some of the factors involved in the analysis can be quantified and predicted (Huss, 1988).

2.2.2 Probabilistic modified trends (PMT) school

Developed under the umbrella of RAND Corporation, the Probabilistic modified trends school takes a different approach on scenario planning. PMT School involves the use of two different matrix based methodologies: the cross impact analysis (CIA) and trend impact analysis (TIA), based on probabilistic modification of extrapolated trends (K. Van Der Heijden, 2005).

The CIA method is used for estimating probabilities of future events by capturing the correlation between the influencing factors amongst these events. The method involves the use of probabilities, cross impact variants and correlation matrixes (Turoff, 1971). By including them in the analysis, the method managed to secure an advantage over the others yet it came at a high cost: the need of a high amount of data for each of the factors involved. Since such a large amount of data is not easily accessible for many companies, this turns the method into a highly exclusive one, perfect to use by large consultancy groups and governments, who can easily obtain these types of data.

TIA on the other hand, is one of the few methods that aimed at bridging the gap between quantitative data and qualitative factors. The forecasting method allows extrapolations of historical data to be modified based on expectations of future events, basically allowing the researcher to include in his trend analysis, effects of possible events that might occur (Gordon, 1994).

2.2.3 The French School

Also named “La perspective” by the French philosopher Gaston Berger, the French school bases its beliefs on the fact that the future is not part of a temporal linearity and can be created and modeled (K. Van Der Heijden, 2005).

The methods used by the French school are based on four concepts: the base, the external context, the progression and the images created. In the order they were presented, the concepts refer to: in depth analysis of the present situation, close examination of the economic, social, political, national and international perspective, simulation of historical data based on constraints of the external context and finally, the creation of scenarios (Durand, 1972) .

Similar to PMT, the method relies on heavy mathematical, statistical mechanisms and probabilities in order to come up with the scenarios. The main difference that sets the French school apart is the use of it. While the other two schools ended up being used by corporations, in France’s case, the scenarios are mostly used for the public sector, usually by the government (K. Van Der Heijden, 2005). In this case, the scenarios developed aim to serve as a guide for policy makers and provide a

starting point for future decisions (Vught, 1987). A short classification of the three different school is provided in figure 3.

Scenario characteristics	Intuitive Logics	Probabilistic modified trends	The French School
Methodology type	Subjective and qualitative	Objective and quantitative	Objective and quantitative
Tools used	Intuition, research, general analysis	Interviews and structural analysis using sophisticated computer tools	Time series, trend impact and cross impact analysis,
Use of probabilities	NO	YES	YES
Output of scenario exercise	Qualitative, narrative, equally plausible scenarios with strategic options, implications and warning signals	Qualitative and quantitative scenarios, implications and possible actions	Quantitative scenarios
Evaluation criteria	Coherence, comprehensiveness, consistency, supported by rigorous structural analysis and logics	Coherence, comprehensiveness, consistency tested by rigorous analysis, plausible and verifiable in retrospect	Plausible and verifiable in retrospect

Figure 3: Summary of the main scenario planning schools

Source: Own creation & Amer M. et al. / *Futures – A review of scenario planning* p.28

2.3 Main intuitive logic school methodologies

As mentioned before, since scenario planning turned out to be a successful tool, many scholars, research institutes and corporations developed their own methods. As the number of different approaches is too large to be covered under this thesis, only 5 different methods, commonly met in scenario planning analysis will be compared: the Global Business Network, Schoemaker’s method, Van der Heijden’s method, TAIDA model and the Stanford Research Institute (SRI). The selected methods are similar on a first glance, as they all fall under the intuitive logics school but as they each got adapted, they do come up with some differences.

Method	Steps	Scenarios	Differentiation
Global Business Network	8	4	Existence of signposts
			Ranking system
Schoemaker	10	2	Strong plausibility tests
			Scenario learning
TAIDA model	5	4	Continuous work rather than one time solution
			Decision focused
Stanford Research Institute	6	7-9 initially	Incorporates unprecedented events
		2-3 final ones	
Van der Heijden	-	2+	Based on profit and competencies
			Focus on uncertainty

Figure 4: Summary of the main intuitive logic school methodologies

Source: Own creation

The Global Business Network has suffered many variations since its publication but its standard format is considered to be the one presented by Schwartz(1996). The method consists of eight steps out of which two stand out compared to the rest of the methods: the existence of the ranking system of the impacting factors and the development of signposts and warning signs as a final step. As this is the method the thesis is based on, the “*Global Business Network method*” subchapter will further describe the method.

Schoemaker’s(1993) method consists of a 10 steps analysis with a final 2 scenarios developed in which scope and time frame is given special attention. The method is the closest to the GBN one as some of the steps collude between the two practices. What differentiates the method from many others is the existence of strong consistency and plausibility test. After scenarios are shaped, they are checked using at least three elements: internal consistency, dealing with the outcome combinations and the trends and finally, the reactions of the major stakeholders. On top of that, Shoemaker relies on the use of scenario learning aiming at further developing the scenarios in case further research is required.

As opposed to Schomaker’s method, TAIDA model comes in a compact and straight forward 5 steps format, with its actual names describing the steps: Tracking, Analyzing, Imaging, Deciding and Acting, shortly: TAIDA (Lindgren, 2003). The technique is more than self-explanatory and quite simple. The only difference the other methods don’t really cover is the sub-step of conducting a complementary analysis after developing the scenarios, aimed at continuously looking for new insights and viewpoints that might impact the scenarios.

The Stanford Research Institute (SRI) methodology is one of the earliest that emerged, therefore the other methods are partly a result of the influence of this method. The method is decision focused and seems to be one of the few methods that is able to easily incorporate unprecedented events. If the SRI method is considered basic and standard, the method proposed by Van der Heijden (2005) seems to be the opposite. The main change this method brings is giving up on creating a number of steps to follow. It focuses on finding out what concepts an organization has to incorporate on an abstract basis and then it discusses the findings and learnings the organization got from this process.

2.4 Global Business Network(GBN) method

Falling under the Intuitive logics school, the Global Business Network method was initially developed by former members of the Shell company, amongst which, Peter Schwartz which would further develop and adapt the scenario planning method used successfully by Shell in overcoming the oil crisis of the 1970's. He presented his findings and methodology in his book "The art of the long view" (1991) which he then adapted in 1996 turning its title into "The Art of the Long View: Planning for the Future in an Uncertain World"

Schwartz(1996) describes the starting point of the scenario planning analysis as asking yourself "What impending decision keeps you awake at night?". Further, he argues that companies should look at what key factors will determine the success or failure of the issue and what are the other driving forces impact the external environment. The drivers are then ranked by impact and uncertainty, with only the factors with the highest impact and uncertainty being further used in the analysis. Based on the selected indicators, a matrix is developed and scenarios are then created by analyzing the way factors that impact the company under the occurring issue developed and are expected to evolve. The last goal of the method is identifying and flagging the indicators or signposts on which the company should keep an eye out as their evolution might indicate towards which scenario the company is heading. The steps presented in the book (Schwartz, The Art of the Long View: Planning for the Future in an Uncertain World, 1996) are as follow:

- 1. Identify focal decision or issue;** Analyzing and deciding which issue the company has to deal with and what decision needs to be contemplated upon in the future.
- 2. Identifying key forces in the local environment;** Based on the issue or decision selected within the first step, a list of key factors contributing to success or failure within the micro-economic frame is made.
- 3. Identifying the driving forces;** Create a list of driving forces within the macro-economic environment such as social, economic, political, environmental and technological.
- 4. Rank the forces by importance and uncertainty;** The elements identified in step 2 and step 3 must be ranked according to (1) uncertainty and (2) importance. The axes of the matrix will be chosen based on the ranking of this elements.

- 5. Selecting the Scenario logics;** The most important elements selected are spread around the axis and clustered as some of them might be joined together. The basic plot of the scenarios will be based on scenario logics that result from the arrangement within the matrix.
- 6. Fleshing out the scenarios;** Develop scenarios by looking at the elements selected at steps two and three. Each key factor and driving force is to be given attention and manipulated within the matrix in order to come up with the scenarios. From this point plausibility has to be constantly checked.
- 7. Implications;** In this step the implications of the scenarios developed will be examined. The initial issue is filtered through the scenarios and results are to be discussed.
- 8. Selection of indicators and signposts;** Lead indicators that have to be monitored are to be selected. The indicators should be able to warn the company when the real life situation is heading towards one of the scenarios.

The Global Business Network method presented by Schwartz has been chosen as a main method to be applied in the case presented in this thesis for a few reasons. The method itself seems to be a perfect mix between steps that it shares with the other techniques and steps added and adapted. On one hand, the GBN method uses steps such as “identifying the focal issue” and “identifying driving forces in the micro and macro environments” that are common steps across many methods but also relies on individual and original techniques such as ranking these steps. Probably the most important step in this case is the last one, as providing the company an overview of the indicators and signposts that have to be monitored is an essential step for the company. As the environment is highly unstable and the changes come at a high speed, red flags could possibly warn the company of what lies ahead and would offer them time to adapt and make take decisions accordingly. These being said, it can be argued that the Global Business Network method is a good fit for the thesis.

On the other hand, as most of the methodologies developed in the field for scenario planning, GBN also has its flaws. A disparity has been identified between the starting points of the analysis, more exactly asking the question “What decision keeps you awake at night?” and step number 4 of the method: “Rank key forces by importance and uncertainty”. As in the original scenario planning the forces are supposed to be ranked and joined together to form the two axis of the matrix, many important elements tend to be left out. A flaw of the method is the difficulty of involving massive disruptive events in the axis of the matrix as major events tend to have high impact on the company

or industry but since their chance of occurrence is most of the times extremely low, their overall level of importance drops. In this case, important events can be left out of the analysis. A few examples of such events that were hard to include in the scenario planning made at their time are: the 9/11 terrorist attack, the dot com bubble, and Russia-Ukraine conflict.

As a solution to the flaw discovered in the method, this thesis argues that using a viable solution would be using a fixed axis matrix in which the most critical event, would be spread over one of the axes. The second axe would continue to be defined as the original method suggests. As the research of this thesis is based on a case which includes such critical event, it makes it the perfect example of how a fixed axis scenario planning can be used to provide a company the information needed for anticipating the impact of the critical event.

Chapter 3 Methodology

Following the introduction and presentation of the problem statement and the research question, it is now time to go through the methodology this thesis is based on. The purpose of this section is to offer the reader a better understanding regarding the structure, the models and frameworks used, the reasoning behind and the way data has been gathered and analyzed.

3.1 Frameworks and models

Firstly, in order to develop a valid and realistic scenario planning analysis, the factors that have an impact on the company will have to be closely analyzed. This section will offer the reader insights on the frameworks and models used, the reason for choosing these methods and the way they are aiding the scenario planning process.

The PESTEL framework is one of the most widely used strategic planning tools in the business environment nowadays. As it is crucial for a scenario planning analysis to consider the external factors that impact a company but are out of its direct control this method will be applied. The PESTLE analysis looks at the issues regarding the company's macro-environment issues from 6 perspectives: Political, Economic, Social, Technological, Legal and Environmental. These categories provide the broad data from which key drivers of change might be identified (Johnson, 2008). The key drivers identified are then to be used during the scenario planning section.

A company's ability to stay profitable is heavily impacted by the competitive state of the industry in which it operates which is determined by the level of five forces: : threat of new entrants, threat of substitutes, bargaining power of suppliers, bargaining power of buyers and the rivalry among the existing firms (Porter, 1979). The five forces presented by Porter are part of the method with the same name: "Porter's five forces analysis" that was developed in order to analyze the level of rivalry and competition, the organization's competitive strengths and the way it positions in the market amongst the competition. It is necessary for Ryanair to take into account these factors as decisions without taking competition under consideration, could result in unrealistic outputs. Furthermore, Porter(1979) described competition as being the essence of strategy. As scenario planning is one of the many methods used in strategic planning, it is important to analyze the competitive state of the industry and it can be argued that Porter's five forces model is the most useful method to use in this situation.

Another key point for a complete strategic analysis is looking at the key industry measures, which airlines usually present in their annual reports. A series of airline industry specific key metrics will be analyzed for the case of Ryanair and compared to the competitors. The first step of the analysis is presenting the production capacity of the airline company and its competitors by looking at the Available seat kilometers (ASK) and Revenue passenger kilometers (RPK). After the capacities of the airlines are presented, the next step is to see how efficient the companies are at filling up the seats for their flights by looking at their Load factor. Further, the average fare per passenger per kilometer, known as yield will be analyzed. Yield goes hand in hand with the load factor as they depend on each other and it is the airline's duty to ensure a perfect balance is reached. The last part of the section will be looking at how airlines do in terms of profitability by looking at their Revenue per ASK (RASK), Cost per ASK (CASK) and Profit per ASK (PASK). The scope of this section is to look at how Ryanair scores compared to its competitors based on the metrics mentioned above. The analysis is meant to supplement Porter's five forces with more on point, data based results. Together, the two analyses are offering an overall image of the competition. The findings are crucial in identifying more strengths, weaknesses, opportunities and threats of the airline that could usually not be detected through other methods. Similar to the other methods used in this thesis, it further helps identifying factors that will be used in the scenario planning analysis and provides bases for our scenario development and the discussion that follows.

The thesis goes further with an internal analysis of the company based on a VRIO framework. The method consists of analyzing the company's resources and discovering the company's competitive advantages from the perspective of four dimensions that also create the acronym VRIO: Valuable, Rare, Imitable and Organized (Barney, 1991). The framework is simple to understand and use and can provide considerable value for organizations looking to stay ahead of competitors. The main reason behind the use of the VRIO model is linked with the need of better understanding if the company possess the necessary resources to successfully get past pressing matter and of identifying the competitive advantages that could boost it out of difficult scenarios.

The findings of the four methods mentioned above will be summarized in a SWOT matrix. By creating a list of strengths, weaknesses, opportunities and threats, the SWOT offers the reader an overview of everything that has been analyzed prior that point. The factors identified will not only serve as a starting point for the first steps of the scenario planning but they will also be the base for the discussion of the implications of the scenarios developed.

The final step of the thesis is conducting the scenario planning analysis. After an in depth literature review in which the main scenario planning schools and methods have been analyzed, it has been concluded that the Global Business Work methodology presented by Schwartz(1996) will be used as it fits best our research needs. The technique involves 8 steps: identifying focal issue, the key forces in the local environment and the main driving forces, ranking these forces by importance and uncertainty, selecting scenario logics, fleshing out the scenarios, discussing the implications and selecting indicators and signposts. The aim of using this method is coming up with scenarios that can show what and how the company could have anticipated the possible impacts of selected matter and what they should expect from the future in this regard.

The methods used aim at answering individual research sub questions and together provide the information required to answer the main research question as explained in the Figure 5.

Research sub-question	Section used to answer it
What is “scenario planning” and what method should be used in order to determine the possible future outcomes?	Literature review
How does Ryanair operate?	Analysis of Ryanair
How do the micro and macroeconomic factors impact the industry and Ryanair?	PESTEL
What is the outlook of Ryanair’s competitive environment?	Porter's five forces
How does Ryanair compare to its competitors?	Key industry measures
What are Ryanair’s competitive advantages?	VRIO
How can Brexit impact the future of Ryanair?	Scenario planning
What are the possible future scenarios Ryanair might find itself in?	

Figure 5: Research sub-questions and methods used

Source: Own creation

3.2 Data collection

The thesis will be written from an external point of view and as the main threats at this point seem to come from the external environment, and with internal data being hard, if not impossible to access, the thesis will only consist of secondary data and information available to the public.

The thesis consists of both qualitative and quantitative data. Even though scenario planning tends to focus mainly on qualitative data, it can be argued that a certain amount of financial and industry statistical data are helpful in offering a bigger picture of Ryanair and its environment. The main data sources consist of annual reports of Ryanair and its competitors, financial and economic databases such as Eurostat and World Bank, industry reports and publications such as International Air Transport Association (IATA), CAPA-Centre for Aviation, United Kingdom’s Civil Aviation Authority(CAA), European Union Aviation Safety Agency(EASA) and International Civil Aviation Organization(ICAO). As no direct contact with the company has been established, the data of the annual report will critically be reviewed. This comes as a measure of precaution as during this

research, a slight note of subjectivism has been discovered in the way Ryanair presents its results. Further will be explained during the thesis. The main sources of data will be supplemented by academic literature, articles, market reports, and information found on the websites of the companies.

3.3 Delimitations

As stated before, the thesis is written from an external point of view based only on publicly available data. It is also important to mention that no direct communication has been established between the author and Ryanair.

In regards with the data, it is acknowledged that some information from annual reports of the companies come with a dose of subjectivity. In order to compensate, only data that could be proved and double checked with other sources has been included. By triangulating the data, the overall validity and credibility of the information used increases (Honorene, 2017).

A period of five years of historical data has been considered to be sufficient when assessing the financial data of Ryanair and its competitors. Due to the different release dates of the annual reports of the companies, 2018 has been set as the end year of the period as some of the companies only release the 2019 annual report on 31st December, therefore the data between 2014 and 2018 has been used. Since Ryanair is the case study company of this thesis, and the annual report for 2019 was released on 31st of March, I considered that it is important to include the data presented. The data from Ryanair's 2019 annual report has not been used in the comparison with the competitors.

Chapter 4 Analysis

4.1 Company overview

4.1.1 History of Ryanair

Ryanair is an Irish low-cost airline company which was established in 1984 under the name of "Danren Enterprises" and was renamed to its actual name one year later. For its first year of operations they have been operating only between Waterford and Gatwick with the aim of breaking disrupting the duopoly that was formed on the flights between London and Ireland by Aer Lingus and British Airways. Within the next 2 years, Ryanair added 3 more routes originating from Luton: Dublin in 1986, Brussels and Amsterdam in 1987 (Simons, 2011).

The first 5 years of operation have been characterized by growth in the number of passengers but shadowed by the fact that the company has been running at loss every year. With an accumulated debt of over £20M by 1990, it was clear they were in need of a strategic and financial reform. By following the Southwest airlines no business class, low cost and operating a single type of aircraft model strategy, they've managed to substantially increase the number of tickets sold. The successful application of the low cost strategy has turned Ryanair into the largest low-cost European airline company.

Probably the most important milestone for Ryanair was 1992, when the deregulation of the European Union's air industry law allowed companies to operate between other EU states. Due to this and the success of the low-cost strategy, Ryanair managed to become the largest Irish Airline in 1995, surpassing Airlingus and British Airways. After being successfully listed on NASDAQ and Dublin Stock Exchanges, the company has raised enough capital to acquire 45 Boeing 737-800 aircrafts which since then, represents the main model used by Ryanair.

The beginning of the millennium is marked by the launch of their website: www.ryanair.com, that was at that time the only source of low fare tickets website in Europe, with over 50.000 bookings per week, while also offering hotel accommodation, travel insurance and car hiring services at the lowest available prices. The next decades are characterized by acquisitions of other airline companies, more aircrafts and a constant hike in the number of passengers with growth rates between 70% (2002-2003) and 6% (2018-2019) (Corporate Ryanair, 2019).

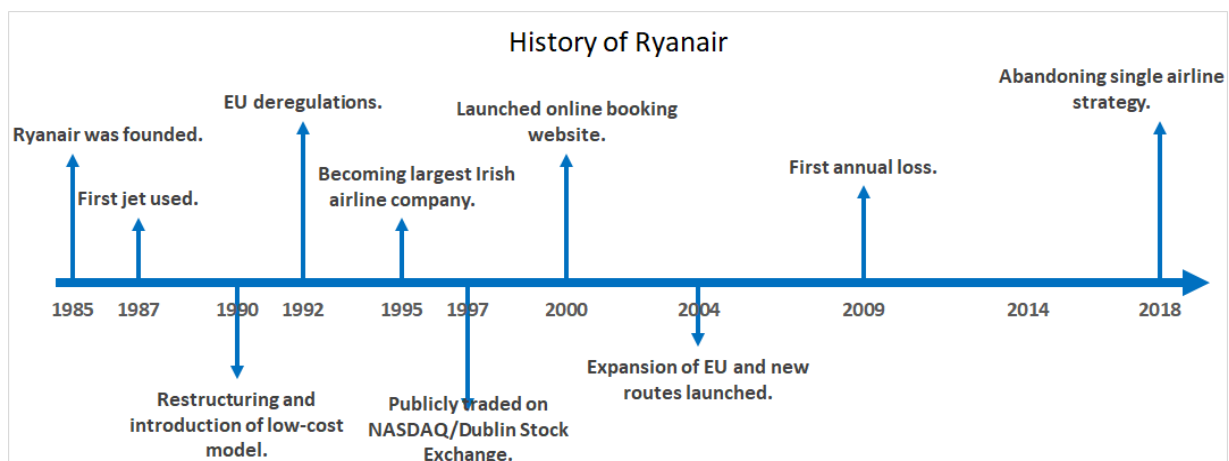


Figure 6: History of Ryanair
 Source: Own creation & www.corporate.ryanair.com

4.1.2 Corporate structure

After decades of operating as a single airline, Ryanair started acquiring competitor airlines, following the IAG model and now currently consists of the parent company Ryanair Holdings PLC and subsidiaries: Ryanair DAC based in Ireland, Laudamotion based in Austria, Ryanair Buzz based in Poland, Ryanair UK and the latest acquisition, Malta Air. Each of the subsidiaries is set to have its own management and CEO that will be reporting to Michael O’Leary, the group CEO (CAPA, 2019). The subsidiaries are set to follow Ryanair’s low-cost strategy and are going to be competing against each other in the market (Ryanair - Annual report, 2019).

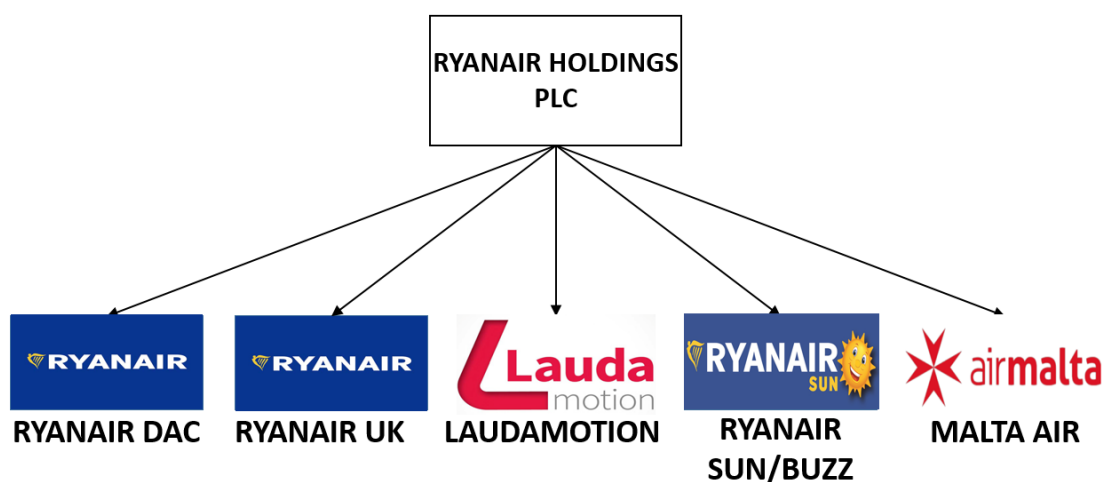


Figure 7: Corporate structure
Source: Own creation & Ryanair annual report 2019

The continuous acquiring has been made in order to hide their brand, as Ryanair has constantly been under media’s and the public's attention for the countless scandals and complains, with Ryanair ultimately being voted as “the worst airline” for 6 consecutive years according to a survey of (Which.co.uk, 2019). With Laudamotion and Malta Air, the group made a step further and chose to maintain the company's original logos and colors rather than rebranding them to the original recognizable blue and yellow carried by Ryanair. On top of that, the acquired companies are set to focus on the initial local markets rather than cover the whole of Europe.

The acquisition of Malta Air is the largest strategic move on behalf of Ryanair as Brexit deadline is approaching, the company sees the new airline as a hedge against the risk of harsh conditions that

will be imposed in case of a no-deal Brexit. On top of that, Malta is known to be a tax haven and now, Ryanair can start shifting aircrafts, employees and numerous other parts of the business there.

4.1.3 Corporate governance

This section aims to offer the reader an overview of the corporate governance structure of Ryanair including the ownership structure, board of directors and the management in order to reveal if the value of the company can be impacted in a positive or negative manner by the decisions made within the company.

4.1.3.1 Ownership structure

Ryanair is currently listed with 1.13 billion shares outstanding as of June 2019 with a nominal value of 10.12 Euro. Institutional investors make up for 77.67% of the ownership, followed by General Public with 17.56% of the shares and 4.77% Insider Ownership. The largest shareholders consist of: Harris Associates, Baillie Gifford, Capital, AKO Capital and Michael O’Leary. (Ryanair - Annual report, 2019)

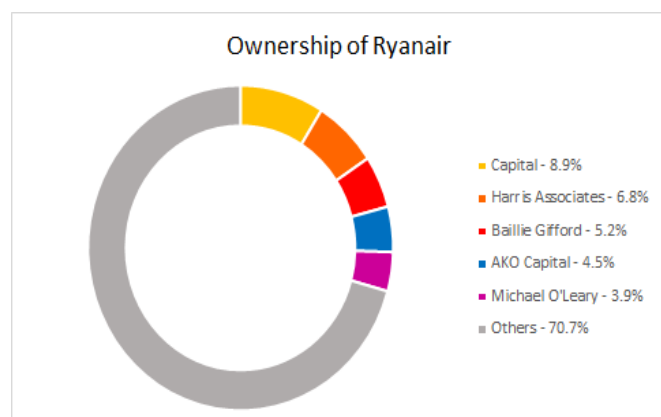


Figure 7: Ownership structure

Source: Own creation & Ryanair annual report 2019

As of the beginning of 2016, Ryanair was only issuing ordinary equity shares but after undergoing a capital reorganization during that year, the shareholders approved on the creation of two new share classes: “B” Shares and Deferred Shares. All the new shares of the two categories were redeemed or cancelled during 2017, therefore Ryanair currently consists only of regular equity shares as of 2019. Ryanair has opted for offering different share option plans to Directors or employees allowing them to acquire an aggregate of 5% of the current outstanding ordinary shares. On top of that, it is important to mention no new shares were issued in the fiscal year 2019. (Ryanair 20F, 2019)

The only limitation in trading the Ryanair shares consists of the necessity of the company to remain a majorly EU owned company, the maximum permitted percentage of shares owned by non-EU citizens being 49.9%. If the company does not comply with the EU Regulation(1008/2008), it risks

losing its operating license. In order to comply with the rules, Ryanair has decided on multiple occasions that shares will not be issued to Non-EU citizens for a specific period of time. As an addition, the company has also made efforts to repurchase shares in order to increase the percentage of EU-hold shares (Ryanair - Annual report, 2019).

Due to Brexit, which for Ryanair would mean a great number of shares owned by or on behalf of UK nationals will be considered as non-EU overnight, which will eventually mean losing the license, the company has decided to consider these shares as Restricted Shares, with the measure set to be in place until the Board determines that the company is no longer at risk (Ryanair - Annual report, 2019).

4.1.3.2 Management

The executive management is formed of group Chief Executive Officer Michael O’Leary, Chief Executive Officer Edward Wilson, Chief Operating Officer Peter Bellew, Chief Technology Officer John Hurley, Chief Marketing Officer Kenny Jacobs, Chief Communications Officer David O’Brien, Chief Risk Officer Carol Sharkey and Chief Financial Officer Neil Sorahan.

The year started with Michael O’Leary as a CEO of Ryanair but as he moved up and became group CEO, the ex-CPO, Edward Wilson has become the new CEO. Michael O’Leary served as a Director of Ryanair DAC since 1988 and Director of Ryanair Holdings since 1996 and CFO of Ryanair DAC. Starting 1994 he has been elected as CEO and has kept this position until this year, as he got promoted to group CEO. His tasks will now move from overseeing a single airline to overseeing the entire group.

Edward Wilson, current CEO of Ryanair DAC as of 1st of September 2019, is currently going through a three month transition period until being able to fully assume the position. Alongside the CEOs of other airlines under Ryanair’s umbrella will report directly to the new group CEO Michael O’Leary. Edward Wilson has been with the company since joined the company in 1997 and has served as head of personnel during his first 5 years. He then got elected as Chief People Officer, position in which he remained until earlier this year. His biggest achievement was leading the talks with the labour unions since 2017, when Ryanair recognized them.

Peter Bellew has a 30 years old career in travel and aviation business and has previously worked for Ryanair, after which he joined Malaysia Airlines as CEO for 3 years, returning recently to his current position. John Hurley has a career of over 20 years in the IT Industry, previously taking key positions in Foughthon Mifflin Harcourt, Publishing Ltd and Education Multimedia Group. Neil Sorahan has been with the company since 2003, as a Group Treasurer since 2003 and Finance Director since 2006 (Ryanair, Senior Management, 2019).

Even though Ryanair's Annual Report pictures the Management as being a perfect fit to the needs of the company, continuous strikes and demands from the staff over the years tends to contradict it. The complaints start with the highest ranks, Michael O'Leary, being the target of numerous accusations such as lacking social responsibility, acting in an aggressive and unapologetic way and even go to the beginnings, people pointing out that he didn't even finish his university and has been pushed through the ranks by Tony Ryan all the way to the CEO position (White, 2017).

4.1.3.3 Board of Directors

The aim of this section is to examine the format of the board of directors, the way they are elected and the mechanism behind their decision making process, this way the reader will receive further insights into the governance processes of Ryanair.

The board is composed of one Executive member and eleven Non-Executive Directors, being a common practice in Ryanair's history that the majority of the board has to be formed of Independent Non-Executives and the chairman has to be a Non-Executive as well. Ryanair aims to have an optimal Board of Directors regarding size, composition and diversity with strict entry requirements regarding the business experience, skills and knowledge.

Directors are appointed by the Nomination Committee, following a selection process and require approval by the Board and they must undergo a final election during the Annual General Meeting of the shareholders. Ryanair's policy require every Director to retire on a yearly basis and offer the option of being re-elected within a period of three years. The Board carries out an independence evaluation of every Non-Executive Director on a yearly basis in order to ensure the decisions made are compromise free (Ryanair - Annual report, 2019).

Even though Ryanair states in its annual report that the board has been found independent, the facts seem to tell a different story. For example Howard Millar and Michael Cawley are listed as independent yet it seems they have links with the airline, both of them working for O’Leary until recently. In the same category falls Kyran McLaughin who has served as O’Leary’s adviser for more than 20 years (Paul, 2017).

4.1.4 Vision and Core Values

Ryanair considers that its objective is to “firmly establish itself as Europe’s leading low-fares scheduled passenger airline through continued improvements and expanded offerings of its low-fares service. Ryanair aims to offer low fares that generate increased passenger traffic while maintaining a continuous focus on cost-containment and operating efficiency” (Ryanair - Annual report, 2015). If for most of its operating years the focus was strictly on cutting cost and being as efficient as possible, nowadays, the company seems to be changing, with Kenny Jacobs, the CMO of Ryanair stating that they are following the Aldi, Ikea and H&M strategy, as they “started off absolutely focused on low cost and then on top of low cost they added more choice and then they improved the service” (Cooper, 2018).

The company considers that it is its duty to provide passengers with a low-cost option to travel to different countries, and over the years, this mentality has helped Ryanair turn into the only ultra-low cost carrier (ULCC) in Europe. Now that the position has been reached, it aims not only on maintaining the lead but it is now looking into providing better services for its customers, while keeping in sight the “lowest fares on the market” strategy (Ryanair - Annual report, 2019).

4.1.5 Business Model and Strategy

Ryanair’s business model followed the one of Southwest airline, the first low-cost carrier company in the world, aiming to offer tickets at the lowest possible prices on the market. In order to turn its business model into a sustainable one, Ryanair follows some typical LLC decisions but also some original ones.

The company is using a “point to point” system rather than a “hub and spoke” operating mostly direct flights from one destination to another (Ryanair - Annual report, 2019), discouraging clients to opt for connecting flights. On top of that, Ryanair uses secondary airports in the large cities as these charge lower landing fees lower air duty tax for passenger, allowing them to offer lower fares. Some of these examples are: Stansted instead of Heathrow in London, Charleroi instead of Brussels airport and Ciampino instead of Fiumicino in Rome.

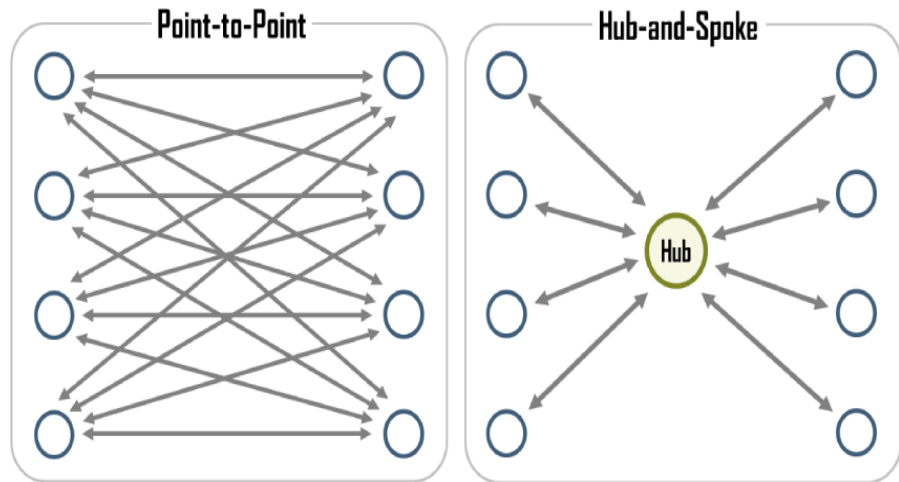


Figure 8: Transport systems
 Source: *Transportgeography.org*

Its fleet consists only of Boeing 737 style planes, with constant orders maintaining the fleet as new and efficient as possible. This allows them not only to get better deals from Boeing as they mainly order from them but also reduces maintenance and spare parts costs and allows the crew to switch from one route to another without having to deal with learning new aircrafts systems. On top of that, Ryanair’s planes have an in-built ladder that allows them to be one of the fastest airlines in regards with time between embarkation of the passengers-taking off and landing-disembarkation, with the boarding gate closing only 20 minutes before taking off (Ryanair, 2019).

As specified before, Ryanair is an ultra LLC rather than a regular one due to extreme cost cuts made through charging for the on board meals and the checked luggage, only offering a small cabin bag option for free and asking its customers to check in online, charging them in case they need to check in at the airport. On top of that they don’t rely on travel agencies to sell tickets for them as their website is handing more than 98% of the bookings, making it the most visited website of an airline company (Corporate Ryanair, 2019).

4.1.6 Partnerships

In order to further expand its customer base, Ryanair has constantly been developing partnerships and sponsorships with different institutions. On top of currently being one of the main sponsors for National Gallery of Ireland, Trinity College, Fairyhouse and Puncchestown, it is also the official airline partner of the Cheltenham Hunting Festival. Probably the most remarkable partnership of Ryanair is with the ESN(Erasmus Student Network). Targeted at the young students and volunteers that go abroad for different exchange stages, the program offers a 15% discount on flights booked through the official website and a checked in luggage for ESN card owners (Corporate Ryanair, 2019). With almost a million exchange students and professors every year and constant growth in the numbers (European Commission, 2019), traveling between every country of the European Union and a few more outside, Ryanair seems to have come up with a smart strategic move that seems to continuously attract the young generation.

As of 2019, Ryanair has also developed environmental partnerships with First Climate, Irish Whale and Dolphin Group, Renature Monchique and Native Woodland Trust through which they are aiming to sponsor them with over 1 Million Euro gathered through the carbon offset donations from customers (Corporate Ryanair, 2019).

4.1.7 Competitors

In order to get a better understanding of Ryanair's situation, a closer look will be taken at its main competitors. In order to select the peer group, two main characteristics have been chosen: the business model and the geographical area in which the companies operate therefore the competitors are considered to be low cost carrier(LLC) and operate mainly in Europe, the three most relevant ones being: EasyJet, Norwegian Air Shuttle and WizzAir.

4.1.7.1 EasyJet

EasyJet is a low-cost European company founded in 1995, based in London Luton Airport that operates both domestic and international, with 979 routes in 35 countries (EasyJet, 2019). EasyJet started by operating a single model aircraft but that changed in October 2002 when they acquired 120 Airbus A319 aircrafts. Nowadays, EasyJet's fleet is composed of 315 Airbus aircrafts, of 4 different models with 109 more on order and has carried over 88.5 million passengers in 2018, making it the 2nd largest LLC in Europe, after Ryanair (Annual report - EasyJet, 2018).

Out of all the competitors selected for this study, EasyJet is the closest to Ryanair in terms of business strategy as it adopted similar measures such as: not focusing on connecting flights, not providing complimentary services on board and charging extra for priority boarding, on hold luggage and others. One main difference would be that even though they started with a similar strategy, EasyJet has decided to allow unions to intervene in 2006 (Berry, 2006), prior to Ryanair, which has only agreed to collaborate with them in 2017 (Corporate Ryanair, 2019).

4.1.7.2 Norwegian Air Shuttle(NAS)

NAS is the largest Norwegian airline company and the third largest low-cost carrier in Europe, after Ryanair and EasyJet. It was founded in 1993 for taking over Busy Bee, with the main purpose of being a regional airline, operating in western Norway. The company switched and has become a budget carrier in 2002 when it took over Braathens (Norwegian - Our story, 2019).

NAS's current fleet consists of 164 aircrafts that carried more than 37 million passengers last year across Europe (Annual report - NAS, 2018). The airline has focused entirely on Boeing aircrafts but has recently decided to set an order for 30 Airbus A321LR as it is planning to further connect Europe and the U.S. starting 2020 (Airbus, 2016).

The strategy of the airline is to be a low-cost carrier serving both leisure and business travelers within Europe, with the largest number of routes within Norway and recently connecting Europe to Asia and North America. The company follows the strategy of other LLCs yet differentiate itself by offering in-flight entertainment and USB charging plugs and a higher overall quality of services. As Ryanair, Norwegian has been through some scandals regarding unethical decisions, their relations to the unions being quite tense. If Ryanair used temporary employment offices in Gibraltar, for tax avoidance purposes, Norwegian Air Shuttle has been accused of using offices located in Estonia (Berglund, 2012).

4.1.7.3 WizzAir

WizzAir is a Hungarian low-cost airline founded in 2003 with its head office in Budapest and is currently the largest Hungarian airline, even though it is not a flag carrier. Its fleet currently consists of 93 Airbus 320, with 3 variation of the model in operation and has 269 more aircrafts ordered, making it the airline with the most aircrafts on order in Europe (CAPA, 2018). They currently operate on 151 airports spread over 44 countries and has carried more than 29 million

passengers in 2018 (Annual Report - WizzAir, 2018). The company’s strategy follows the patterns of a regular LLC and on top of that, it has focused on opening routes to new destinations that were not explored before, especially in Eastern Europe, this way capitalizing the rise in tourism in this region (WizzAir - Route Map, 2019).

	Passengers	Fleet	Countries	Routes	Employees
Ryanair	130 Million	440	37	1,831	14,500
Norwegian	37 Million	164	39	500	10,215
Easyjet	88.5 Million	315	35	979	14,000
Wizzair	29.6 Million	93	44	525	3,600

Figure 9: Airlines size comparison

Source: Own creation & 2018 annual reports

4.1.8 Positioning

Another important factor that needs to be analyzed is the positioning in the market of Ryanair and its competitors. Positioning is based around the spot a brand occupies regarding perception of the customers and focuses on the distinguishing features the company has compared to other companies. The spot occupied is shortly described as the reason why consumers buy it (Wind, 1988).

Ryanair has a clear positioning in the market, based on optimization of performance. It has comfortable seated itself as market leader when it comes to offering the lowest fares possible on the market. They manage to achieve this by purposely cutting down any cost they considered it stands in their way of doing so. They chose not to focus on their reputation as much as competitor companies, therefore, while

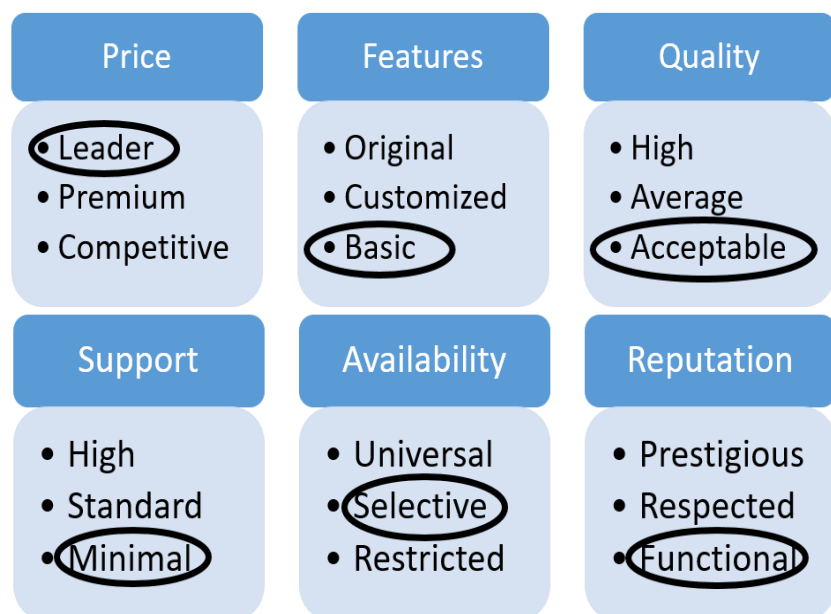


Figure 10: Ryanair’s positioning strategy

Source: Own creation

flying with them the service and the features offered are considered minimal, in order to get extra, you have to pay extra. The lack of focus on customer care and support has led to Ryanair being voted the worst airline 6 consecutive years (Which.co.uk, 2019). The situation doesn't seem to improve from year to year, and it's mainly because it is not meant to as Ryanair chooses to operate in such ways that will keep the airline as functional as possible.

As stated above, figure 11 proves that the perception of the public matches the way Ryanair perceives business. Offering the lowest fares, with an average fare of 37 Euro/ticket(Appendix 4), seems to be clearly leading the market. EasyJet and WizzAir follow a similar strategy yet, the prices they managed to offer are higher than what Ryanair offered to the public with average price/ticket of 65.4 Euro/ticket for WizzAir and 73.77 Euro/ticket offered by EasyJet (Appendix 4), in exchange, the services offered by the two companies seem to be ranked higher. Norwegian air is the company that seems to stand out of the crowd, with both higher prices and higher quality of services offered.



Figure 11: Positioning of Ryanair
 Source: Own creation & Appendix 4

4.1.9 Financial Performance

4.1.9.1 Stock performance

Ryanair became a publicly traded company on May 1997 on Dublin stock exchange and NASDAQ(New York) stock exchange and is currently traded as “RYA” and “RYAAY”. The stock has faced a constant growth over its first decade of existence, with a small drop in value in 2004. The company seemed to have adapted well to the different obstacles it came across in the past decades, the main example being the economic crisis in 2007-2008 when the stock prices of some airline companies dropped by 80-90%, with some of them such as Spanair and Cimber Sterling going bankrupt soon after (Reuters, 2012) & (Khetani, 2012), Ryanair’s stock only dropped by only 50-60% and after 4 years of stagnation, the value of the Ryanair stock has risen from 4.01 Euro/share in July 2012 to an amazing peak of 18.37 Euro/Share in July 2017. Since then, the value

has seen constant decrease, reaching 8.57 Euro/Share in August 2019, the drop being most likely blamed on the fear of a hard Brexit that could send Ryanair's stock plunging towards a rock bottom.



Figure 12: Evolution of Ryanair's share price
Source: [google.com/finance](https://www.google.com/finance) – Ryanair

4.1.9.2 Financial performance of Ryanair

After years of continuous growth, Ryanair has reported this year the lowest profit in the past 4 years and forecast another fall next year even though the number of passengers continued to rise. The slowing down in profits is blamed on the drop in fares due to Brexit uncertainty, as Ryanair has to stimulate and make up for it with offering better promotions. Other reasons for the shrink in the profit are the increase of fuel prices by 28%, the increase in staff costs by 33% and the start-up cost for acquiring Laudamotion (Ryanair - Annual report, 2019).

Million €	2015	2016	2017	2018	2019
Total operating revenues	5654	6535.8	6647.8	7151	7697.4
Change (%)	12.26%	15.60%	1.71%	7.57%	7.64%
Total operating Expensee	4611.1	5075.7	5113.8	5483.7	6680.6
Change (%)	5.32%	10.08%	0.75%	7.23%	21.83%
EBIT	1042.9	1460.1	1534	1667.3	1016.8
EBT(Operating profit)	1158.6	1622.9	1688.4	1828.4	1079.9
Operating exp. Ratio	0.815547	0.7765997	0.769247	0.766844	0.867903
EBT margin(%)	20.49%	24.83%	25.40%	25.57%	14.03%
Basic earnings per share(€)	0.6259	1.1626	1.053	1.2151	0.7739
Total assets	12185.4	11218.3	11989.7	12361.8	13250.7
Shareholder's equity	4035.1	3596.8	4423	4468.9	5214.9
Equity ratio	0.331142	0.320619	0.3689	0.361509	0.393557
Current assets	5742	4821.5	4706.1	4189	3804
Current liabilities	3346	3369.5	3011.8	3412.9	4096.6
Current ratio	1.716079	1.4309245	1.562554	1.227402	0.928575
Passengers (million)	90.6	106.4	120	130.3	142.1
Change (%)	10.89%	17.44%	12.78%	8.58%	9.06%

Figure 13: Key financial figures

Source: Own creation & Ryanair annual reports 2015-2019

Probably, the most important reason behind the lower profits this year is the delay in the Boeing 737 Max caused by the Ethiopian Airline incident, when the same model of plane crashed, leading to the death of 157 people. That led to Ryanair carrying only 142 million passengers, with 6% less than what they forecasted for the same year, as they expected to serve between 151 and 153 million passengers. Not only the new expected planes caused disruptions in flights segments and loss but Ryanair decided to keep all its Boeing 737 Max planes on the ground until further checks of security are made and the authorities allow them to fly again (Ryanair - Annual report, 2019).

With only a 7.64% growth in operating revenues and a 21.83% growth in operating expenses, Ryanair's profits quickly shrunk to a half decade's low, with a drop of 42% in earnings before tax(EBT) from €1,82 Billion last year to only €1,07 Billion. This come as a shock, considering that the number of passengers carried by the airline increased by 9% compared to the next year.

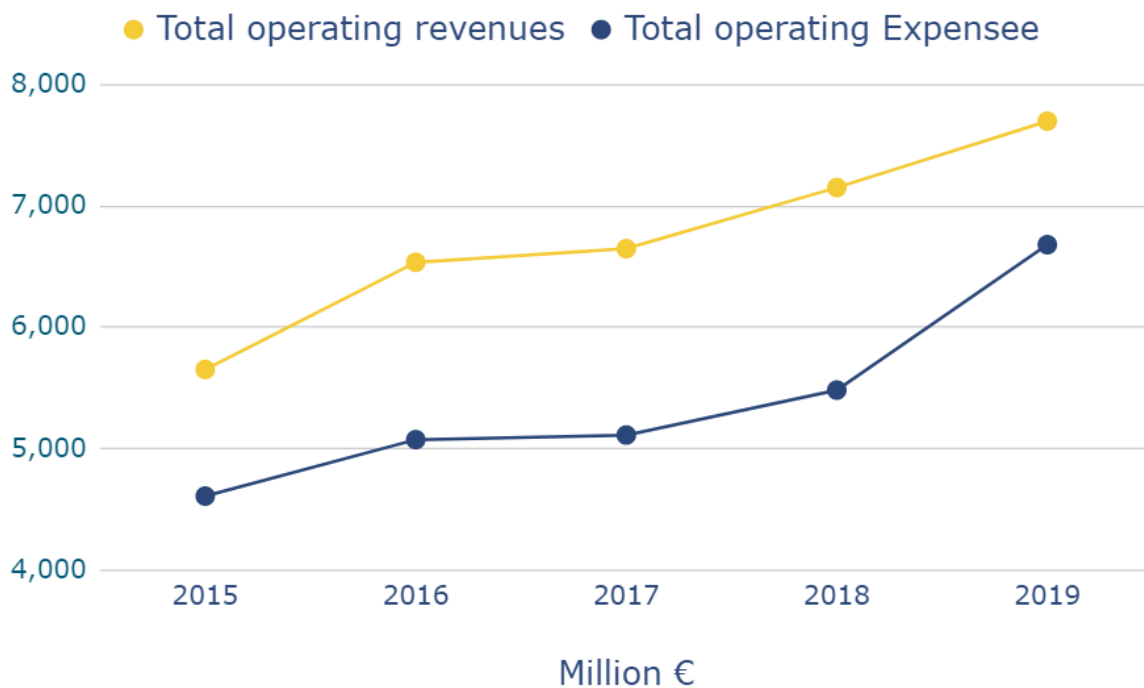


Figure 14: Operating revenues vs expenses
 Source: Own creation & Ryanair annual reports 2015-2019

4.2 Strategic analysis

4.2.1 PESTEL analysis

The PESTEL model is in fact an extension of the classic PEST model that looked only at the Political, Economic, Socio-cultural and Technological factors. Due to the continuous growth in complexity of the business environment, the extended model also includes the Environmental and Legal issues (Galea, 2014).

4.2.1.1 Political Factors

Historically, the airline industry has been sensitive to changes in the political environment. The past decades are represented by large deregulations, with fewer restrictions to follow, the airlines turned from traditional national companies to dynamic, interstate, fast expanding companies. The milestone of the deregulation process is 1997, when both European Union and the United states allowed airlines to operate flights between more countries, with the condition that the connection is made through the airline's home base. On top of that the airlines could now compete on different aspects such as prices, routes, and frequencies without a third party regulator (ICAO, 2016).

After years of continuous expansion for Ryanair, partly due to deregulation, it seems the company is facing a great risk: Brexit. The outcomes of Brexit are highly unpredictable and depend, especially on an agreement reached or not between the EU and the UK. With its main base in the UK, the company has been asked to relocate or turn one of their EU bases into the main one if they want to continue operating inter EU flights.

Although the future outcome of the Brexit situation is yet unknown, with different possible scenarios, Ryanair has already taken some action in order to protect itself for the worst case scenario and now is carefully waiting for further information regarding the Brexit.

4.2.1.2 Economic Factors

Demand in air travel is usually determined by the outlook of the overall economy as there is a correlation between those two, with GDP growth causing growth in civil aviation (Zhou & Zhongmin, 2005). As Ryanair has Ireland as the home country and operates mostly in the European Union, an analysis of the evolution of real GDP per capita will be conducted. On top of that since this thesis implicates Brexit and around 30% of Ryanair's revenues come from flights within and connecting the United Kingdom (Ryanair - Annual report, 2019), the Real GDP per capita will also be analyzed in this case.

In the case of the European Union, the value of the Real GDP per capita, calculated as average of the 28 countries has faced constant yet slow growth over the past ten years therefore the airline companies had to benefit from this. Ireland on the other hand faced even slower growth rates in the first half of the 10 year period but benefited from incredible growth, as high as 24% in the second half, proving that the economy is booming and Ryanair would benefit from it. On the other hand, with the Brexit getting closer and closer and the uncertainty growing day by day, the UK economy seems to have slowed down, after 5-6 years with 1-2% annual growth in the GDP per capita, in 2018 they only registered a 0.73% growth compared to the previous year.

If on one hand, Ireland's economy might continue to grow, especially with a part of the businesses from the UK likely to move their headquarters to Dublin, both the EU and UK are to register more drastic changes. Considering the size of the EU, the impact of Brexit is less likely to be a major one as opposed to the UK, which, by also being the main actor of Brexit, is more likely to be impacted.

Real GDP per capita (€)

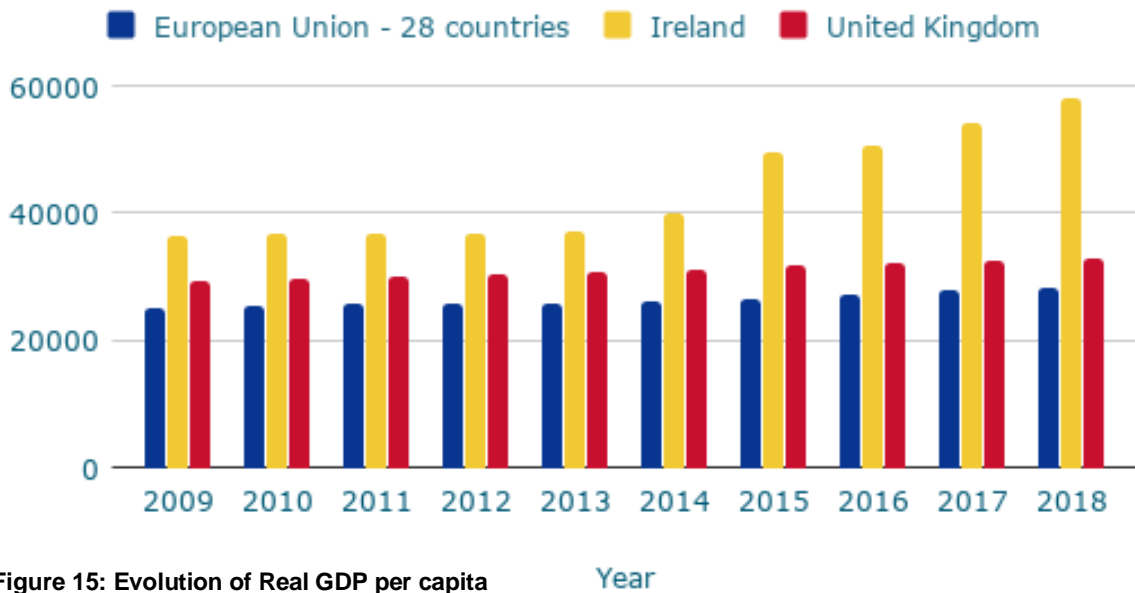


Figure 15: Evolution of Real GDP per capita
 Source: Own creation & appendix 3

Another economic factor impacting the airline companies is the oil prices mainly due to the fact that jet fuel and oil prices are strongly correlated and with jet fuel being around 35-36% of Ryanair's operating costs (Ryanair - Annual report, 2019), it is crucial to look at the evolution of the two.

Due to high fluctuation and volatility in oil prices, airlines are open to great risk, with even a slight increase in the prices, companies could increase their costs significantly, for example, Ryanair estimates an increase of 1\$ in the annual average of the metric ton of oil, would

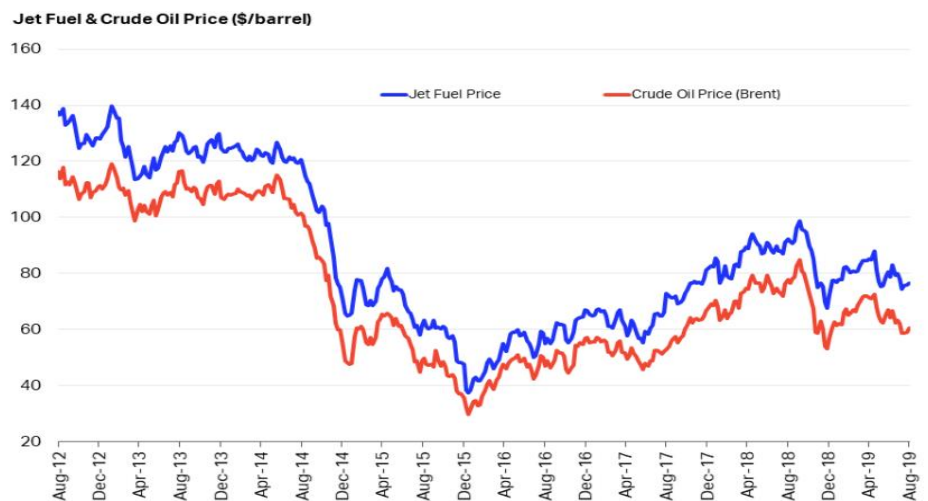


Figure 16: Jet fuel price & Crude oil price developments
 Source: IATA fuel monitor 2019

cost the company 3.3 Million Euro. To avoid being open to such risk, Ryanair engages in regular hedging transactions, where the company and the counterpart agree to buying/selling the barrel of oil at a specific date in the future at a set price (Ryanair - Annual report, 2019)

The hedging strategy is really effective in the short term, especially that the hedging prices are low but in the long run, Ryanair cannot fully cover it's risk considering the scarcity of the oil will eventually increase the prices of jet fuel.

4.2.1.3 Socio-Cultural Factors

Similar to the previous years, the number of air passengers worldwide is continuously growing with The International Air Transport Association (IATA) expecting the number of passengers to double in the next two decades (IATA, 2019).

Ryanair is currently expanding its fleet, adding new destinations and additional flights, as they expect the annual number of passengers from 142 million to 200million within the next 5 years (Ryanair - Annual report, 2019). It is crucial for Ryanair to expand at an accurate rate, as not enough aircrafts will reduce the potential profit while an obsessive expansion, followed by a lower growth rate in the number of passengers than expected would lead Ryanair to financial trouble.

4.2.1.4 Technological Factors

Technology and innovation are crucial to airline companies as they can be used to reduce costs, optimize the operations and create a competitive advantage.

One other scope in which technology can be used is reducing the CO2 emissions and offering cleaner flight opportunities as companies are under increasing pressure to become more environmentally friendly. A solution to this issue is having a fleet as new and up to date as possible that not only reduces CO2 emissions but also reduces the costs/seat/km as the new aircrafts are more efficient. Ryanair is expected to receive 210 new Boeing 737-MAX-200 within the next 5 years, the newest generation produced by Boeing which promises a reduction of costs of 16% per seat. On top of that Ryanair has just launched a technological Centre in Bergamo with the sole purpose of training pilots, engineers and cabin crew (Ryanair, 2019).

Another technological innovation worth mentioning are the launch and high growth in the number of users of fare comparing websites such as www.skyscanner.com or www.Kayak.com. Now

airlines have to constantly keep an eye on the prices of the competitors as more and more customers go through these type of websites in order to compare and find the cheapest and most convenient route they can take.

4.2.1.5 Environmental Factors

As consumers and the general public are constantly raising concerns regarding the environmental issues related to the aviation industry, it is clear that the companies that will not be able to adapt fast enough to the needs and requirements, will face consequences.

In order to keep the CO₂ emissions under control, over 70 states have joined forces into supporting CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation). Its aims are to mitigate more than 2.5 billion of metric tons of CO₂ and provide 40 billion USD to the climate finance by 2035 (IATA, 2019).

On top of that, CORSIA acts as a referee and requires all the airline companies to provide data regarding their annual level of CO₂ emissions. Not only that Ryanair has reached its emission targets but has now decided to publish data regarding CO₂ levels on a monthly basis in order to increase the transparency. Ryanair takes serious the environmental issue, vowing to continue improving its operations in a responsible manner. In 2018, the company has introduced a voluntary scheme through which the costumers can off-set their CO₂ emissions by donating a small amount of money that are redirected to environmental partners of Ryanair on a yearly basis. On top of that, the company has vowed to lower their emission rate of CO₂/passenger by 10 percent and maintain the value under the competitor's average and eliminate all its non-recyclable plastics within the next 5 years (Ryanair - Annual report, 2019).

4.2.1.6 Legal Factors

The legal environment in which Ryanair operates is complex, with many authorities issuing strict laws that any airline has to respect in order to be a commercial one. Out of the legislative organizations found four of them are considered to be of high importance: European Aviation Safety Agency (EASA), International Air Transport Association (IATA), International Civil Aviation Organization (ICAO) and the United Kingdom Civil Aviation Authority (CAA). Together, they ensure that any aspect of the law is followed, while also maintaining a fair and balanced business environment.

As also stated above, by far the greatest risk Ryanair is facing at the moment is Brexit as the company might face potential regulatory challenges due to the fact that the UK will be the one deciding which laws will be held as before and which will be modified. One of the main concerns the company has raised is related to EU Regulation No. 1008/2008 that refers to the conditions under which an airline company is able to obtain a license to operate in the EU (European Parliament, 2008). The law states that in order to obtain the license, more than 50% of the outstanding shares must be controlled by nationals of the European Union member states. Meanwhile, the company has come up with solutions that aids hedging the risks. These solutions have been discussed under the ownership structure sub-chapter.

4.2.1.7 Summary of PESTEL analysis

Political	Technological
•Changes in regulations	•Increased efficiency planes
•Brexit	•Fare comparing websites
Economic	Environmental
•Economical performance	•CO2 emission reduction
•Fluctuation in oil prices	
Social-Cultural	Legal
•Higher demand for air travel	•Legislation changes post-Brexit
•Lower fares	
•Globalization	

Figure 17: PESTEL summary

Source: Own creation

As pictured in Figure 17, Ryanair's macro environment is highly complex, with many impacting forces falling in different categories. For now, the segments that have the highest potential of influencing Ryanair's operations are from the political and economic sphere with factors such as: Brexit, changes in regulation, economic performance and the fluctuation in oil prices being on the company's issue agenda. On the second plan, factors such as: increasing demand for air travel, globalization, higher efficiency planes and fare comparison websites have been identified. Probably the most underrated factor, the CO2 emission has made its way into the list, as more and more customers are environmental aware.

4.2.2 Analysis of Porter's Five Forces

While PESTEL offered us insights regarding the factors that affect Ryanair from a macroeconomic perspective, Porter's Five Forces framework will offer a detailed view of the airline industry and its attractiveness, therefore a microeconomic point of view by looking at 5 main factors: the threat of entry, the threat of substitutes, the bargaining power of suppliers, the bargaining power of buyers and the competitive rivalry (Porter, 1979).



4.2.2.1 Threat of new entrants

Whenever a new player decides to enter the market, its main goal is to gain market shares from the companies that are already

on the market, making the new entrant a threat, yet, in order to actually become a competitor, the new airline has to pass the entry barriers. The most relevant entry barriers the airline industry faces are: high capital requirements, airport capacity and bonus programs.

The costs associated with the aviation industry are high as the companies need capital for aircrafts, airport slots and landing/taking-off rights although it is not the main impediment for the new airlines due to the availability of a wide range of financing opportunities from investors, banks and even aircraft manufacturers. On top of that the companies also have leasing options.

A more delicate issue regarding entry barriers is the limited availability of airport slots. The slots are represented by the physical area offered to the airline in order for them to run the operations: check-in desk, security check area, gate access etc. (IATA, Worldwide Airport Slots, 2019). Due to the fact that airports only have a limited amount of slots, new competitors might have to pay a huge amount of money in order to get access to one. A good example would be the record set by Oman Air that paid \$75m for a pair of landing and takeoff slots at Heathrow Airport (Dominic O'Connell,

Figure 18: Ryanair's positioning strategy

Source: Own creation based on M.E. Porter (1979) - *How Competitive Forces Shape Strategy*

2016). Even if a company can afford the price of a new slot, they will face another issue: all the good slots are still occupied by other companies as they have the right of renewing their slots every year, gaining a competitive advantage over the new entrants.

Bonus/Reward programs represent another challenge for the new entrants in the market as customers can opt for paying a yearly membership fee that would provide them with plenty of benefits, such as: discounted tickets, priority boarding, extra luggage, fast track and many others. Once a person is a member of an airline company's benefit program, he is less likely to choose an alternative company for the same route, unless the price difference is substantial. Ryanair for example has just introduced its first frequent flying program in which a person can acquire a membership for £199 a year and benefits of fast-track through security, free seating and priority boarding on every flight (Ryanair - Annual report, 2019).

4.2.2.2 Threat of Substitutes

When assessing the viability of the alternative means of transport, one must look at factors such as price, time consumption and nowadays, the ecological footprint. Depending on the travel distance and the region, trips by car, bus, trains or even boats may also be able to satisfy the need of the customer, especially for short distances. For example, even though a flight from Budapest to Vienna would only take 50 minutes, considering the 2 hours that you have to be in advance at the airport and the transport to the airport, the door to door time would be around 3-4 hours and the cost higher than 150 euro while with the same time spent on the road, you only pay 30 euro on a drive, 10 euro on a bus and 8 euro on a train ticket (Rome2Rio, 2019).

The main advantage flying used to have over the other means of transport, the reduced amount of time that you spend between the destinations, seems now to have partially lost its value since the speed of the trains keeps increasing, with trains like AGV Italo, Siemens Velaro, Talgo and TGB reaching 350-360km/h nowadays, making the journeys shorter and shorter (Railway Technology, 2013). On top of that, the European Union is aiming to further develop and expand the Railway System between the component countries, with grants allocated to the railway investment of more than 33 Billion Euro (European Commission, 2019). Trains, therefore seem to be a strong opponent to the flight industry, especially with the growing concerns of CO2 emissions, as discussed in the PESTEL analysis, yet, Ryanair would probably be the least effected of the airline companies as it

combines the benefits of short travel time, low prices, most of the times even lower than railway but also care about the environment, claiming to be the greenest airline (Ryanair - Annual report, 2019).

It is not only alternative means of transport that can represent threats to the airline industry. There is a growing concern that more and more business travelers choose to have their meetings through video conference rather than face to face as it reduces time and money spent for such meetings. Despite accounting for a small part of the total number a passengers, the business travelers are an important segment targeted by the airlines, mainly because they are less price sensitive and their travel is covered by their companies (Macario, 2010).

4.2.2.3 Supplier's bargaining power

As margins in the airline industry are relatively low, bargaining is essential in order to ensure future profits, it is therefore necessary to analyze the power of bargaining of the suppliers and of the buyers. In general, for the airline industry, suppliers are fuel suppliers, airplane and spare parts manufacturers, maintenance providers and airports. On top of that the unions will be considered as “suppliers” on the workers side.

When it comes to airplane manufacturers, the industry faces a harsh duopoly, with Boeing and Airbus as main actors. This means in general a high supplier power, as the two companies can focus on a joint strategy that can affect the prices. Luckily, Airbus and Boeing are currently competing rather than cooperating, each one of them trying to get a larger share of the market. Currently, Ryanair's fleet consists only of Boeings, fact that has offered them large discounts while purchasing new aircrafts and spare pieces yet, this way the company would not be hedged against risks as delays, or failure in deliveries (Ryanair 20F, 2019). The fact that between Boeing and Ryanair there is a co-dependency relation reduces partially the bargaining power of Boeing, as Ryanair is one of their largest customers, they cannot afford to lose them. On top of that, earlier this year, Michael O'Leary, the CEO of Ryanair has confirmed talks with Airbus for a future collaboration with the newly acquired company, Laudamotion (Ryanair - Annual report, 2019). This way Ryanair is supposed to either end up receiving higher discounts from Boeing for staying a loyal customer or receive discounts for being a new customer of Airbus.

Regarding the power that workers and the unions behind them have, Ryanair is known to be “Anti-Union” and has been the target of many scandals for adopting this mentality. The situation changed in the recent months though, when the company decided to recognize unions for pilots and crew in a number of countries (Ryanair - Annual report, 2019) and the staff that once had no saying in different matters such as salaries, bonuses and other matters, now became empowered, or at least was supposed to, as Ryanair refused to follow the suggestions of the unions shortly after recognizing them. Large strikes followed in January with hundreds of crew members refusing to fly, making Ryanair give up in the end and allow better working conditions and ensure job security. If the bargaining power of the airplane producers used to be and continues to be low to medium, when it comes to the union’s power the situations seems to have taken a twist and if last year unions weren’t even recognized by Ryanair, this year it seems they managed to push the company in the corner and manage to get what they asked for, making their power of bargaining go from low to medium-high.

4.2.2.4 Customer’s bargaining power

It is considered that the customers have a higher bargaining power when there are only a few of them that are concentrated, there are low switching costs and the buyers in general are price sensitive (Johnson G., 2014).

In the airline industry price sensitivity depends on the type of customer: leisure or business. On one hand, as stated before, the business travelers are less sensitive to changes in prices due to the fact that the tickets are usually acquired by their companies, therefore the budget is a bit more generous. Countering the lack of sensitivity is the fact that high corporations can and tend to ask and get better deals for their employees as they fly frequent, making the overall bargaining power of the business class travelers to be medium.

When it comes to leisure travelers, they usually tend to aim for the cheapest tickets available making them highly sensitive to changes in price, offering them a higher bargaining power. On top of that bargaining power is increased due to wide availability of pricing information of competitor airlines through websites such as Skyscanner.com and Kiwi.com lowers the cost of switching, nowadays clients being one click away from choosing another company’s flight. On the other hand, the fact that the planes are most of the times full, sometimes companies even selling more tickets

than seats in their search for seat optimization (Jeffrey C., 2017), shows that there is a high demand in the industry, lowering the bargaining power of the customers. Talking strictly about Ryanair, it seems the customers have almost no word to say when it comes to the prices of the tickets as the strategy of the company involves ultra-cheap fares, most of the times with prices under the competitor's offers. For example an increase in the price of a ticket from 10 euro to 30 euro won't bother the customers and even if it does, most of the times, as the high load factor of Ryanair proves, there will be another customer willing to buy the ticket, considering that the next cheapest alternative is usually twice as expensive.

4.2.2.5 Rivalry amongst existing firms

The last subject touched by Porter's Five Forces model consists of the rivalry among existing players. As presented by Porter (1979), the level of the intensity of the competition is in an indirect relationship as a really competitive environment could drive profit levels down and the other way around.

Airline industry is known for having high launching costs yet, another important aspect for our analysis is the fact that exiting the market also comes at a high cost, with many airlines choosing to operate on loss (OECD, 2019), therefore the number of competitors remains constant in the long run. The industry tends to push out the companies without enough capital and forces the remaining ones to be as cost cautious and profitable as they can. Even though the competition seems to be constant regarding the number of existing airlines, another factor it is to be considered: expanding to the new routes. It seems that from this point of view, the rivalry is set to rise with all the airlines in our analysis launching new routes: 99 from Ryanair, 33 from EasyJet and 11 from WizzAir. On top of that, the LCC sector is known to have the fiercest rivalry amongst its competitors as the companies fight to offer the lowest fares possible, in their struggle to increase their market share.

4.2.2.6 Summary of Porter's five forces analysis

Concluding, Ryanair is operating in a highly complex and fierce environment in which they must operate carefully and adapt their strategy based on a number of factors. Firstly, the already high rivalry seems to continue to increase, with competitors launching new routes and offering competitive fares on one hand and a constant fear of substitutes due to an increase in customer choice for eco-efficient transportation such high speed electric trains on the other hand. On top of that the company has to consider the bargaining power, especially of the suppliers with labour

unions and fuel suppliers being the main concerns. Lastly, Ryanair should be aware of the new entrants and the impact they could have on the industry environment. Luckily for Ryanair the limited airport slots and large entry capital requirements make it relatively difficult for new airlines to succeed. A summary of the findings can be viewed in the Figure 19.

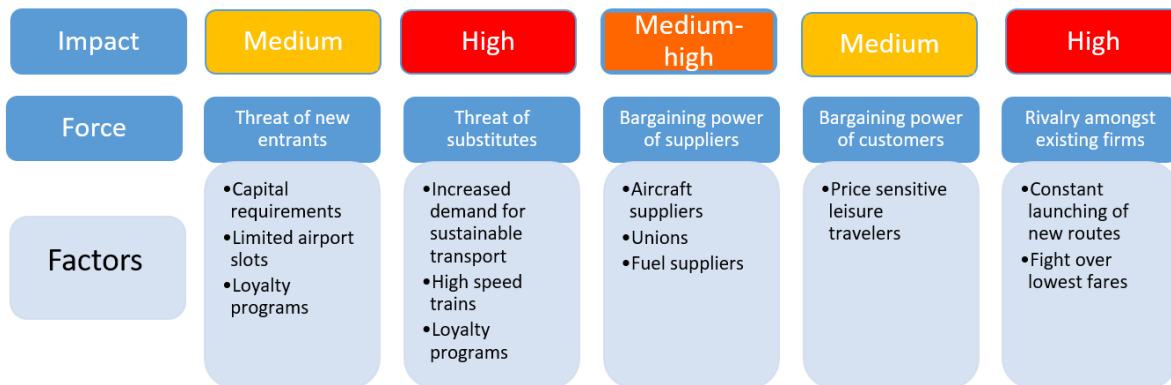


Figure 19: Porter's five forces summary
 Source: Own creation

4.2.3 Key industry measures analysis

To further enforce the analyses that have so far covered general aspects, it is crucial to consider the industry specific indicators. Specific airline industry factors such as Available seat kilometers (ASK), Revenue passenger kilometers (RPK), Load factor, Yield, Revenue per ASK, Cost per ASK and Profit per ASK will further be explained and analyzed.

4.2.3.1 Available seat kilometers (ASK)

Available seat kilometers is a fundamental indicative in the airline industry that measures capacity of carrying passengers. It is measured as the number of seats/spots available multiplied by the number of kilometers flown.

Figure 20 shows that even though they currently have different transporting capacities, the airlines seem to be expanding at similar paces, proving that they are preparing to match the future demands.

Ryanair is clearly leading the market regarding capacity and continues to expand further, managing to reach 170 billion ASK in 2018, from 125 Billion in 2014, representing a 35% increase. A similar increase has been registered by EasyJet who managed to increase its capacity by 31% over the same period. The stars though, are Norwegian and Wizzair, both which managed to double their capacity within the 5 years.

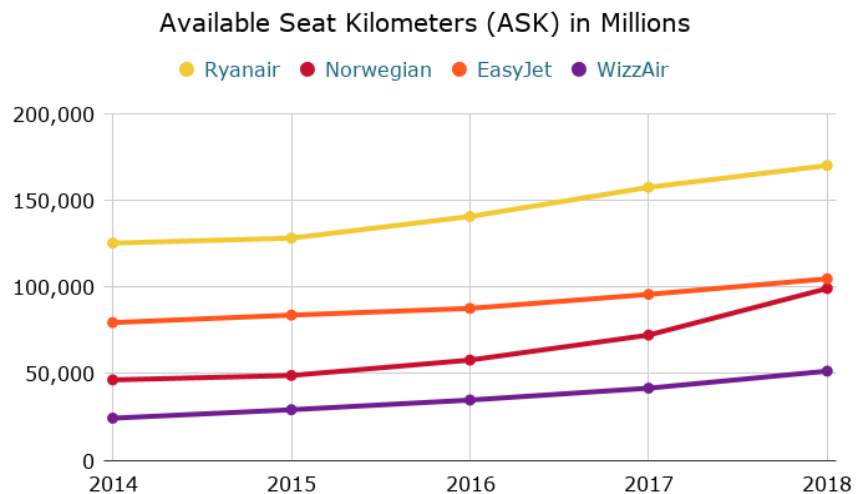


Figure 20: Evolution of ASK
 Source: Own creation & appendix 8

Ryanair seems to have taken action in advance and 2020-2024 will be market by the delivery of 135 new aircraft and the option of purchasing 75 more (Ryanair - Annual report, 2019). A similar strategy but on a larger scale has been followed by Norwegian, which has 195 new aircrafts on order (NAS, 2018) and WizzAir with an impressive order of 254 aircrafts (WizzAir, 2018) for the following years. Despite the aggressive extension of its opponents, EasyJet seems to prefer acquiring options of buying aircrafts, making it the most flexible airline out of the four, as by 2022, the company can decide how many aircrafts it wants under its flag, as its decisions can allow them to increase to 386 aircrafts or decrease to up to 315 (Annual report - EasyJet, 2018).

4.2.3.2 Revenue passenger kilometers (RPK)

Revenue passenger kilometers (RPK) is a clear indicative that can be used by management as an overview of the demand in the market and airlines have to adapt their ASK based on it. A higher offer than demand can lead to lower margins as the companies still have to deal with the fixed costs while a demand higher than the offer can lead to an increase in prices.

RPK can be calculated as the number of occupied seats multiplied with the number of kilometers flown and compared to ASK, which showed the capacity, it provides the actual value of production.

As mentioned above, companies tend to expand their fleet based on the demand, therefore usually ASK and RPK follow similar trends. As it can be noticed, figure 21 is, except a few differences, similar to figure 20.

The main event notable is based

around Norwegian as they expanded their ASK by 27 Billion while their RPK only expanded by 22 Billion. The other 3 airlines seemed to adapt precisely to the increase in demand.

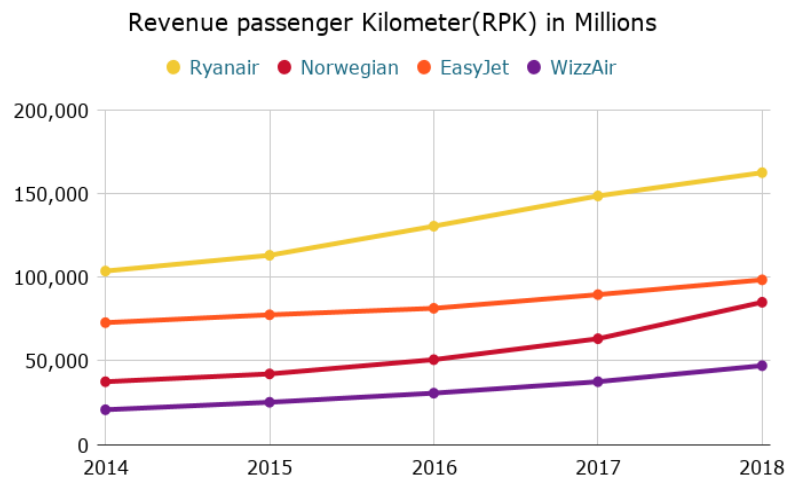


Figure 21: Evolution of RPK
Source: Own creation & appendix 8

4.2.3.3 Load factor

An even more efficient indicator is the load factor as it measures the airline's ability to fill in the seats. It is calculated by dividing RPK by ASK, this way eliminating the distance factor, allowing a better comparison of short-haul airlines such as Ryanair, WizzAir and EasyJet to companies that also operate long-haul flights such as Norwegian. The higher the load factor, the more efficient has the company been in matching their offer and the market demand and the more environmentally friendly the airline becomes as they use the fuel in a more efficient way.

If the first two indicators seemed to evolve hand in hand, Figure 22 shows that regarding the load factor, things are completely different. If in 2014 EasyJet seemed to lead with its efficiency managing to sell 91.7% of its available tickets, while the other three were struggling between 80% and 85%, over the next 5 years, the situation has changed for few of the airlines. Ryanair appears to have improved the most managing to increase its load factor from 82.7% to 95.5% within 5 years,

becoming the most efficient airline amongst the four. EasyJet has shown slow yet steady growth, managing to increase its load factor by 3.7% over the period, allowing it to be the 2nd. An impressive evolution can be noticed in WizzAir's case, the youngest of our selected airlines, managed to pass the 90% threshold in 2017, only 14 years after its launch. On the other hand, Norwegian who was only at 80.9% load factor in 2014, showed signs of improvement within the next 2 years, managing to reach 87.7% in 2016 after which a slow decline has been initiated, the load factor dropping to 85.8% in 2018.

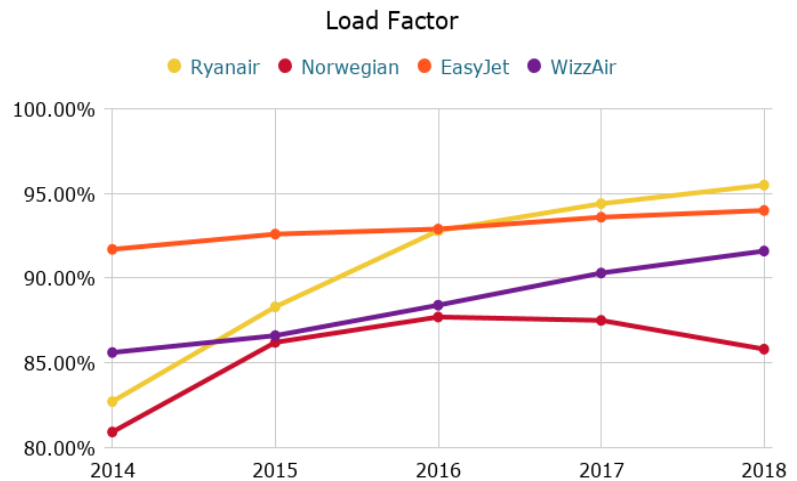


Figure 22: Load factor
 Source: Own creation & appendix 8

4.2.3.4 Yield (Revenue/RPK)

Yield represents the average airfare per passenger per kilometer and it is calculated by dividing the revenue by RPK, making it an effective indicator of how effective the airline is in securing revenues for the offered flights.

An overall drop in the yields of the airlines in the past 5 years can be noticed, mainly due to increase in costs, large part of it due to the increase price of fuel as between December 2015 and September 2019, the price has hiked from approximately 40 USD/barrel to more than 100 USD/barrel (Figure 12). With higher costs and fierce competition, airlines are constantly fighting to increase their load factor, many times doing so by offering lower fares, ending up lowering the yields.

Out of the four companies selected, EasyJet seems to have been the best at managing the rising cost crisis and not only they managed to retain their leader position but opposite to the other airlines, whose yields constantly decreased, EasyJet managed to actually increase their revenue per RPK in 2015 and 2018.

On the other hand, even with periodic increases in their yield, EasyJet still managed to lose 0.009 Euro per RPK within 5 years, while Wizzair only lost 0.007 Euro and Ryanair 0.005 Euro. The company that got affected the most is Norwegian, going from a yield 0.062 Euro to only 0.049 Euro, loss that can be blamed on their inability to match the lower fares of its competitors. Future seems to be volatile as the oil prices have taken a downturn in 2019 but the competition seems to have become as fierce as it has never been before, lowering the chances of the airlines to predict their future yields.

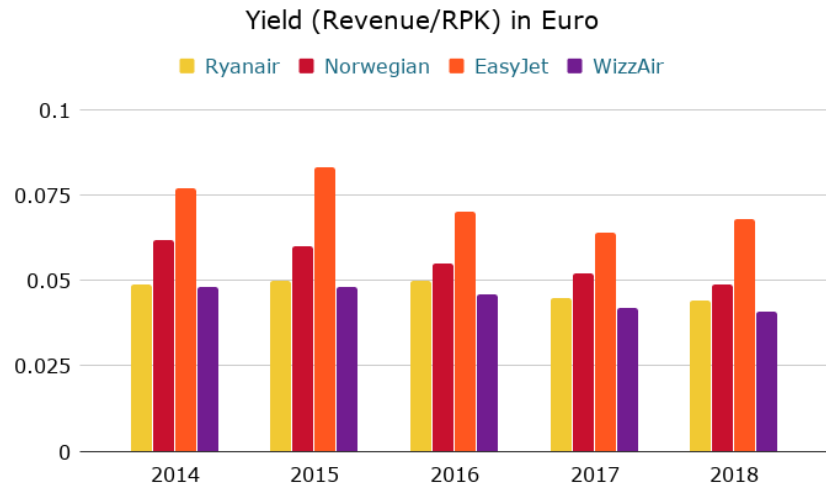


Figure 23: Evolution of Yield
 Source: Own creation & appendix 8

4.2.3.5 Revenue per ASK, Cost per ASK and Profit per ASK

In order to get a better understanding on how profitable airlines actually are, an analysis of both Revenue per ASK (RASK) and Cost per ASK (CASK) will be considered. The reason for analyzing both of the indicators at the same time is due to the fact that the difference between RASK and CASK will provide the value of Profit per ASK.

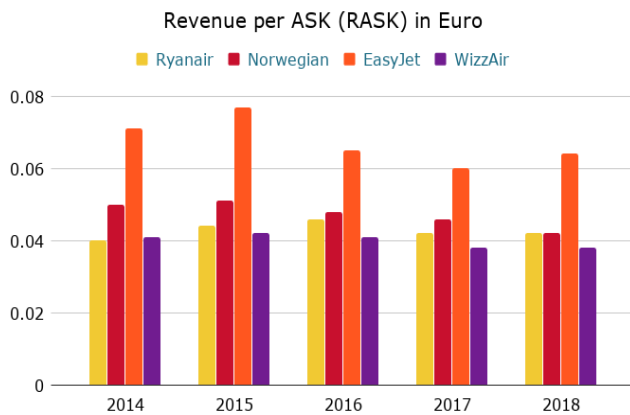


Figure 24: Evolution of RASK
 Source: Own creation & appendix 8

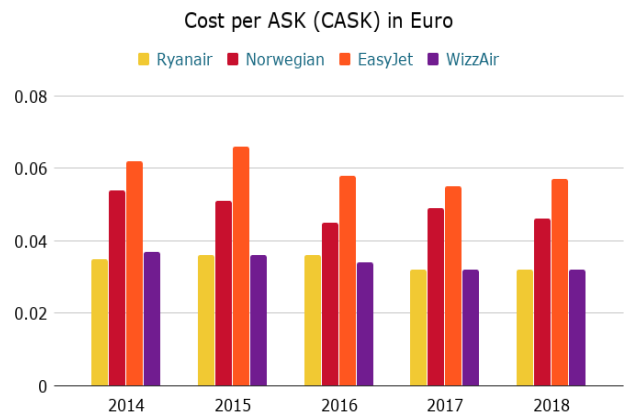


Figure 25: Evolution of CASK
 Source: Own creation & appendix 8

The five years period shows volatility in both the RASK and CASK for the majority of the airlines and in many cases, as before, the revenue and cost seem to move together, with the exception of Ryanair. It seems that Ryanair managed to increase its yearly revenues and when it did not managed to, the reduction was minor. On top of that, Ryanair managed to maintain constant or even reduce its costs per ASK, with 0.035 Euro per ASK in 2014 and 0.032 Euro per ASK in 2018. A similar path in reduction of CASK has been followed by WizzAir which, on the other also had to deal with falling RASK. Out of the four airlines, again, Norwegian seems to have trouble managing its revenues and costs.

A more convincing representation of how the situation evolved over time for the airlines is presented in figure 26. Here, it can clearly be noticed Ryanair’s efficiency in obtaining and increasing its Profit per ASK, managing to double it, from 0.005 Euro to 0.01 Euro in only two years and managing to keep it constant over the next three years, proving that even in a decade when the profits of airlines are shrinking, there is hope. On the opposite side, Norwegian is the only airline that has registered loss during the 5 year period.

In 2014 alone, Norwegian lost 0.004 Euro per ASK, after which, in 2015 they managed to break-even and the following year they managed to turn the tables and register a profit of 0.003 Euro per ASK. Unfortunately for them, it was the only year they managed to do so, the following two being also represented by large losses.

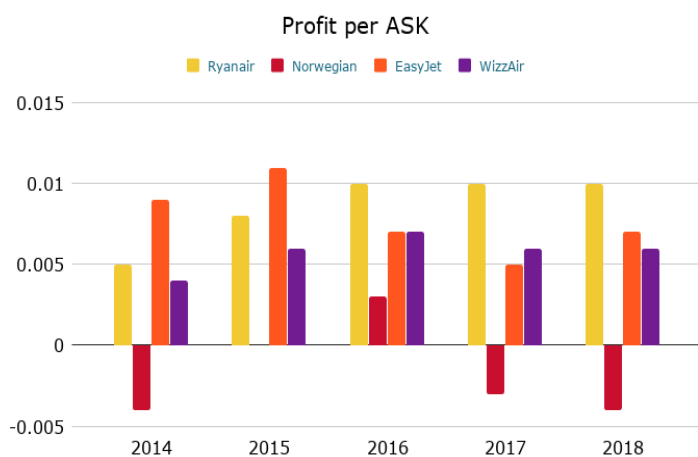


Figure 26: Evolution of PASK
Source: Own creation & appendix 8

4.2.3.6 Conclusion on key industry measure

Despite having the highest ASK, therefore capacity of all the competitors, Ryanair’s low-fare strategy yielded and allowed to company to also obtain the highest RPK values in the industry. Even though the low fare strategy resulted in lower yield, the company managed to benefit of increasing load factor, taking the lead against its competitors in 2017 with a 94.4% load factor, reaching 95.5% in 2018. On top of that, having one of the lowest RASK in the industry, Ryanair

still managed to obtain the highest PASK, mainly due to their extreme cost cutting strategies. Overall, it can be concluded that Ryanair's strategy allowed the company to become the most efficient airline in the industry.

4.2.4 Internal analysis-VRIO

In order to develop successful strategies an analysis of Ryanair's internal resources and capabilities will be presented and the sustainable competitive advantages the company will be identified using the VRIO framework. Originally developed and presented by Barney (1995), the framework is based on four attributes that the company must possess in order for its resources to be considered a sustainable competitive advantage: valuable, rare, imperfectly imitable and non-substitutable, shortly, VRIO.

- 1) *Valuable*: Do the attributes and resources of Ryanair allow the company to exploit an opportunity or neutralize a threat?
- 2) *Rare*: Is the valuable resource or capability rare?
- 3) *Imitability*: Is the resource or capability costly and hard to imitate by the competitors?
- 4) *Organizational*: Is Ryanair organized in order to exploit the potential of its resources and capabilities?

Based on the combination of answers to these questions, the resource or capability falls under four categories as Figure 27 shows:

Valuable	Rare	Costly to imitate	Organisation exploits it	Competitive implication
NO	-	-	-	Competitive disadvantage
YES	NO	-	-	Competitive parity
YES	YES	NO	-	Temporary competitive advantage
YES	YES	YES	YES	Sustained competitive advantage

Figure 27: VRIO framework
Source: Own creation

4.2.4.1 Aircraft fleet

Ryanair currently operates 430 single model Boeing 737 aircrafts and has 240 more on order for the near future. The company has constantly made efforts to maintain its fleet as new as possible by regularly acquiring the most modern available planes and retiring older planes as newer planes are more cost and fuel efficient.

By operating a uniform fleet, Ryanair manages to substantially decrease its costs. First of all, by acquiring the same model all the time, Ryanair manages to obtain notable discounts that would not be possible if they would order different models from different producers. Second of all, the maintenance costs drop as spare parts can be used from one aircraft to another. Another important factor in maintenance cost reduction is the labour cost involved, as the mechanics learn and only need to repair one type of plane. On top of that, the case of lower staff costs also applies to the pilots and stewardesses as they can easily work on different routes if required, offering the company a higher level of flexibility. With all these being said, it can argue that the aircraft fleet factor is valuable. Ryanair has proven that is well organized and has the ability of taking advantage of the single type aircraft strategy, with great financial results proving it.

On the other hand, when it comes to rarity and imitability, the usage of single type aircraft is a common trait amongst low-cost carriers and the perfect example would be EasyJet that uses Airbus A-319-A321 type aircrafts (Annual report - EasyJet, 2018). The only factor that is hard to obtain for the other companies is the size of the fleet, as Ryanair is currently way ahead of the competitors when it comes to the number of aircrafts in use, therefore Ryanair's fleet is considered a competitive advantage.

4.2.4.2 Brand and reputation

When it comes to brand value and its reputation, Ryanair is a paradox. By being the largest airline in Europe and one of the most popular airlines in the entire world it seems that they do a good job in attracting customers. On the other hand the customer surveys tell another story. The company has been voted as the worst airline in Europe and one of the worst in the world (Which.co.uk, 2019).

Ryanair continues to be one of the most chosen airlines due to their aggressive low fare advertising, with many opting for the cheapest option on the market, which most of the times happen to be Ryanair. The rupture between being happy with Ryanair and being disappointed happens as soon as they realize that everything else but the tickets will come at a high price. From airport check-in tax, luggage size reduction and overpriced extra luggage options, seat selection fee and name change fee, Ryanair is ready to do whatever it takes to increase its revenues. In 2019, the airline broke

another of its records, managing to achieve 31.7% of its revenue from extra charges (Ryanair - Annual report, 2019).

Another complain-worthy situation is the way the company is behaving with its customers and even staff. Ryanair is one of the airlines that deals with staff strikes with the most recent ones being in September this year. Strikes also come at a price, as angry pilots and staff refusing to work, resulting in hundreds of flights and thousands of unhappy customers. On top of that, the lack of customer care goes as far up as the CEO. The ex-CEO, currently group CEO, Michael O'Leary has been involved in numerous scandals in which he publicly insulted not only its staff but also its customers and the media reporting the incidents. When asked if he will ever apologized, he simply replied: "Are we going to say sorry for our lack of customer service. Absolutely not." (The Irish Times, 2017).

With this being said, it is clear that the brand and reputation is not the strong point of Ryanair and clearly not bringing value to the company. Even the company is aware of this and is currently working on rebranding Ryanair Sun into Buzz (Corporate Ryanair, 2019). On top of that Ryanair seems to purposely not change LaudaMotion and MaltaAir into companies that would contain the name of the Ryanair brand. As a conclusion it can be argued that the brand and reputation of Ryanair represents a competitive disadvantage.

4.2.4.3 Bargaining power

Probably one of the most exclusivist treats to possess for Ryanair is the ability to bargain with airports, suppliers, local authorities and even governments.

Local authorities and governments offer subsidies in order to boost the economy of certain regions/cities and attract tourists, aircraft suppliers tend to make discounts for bulk buying and airports can offer incentives and tax reduction in order to bring more airlines in and become more attractive. The fact that Ryanair is the largest low cost airline in Europe by the number of passengers carried makes it the ideal candidate to be targeted for bilateral agreements with airports and authorities. According to a study ran by Transport and Environment (2019) out of Ryanair's 214 airports, at least 35 (16%) of them have received government subsidies. Ryanair's annual report presents the fact that for the 2013 Boeing Contract, the company managed to obtain certain

price concessions in the form of discounts that could be used to purchase of other goods and services from Boeing. The promotions made reduced the overall price of each new aircraft purchased by Ryanair.

Taking into account the above mentioned, it is clear that bargaining power of Ryanair is adding value to the company. Since the subsidies are offered only to the largest companies with high potential of increasing tourism in a region and high purchasing power for large aircraft orders, it can be argued that the rarity element is present. In order to replicate Ryanair's ability, companies would have to reach Ryanair's size first, which at this point can only be done in theory, making the bargaining power also costly to replicate. Lastly, it can be noticed that Ryanair is well organized and is already taking advantage of the subsidies and discounts offered therefore, in conclusion, the bargaining power represents a competitive advantage for Ryanair.

4.2.4.4 Human resources

Despite the countless scandals regarding the inadequate treatment of their staff and a history of regular staff strikes, Ryanair's staff can potentially offer the company an important competitive advantage.

As mentioned previously in the thesis, Ryanair starts a step ahead of many competitors due to the fact that their fleet is uniform, allowing their staff to operate on different routes if required to do so, offering the company a high level of flexibility. Even though single aircraft fleet and multi-route operational staff are not unique characteristics, Ryanair manages to distance itself ahead of similar business model airlines by pushing the staff cost reduction to extreme. Some of the main Ryanair's staff cost reduction measures are: ability to require staff to take unpaid holiday leave, charging the staff for their uniform and charging for the training (Ryanair - Annual report, 2019).

By looking at measures such as cost per employee, number of customers served per employee and revenue per employee it can easily be proven that the human resources sector of Ryanair provides great value to the company. By looking at the data presented in Figure 28, it can be noticed that Ryanair's staff is the most efficient, leading with almost 9000 passengers served per employee, with Norwegian at the other end with only 3622 passengers served per employee in 2018. When it comes to the average amount spent on an employee, Ryanair occupies the second place, following

WizzAir. It is important to state that this situation occurs after Ryanair had a 17% increase in the staff related costs as compared to 2017 (Annual report - Ryanair, 2018).

2018	Ryanair	Easyjet	Norwegian	Wizzair
Number of employees	14500	14000	10215	3600
Staff related costs(Million €)	701.5	983.1	579.84	147.6
Number of passengers(Million)	130	88.5	30	29.6
Cost/employee(€)	48379	70226	56764	41000
Passengers/employee	8965	6321	3622	8222

Figure 28: Staff and passenger summary
Source: Own creation & annual reports 2018

Considering that, as it can be noticed in Figure 28, Ryanair and Wizzair are relatively close regarding the cost/employee and passengers/employee, one may argue that the treat is not rare nor imitable. On the other hand, if the size of the two companies is to be considered, it can be argued that the reality is different as none of the large companies managed to obtain an efficiency close to Ryanair. As for WizzAir, it will be costly and difficult, if not impossible to reach Ryanair's size and still maintain the same results regarding staff efficiency. On top of that, not only Ryanair is well organized to take advantage of the potential of the resource but it is clear by now that they are the ones that made this possible, therefore human resources represent a competitive advantage for the company.

4.2.4.5 Cost Efficiency

If Ryanair could be described in one word, that would most likely be "efficiency". As a starting point, it is important to mention that at the roots of efficiency stands value is considered valuable.

In order to measure cost efficiency, cost per available seat kilometer will be used. Ryanair seems to be leading the airline industry amongst WizzAir with 0.032 Euro per available seat kilometer.

Despite having already offered an example of another company that manages to push the costs as low as Ryanair, it can be argued that the ability to be extremely cost efficient is still a rare treat as the rest of the companies that follow a similar business model are far from reaching 0.032 Euro limit, with Norwegian spending 0.046 Euro and EasyJet 0.057 Euro for every available seat for the distance of one kilometer flown. On top of that the ability to be cost efficient is hard to imitate, not only cost wise, as it involves constant investment in aircrafts, training and development and even pushing the legal boundaries.

On top of that, generally talking there is a tradeoff between cost efficiency and quality of services provided as focusing too much on cost reductions associated with productivity can reduce the satisfaction of the customers and a strong focus on customer satisfaction can increase the costs (Rust, 2012). In these conditions, most of the airlines seem to focus more on providing quality and even the ones that do focus on cost rather than quality do not push cost reduction as much as Ryanair, which is currently the only ultra-low cost carrier that openly announced, through their CEO, Michael O’Leary, their extreme approach on cost rather than quality.

Considering that Ryanair’s main goal is keeping the costs as low as possible, the company already qualifies as well organized enough to take advantage of its cost reduction ability. With these being said, since cost efficiency has been proven to be valuable, rare and hard to imitate it is clear that Ryanair’s ability qualifies as a competitive advantage.

Resource/Ability	Valuable	Rare	Difficult to imitate	Organized	Result
Aircraft fleet	YES	YES	YES	YES	Competitive advantage
Brand and reputation	NO	-	-	-	Competitive disadvantage
Bargaining power	YES	YES	YES	YES	Competitive advantage
Human resources	YES	YES	YES	YES	Competitive advantage
Cost efficiency	YES	YES	YES	YES	Competitive advantage

Figure 29: Ryanair’s competitive advantages

Source: Own creation

4.2.5 Summary of the strategic analysis

Following all the research and in depth analysis of Ryanair and its environment, it is now time to summarize the findings and distribute them in four categories: strengths, weaknesses, opportunities and threats. In order to offer the reader an easy to understand overview, the results will be placed in the SWOT matrix summary presented in Figure 30.

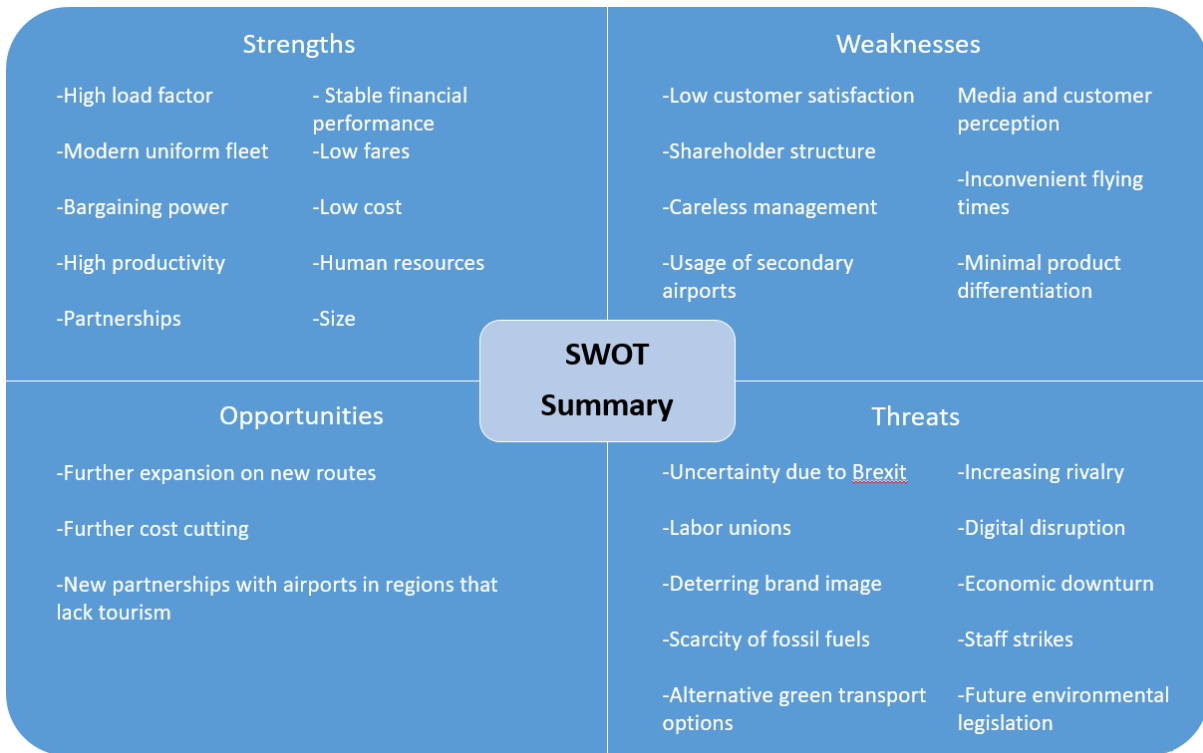


Figure 30: SWOT summary
 Source: Own creation

4.3 Scenario planning

Schwartz(1991) defined scenario planning as “a tool for ordering one’s perceptions about alternative future environments in which one’s decisions might be played out”.

According to (Schoemaker J., 1995), managers who are able to broaden their imagination horizons will be able to predict a larger range of possible futures, therefore be better positioned and take advantage of the unexpected opportunities that arise.

This chapter aims at showing how Ryanair could have and still can adapt their decisions regarding Brexit, based on a scenario planning procedure. In the beginning, the scenarios will be developed from a past perspective, with the date of the referendum as a starting point. The second part of the scenarios will be presented with regards to the future, and what Ryanair should expect from the different scenarios. In order to do so, Schwartz’s 8 step methodology will be used

4.3.1 Focal issue - Brexit

On the 23rd of June 2016, the United Kingdom (UK) voted to leave the European Union (EU) with a vote of 52% for and 48% against, creating a wave of uncertainty in many domains, amongst which, the airline industry (IATA, Annual Review, 2019). With almost 30% of its revenue coming from flights in and out of the United Kingdom, Ryanair had campaigned actively for a “Remain” vote prior to the election, acknowledging the risks and disadvantages a separation of UK and EU could bring (Annual report - Ryanair, 2016).

There is a great level of uncertainty regarding the implications of Brexit on the airline industry, especially for companies with important bases in the United Kingdom such as Ryanair, British Airways, Lufthansa and EasyJet. Depending on the negotiations and on the level of agreement between the UK and EU, the consequences vary to the extremes: from no changes at all to cancelling the flights between UK and EU.

As soon as the results were in, it was clear that Brexit had become the largest threat Ryanair was going to face in the near future. The company had at that point to already consider what possible impact could Brexit have on their business and what decisions needed to be taken in order to ensure the negative impact can be reduced and the risks hedged.

In this thesis Brexit implications have been split regarding “Deal” and “No deal” scenarios. In order to offer the reader an overview of the changes that the two situations bring, a further explanation will be provided.

A “Deal” scenario involves the EU and the UK reaching an agreement and decide to split parts in an amiable way. It is worth mentioning that the implications will entirely depend on the negotiations that are currently being held. Even though it cannot be guaranteed, in case of a deal, there are still a few factors regarding the airline industry that are most likely to happen. Firstly, the freedom of movement between the EU and UK states won’t be affected, with the two parts opting not to introduce visas. Secondly, the rights of EU citizens living in the UK, and of the UK citizens living in the EU, will most likely be guaranteed. Thirdly, the UK is likely to continue following the directions and legislations of the EU regarding matters such as: CO2 emission standards, safety

standards and consumer rights. The rest of the matters regarding the airline industry are likely not to suffer much change and will therefore be considered constant in this analysis.

A “No deal” scenario is represented by a case in which the EU and the UK do not reach an agreement by the date at which the UK has to officially leave the EU. As opposed to the previous case, a “No deal” is set to bring more drastic changes to the airline industry. Firstly, the freedom of movement of both the EU and UK citizens can be restricted, with the UK likely to have individual negotiations with every EU country and set up a Visa scheme with more requirements for countries from Eastern Europe. On top of that, the UK will most likely introduce stricter labour legislation in order to discourage the inflow of workers, especially undocumented ones. Another major change will regard the path UK will choose regarding the above mentioned legislations, which so far have been dictated by the EU. With no legislation in place at the time of the Brexit, the UK is likely to have a transition period in which it will follow the legislation as it was put in place by the EU after which they will set up their own new legislation.

4.3.2 Key impacting forces

As Brexit has already been selected as the main impacting force, it will not be included in the ranking list. One of the axes will be based on the Deal-No Deal between EU and UK scenarios while the other main impacting force will be chosen out of the ranking list. It is important to mention that some factors that could be added to the list fall under the umbrella of Brexit and will be analyzed as a whole. Some of the examples are: new legislation/agreements regarding flying between UK and EU countries, freedom of movement (visa/no visa requirements), legal and environmental accountability.

As part of preparing for this step, some factors have already been discussed in the previous subchapters. The ones that can be recalled : Oil prices, labour union disputes, increased rivalry, increasing green alternatives, changes in the UK economy and anti-CO2 emission legislation.

In order to rank the factors impacting Ryanair, a scale from 1 to 5 will be used where “1” represents low impact and highly predictable and “5” represents high impact highly unpredictable. The aim of the ranking is to come up with the factor that has the highest impact and is highly unpredictable since this case would be the most urgent to be analyzed.

The decision comes as "low impact & predictable" presses no threat to the airline, "Low impact-unpredictable" is not of much interest as even if it is to happen, the impact will be low, and in the case of "high impact-predictable", even though the matter is of high importance for the airline, since it has a high degree of predictability, the risks of it happening can be hedged in advance.

4.3.2.1 Increasing oil prices

Ryanair's main cost consists of fuel and oil used for its operations, accounting for approximately 35% of the total costs (Ryanair - Annual report, 2019), therefore it can be argued that the fuel cost component should be considered as one of the most important factors. On the other hand, Ryanair is currently the most fuel efficient airline in Europe due to its current fleet and highest load factor therefore, in case of a spike in fuel prices were to occur, Ryanair would still be ahead of its competitors, with plenty of room for extra costs that it can cover and still be profitable. Finally, an increase in oil prices can be considered as of medium importance therefore a score of 3 has been attributed.

Regarding uncertainty, based on the offer and demand factor and scarcity of oil resources it is clear that in the long term oil prices will increase. The World Bank (2019) anticipates that oil prices will continue to increase after 2020, reaching 70\$ on average per barrel in 2030. A score of 2 has been attributed mainly due to the possible fluctuation in the short term.

4.3.2.2 Labour union disputes

Staff costs are only the third largest cost for Ryanair after fuel costs and airport and handling costs, consisting of approximately 15% of the total costs (Ryanair - Annual report, 2019). The factor has only been attributed a score of 2 as even though strike and labour union interventions comes at a high price, it is usually short term and the profit obtained through staff efficiency is of greater importance in the long term.

Situation is different on the uncertainty side as the demands of the staff and labour unions seem to be hard to predict in the future. Known for the numerous strikes of the staff, Ryanair has managed to secure a part of its uncertainties as, as of 31st of March 99% of the pilots have agreed on an updated pay deal. On the other hand, the score of 4 is attributed mainly for the fact that Ryanair has almost no experience with the labour unions as the company only acknowledged them in December

2017. On top of that, Ryanair admitted that there may be periods of unrest regarding labour as unions in general don't agree with the productivity system they have in place (Ryanair - Annual report, 2019).

4.3.2.3 Industry rivalry

As stated in section "4.2.2.5 Rivalry amongst existing firms" a constant expansion in the number of routes for most of the low cost carrier airlines, with 99 new routes from Ryanair, 33 from EasyJet and 11 from WizzAir, with all of them having aircrafts on order. Regarding the fight for offering lower fares, Ryanair is leading as usual lowering their fares from approximately 47 Euro/flight in 2016 to 37 Euro/flight in 2018, obliging the competitors to follow in order to be able to maintain their market share.

Regarding importance, in general, an increasing rivalry amongst competitors usually is considered to have a high impact but in this case, since Ryanair is already the leader and in a good position to dictate the fares, a score of 3 has been attributed. On the other hand, considering that the industry rivalry has been increasing and is most likely to continue increasing and the fact that the effects of it such as: increased costs, the need for lowering fares and finally, reduction in the profits, are of general matter and already known, the value of one has been attributed to the predictability measure.

4.3.2.4 Evolution of the United Kingdom economy

As in any other industry, one of the main factors that can be decisive in determining a company's success or failure are the economic conditions. As the Brexit procedures started, there are signs that economic conditions are highly unlikely to remain constant, with changes being spotted as early as the announcement of the results when, the Pound Sterling dropping 8.4% from 1.31 Euro to 1.20 Euro within the first 4 days (Morningstar, n.d.).

Probably, the economic impact of Brexit on the UK is the most difficult factor to predict, with reports being split in two opposite categories. For example, in one study of the UK government published in November 2018, by comparing the economic growth (GDP in this case) of different Brexit scenarios to the base scenario-remaining in the EU, the study shows that in all the scenarios the UK economy would have to benefit and their economy would grow, the only difference being the speed in which it does (UK Government, 2018). On the other hand studies such as the one

created by KPMG argue that in some situations such as leaving the EU without a deal, the UK would plunge into a deep recession (KPMG, 2019). With this being said, it is clear that the evolution of the economy of the UK is difficult to predict, and as the opinions are split to the extremes, a maximum score of 5 for uncertainty has been attributed. Regarding the impact of the future economic development on business, in general, it can be argued that the factor has a medium-high importance. Considering that during the last recession, in 2009, Ryanair reported its first loss in more than 20 years, it can be concluded that economic changes do have a high impact on the company. Despite registering a loss, compared to the majority of the airlines, Ryanair seemed have adapted faster to the changes and be the airline that had to suffer the least, even managing to increase its market share as its competitors were struggling (Halpin, 2009). Considering the above mentioned facts, a score of 4 has been attributed to the impact factor.

4.3.2.5 Innovation in “green” transport alternatives

As more data is available, awareness regarding climate change has significantly increased in the past years. With passengers being more aware of their CO₂ footprint, some have started looking for greener alternatives such as trains, especially high-speed ones.

The value of 3 has been attributed to the importance factor after considering a few factors. Firstly, as presented in the “Threat of substitutes” section, trains can nowadays reach 350-360 km/h, making them a viable option especially for short distances. Secondly, even though as of this moment, some short distance trips might still be cheaper if you opt for taking a plane, following the rise of fuel prices, increasing CO₂ emission taxation and increased investments in the development of railways and train technologies, trains will eventually be the cheaper option. On the other hand, a value of 4 or even 5 has not been attributed due to the fact that Ryanair is already the most Eco-friendly airline, with the newest available aircraft on the market and its strategy consisting of remaining in that position (Ryanair - Annual report, 2019). On top of that, the airlines always have the options and most likely will switch to biofuel, considerably reducing their CO₂ emissions.

Regarding uncertainty, on the one hand, there is no doubt about the emergence of green alternatives as rivals to airline industry and the impact it can have on it, while, on the other hand, there is no way of clearly predicting how long it takes until major changes can be noticed and to what extent the market share of high speed train will increase.

The ranking of factors analyzed above can be observed in Figure 31.

Factor	Importance	Uncertainty	Total
Increasing oil prices	3	2	5
Labour union disputes	2	4	6
Increased rivalry	3	1	4
Evolution of the United Kingdom economy	4	5	9
Anti-CO2 emission legislation	5	2	7
Innovation in green transportation alternatives	3	3	6

Figure 31: Ranking of key factors
Source: Own creation

4.3.3 Future scenarios

Based on the ranking, the evolution of the United Kingdom economy has turned out to be the most important factor that can impact Ryanair. Usually, the next step would be choosing scenario logics, for which more factors are clustered together and joined together until they form a broader concept. In this analysis though, since economy evolution is already a broad concept, step number 5 will not be used.

The scenarios will be formed and discussed based on the two axes selected: Brexit and evolution of the economy of the United Kingdom. The ends of the Brexit axis will be represented by “Deal Brexit” and “No Deal Brexit” while the evolution of the economy will be split into “recession” on one end and “economic growth” on the other. The four scenarios that result will be presented in the next matrix:



Figure 32: Future scenarios
Source: Own creation

4.3.3.1 Been there, done that.

The “Been there, done that.” scenario is found in the left top corner of the matrix, composed of the case when a deal is agreed on between EU and UK and the economic conditions of the UK turn out not to be favorable. This scenario focuses mainly on the impact of the recession, since the Deal part brings only a few changes to Ryanair’s situation.

This is the scenario to which everybody seemed to believe the situation is heading towards within the first few months following the referendum. On one hand, both the UK and EU seemed to have understood a deal is the most beneficial for both and on the other hand, the UK economy already was feeling the first negative economic impacts. The first sign of the economic downturn was the Pound Sterling dropping 8.4% from 1.31 Euro to 1.20 Euro within the first 4 days and not recovering even to this date, with its value fluctuating between 1.08 Euro and 1.20 Euro (Morningstar, n.d.). Inflation also jumped from 0.8% in June 2016 to 2.8% in September 2017 and slowly decreasing to 1.5% in November 2019 (ONS, n.d.). Despite the value of the inflation returning to normal values, it is the speed at which the inflation increased, 2% in only a year that is alarming, rather than the value itself.

The main benefit of a “Deal” scenario is the freedom of movement, that analyzed without taking the recession into consideration would mean no change at all or even a slight increase in the number of passengers. A recession though would bring into light a decrease power of purchasing, a tendency towards savings rather than expenditure, therefore negatively impacting the tourism sector (Milton, 2013). On top of that, UK’s strong economy has constantly attracted workforce, especially from Eastern Europe and an economic downturn followed by austerity measures of the UK government would push some of the workers to consider relocating to better performing economies such as the ones in the Nordic countries. The process of relocating can already be seen in the statistics with a survey from the UK Office for National Statistics showing a decrease in the number of EU citizens working or looking for work in the UK dropping from 113 thousands in September 2016 to 70 thousands only 2 years later (ONS, Migration Statistics Quarterly Report, 2019). This only covers legal workers, the situation of the undocumented workers will be discussed in the no deal scenario.

For Ryanair this would mean a decrease in the demand, therefore a lower load factor and a decrease in overall efficiency. Luckily, the company covered the risk of a decrease in the number of passengers for the future years. Out of the 210 aircrafts that are to be delivered by 2025, 75 of them come with the option of canceling the order (Ryanair - Annual report, 2019). In order to reduce costs and continue to be as efficient as possible, Ryanair should therefore cancel the order for the extra 75 aircrafts. Since the airline has no saying in the decision of the workers to relocate, Ryanair should therefore focus on the tourism side and try to fight the decrease in demand created by the recession by offering promotional fares that would, to a certain extent, attract the customers, even though they were planning on saving money. Another strategic option Ryanair could consider is redistributing its aircraft fleet by lowering the number of flights within, towards and from the UK, allowing them to reach the expected load factor on these routes. The company should therefore increase the number of aircrafts that operate EU-EU routes that are less likely to see a decrease in demand.

For Ryanair, a “Deal” scenario means they still have to obey the EU regulation regarding CO2 emissions, which already come at a high cost for the company. During a period with no economic disruption, that would pose no threat for the company but, as increase in operational costs related to the recession in the UK is in sight and with the fuel prices continuously increasing, the company has to find a way to cut costs. A valid option Ryanair is already using is hedging against fuel price fluctuations by entering forward contracts covering up to 18 months (Ryanair - Annual report, 2019). Due to extreme conditions, Ryanair must consider increasing the fuel amount they create forward options for and also use its bargaining power in order to increase the time period and decrease the price of the contracts. Another option for Ryanair would be taking a more focused approach on exchange rate risk hedging. Ryanair is currently hedged against a possible fluctuation of maximum 10% of the exchange rates, with the company stating in its annual report that a 10% positive or negative change would not impact the income statement (Ryanair - Annual report, 2019). The drop of 8.4% of the Pound Sterling in 2016 should have already raised an alarm signal but Ryanair seemed to have kept the 10% marge over the last years. Due to continuous high unstable evolution in exchange rates, Ryanair should get more involved in exchange rate risk hedging and possible raise the 10% to 15%, preferably before the decision of deal or no deal is made as, similar to the following dates of the announcement of the referendum, the Pound being most vulnerable during these days.

A more delicate issue for Ryanair is possible conflicts with labour unions. As recession sets in, the company will set in place measures to reduce costs as soon as possible. As Ryanair's demand is set to fall, some of the measures will most likely involve lowering the salaries and probably firing a certain number of employees, putting even more pressure on the remaining ones. This decisions will surely infuriate the labour unions and as Ryanair finds itself in a deal scenario, the company still has legal obligations to unions of all the EU states. The situation will leave Ryanair in a difficult position where they have to choose between 1) cutting costs in order to be profitable and ignoring the unions that will send the company into a legal disaster that might end up in large fines, 2) acknowledging the unions and find other ways to cut costs or 3) simply registering a loss.

Overall, for Ryanair this scenario does not pose as much threat as it would be expected, with the company passing through a few recessions before. Even though they registered losses, they did more than survive, as when recession struck they were still able to maintain their position and be the ones to get out of it with the least losses, even increase their market share (Halpin, 2009).

4.3.3.2 Sky is the limit

The "Sky is the limit" scenario is found in the right top corner of the matrix, composed of the case when a deal is agreed on between EU and UK and the economic conditions turn out to be favorable. This scenario would be ideal for Ryanair.

With the UK economy recovering from the initial shock caused by the Brexit Referendum and turning into a more and more efficient one, it also becomes more attractive to workforce incoming from EU countries. With no further visa requirements due to the deal set in place, the number of people coming to work in the UK will start to rise again, with the UK now becoming the targeted country for relocation of workers looking for a better life. On top of that, having a higher standard of living, the UK citizens can now afford to travel more often, creating a higher demand in the tourism sector.

For Ryanair, that would translate into a higher demand and as they have the highest capacity according to ASK values, in the short term they can take advantage and benefit the most out of the situation, comparing to its competitors. In order to continue to lead, the company should accept the

75 extra aircrafts set to arrive by 2025 and set further orders for more aircrafts in order to profit in the long term also. In order to better cover the future demand, the company should establish new routes both within the UK and for flights connecting UK and EU. Another benefit this scenario can bring to Ryanair is that it offers a chance of balancing the seasonal differences in income. If usually, Ryanair was making most of its profit during summer and holiday season, with more people traveling during holidays, the gap between the high performing periods and low performing ones could be minimized. Regarding this matter, Ryanair should offer promotions for return tickets boosting this way weekend trips and city breaks in the unfavorable periods. This measure could be beneficial in this specific scenario as freedom of movement is in place and as the wealth of the population increases, people that usually do not go on holidays could now afford to fly. Considering that before they could not afford it, it is likely that now, their budget would be minimal, therefore they would aim for low-season ticket sales. Finally, a more balanced seasonal income will attract more investors and create better connections with the existing ones.

With economic growth and freedom of movement at the same time, demand for air travel is set to increase, with the numbers of both workers and tourists coming to the UK and tourists from the UK heading towards the EU for holidays being expected to grow. In these circumstances, rivalry amongst existing airlines is set to turn fierce as they will compete to cover the growing demand. On top of that, the launch of new airlines is highly likely, as it was the case of WizzAir that was launched in 2003, when the EU's economy was starting its journey of a few years of growth as it has been forecasted by IMF (2003). In order to remain attractive, Ryanair has to take advantage of its competitive advantages, continue maintaining or even increasing its cost efficiency, putting more pressure on the suppliers in order to get better deals and maintain fares as low as possible. As the economic situation is favorable, no cost cuts need to be put in place, therefore there will not be any further pressure from labour unions. The cost of continuing to be a CO2 friendly airline and the increasing cost of fuel can be easily offset by the revenues created by economic growth. As the airline will find itself in a situation with no external pressure and increased profits, it can now focus on improving its disadvantages and non performing sectors. The main issue of Ryanair is currently its brand reputation, which represents a competitive disadvantage. Not only they need to invest in order to further attract customers but a more pressing concern will be that due to fast growth and expansion, with new aircrafts to be delivered and new routes to be established, an important number of employees will need to be hired in order to be able

to turn the expansion investment into a feasible one. With Ryanair's reputation of treating its employees, the company has to reconsider the salaries and benefits but also cover some of the costs that are currently supported by the staff. The costs associated with increasing its brand can be offset by reducing the costs related to uncertainty, as the environment is less likely to be unstable during a period of economic growth. While the fuel price hedging measures presented in the first scenarios should still be considered, the company can now reduce its investments in currency exchange risk hedging.

4.3.3.3 Adapt or die

The "Adapt or die" scenario is found in the bottom left corner of the matrix, composed of the case when no deal is agreed on between EU and UK and the economic conditions turn out to be not favorable. By far the most complex and controversial, this scenario is not only Ryanair's nightmare but also not wished by anybody doing business between UK and EU.

For the airline industry, by far, the most disruptive decision would have been cancelation of all flights between EU and UK. Luckily, the possibility of having all flights grounded has been postponed for at least 9 months after a "no deal" Brexit and it seems that it is in nobody's interest to pursue such a decision (Ryanair - Annual report, 2019). With this being cleared, Ryanair still has to face plenty of consequences in case the UK decides to leave without a deal.

The most worrying factor for the airline industry in case of a "no deal" Brexit is concerning the border management. After the transition period agreed on, the UK will most likely have to negotiate visa agreements with every state in the EU. Taking into account the UK government should seek out best options for its citizens, it is most likely 30 or 90 days visa free will be agreed upon with most of the states (Taylor Airey, Frontier Economics, 2018). As one of the main points Brexit has raised was illegal immigration/illegal work, countries with large amounts of undocumented workers such as Poland, Romania and Bulgaria will probably have to negotiate new terms regarding visit and working visas. On top of that, entering the UK will only be permitted with a valid passport, as opposed to the current option of entering UK with an EU national ID card. Even though it is nearly impossible to come up with the exact numbers of illegal workers in the UK, sources roughly estimating between 0.8 and 1.2 million workers without a working permit (Phillip Connor, 2016). Due to the recession and the new working visa requirements, even the legal

working force is considering relocating. With the majority of them being EU citizens and constantly traveling between the UK and their home country, it is clear that the airline industry in general is to be hit hard, with Ryanair being the main impacted airline since in many cases it was the airline offering the cheapest alternatives. The sudden lack of demand can lead to shutting down of many routes, especially the ones tying the UK and Eastern Europe. Combined with the low tickets demand due a slowdown in the tourism sector caused by the recession and the possible visa charges, Ryanair finds itself in a difficult position.

Ryanair will suddenly find itself in a situation where the demand for its tickets suddenly dropped and the operational costs keep increasing. On top of the fuel prices on the rise, the company has now to deal also with higher exchange currency risk hedging costs as the environment is as unstable as it can get and airport costs related to the delays the visa and document check procedures will cause. Unable to attract enough customers for obtaining a sustainable level of load factor and with the decreasing revenues, Ryanair will shortly find itself in the situation where costs outweigh the revenues. The desperate need for profits and the pressure from investors will push Ryanair to increase the fares in order to cover the loss and might send the company in a spiral where the demand drops even more due to higher prices. At this point its signature business model-ultra low cost will be impossible to follow and suddenly, the company can lose its advantage over the competitors. Being in a position where it has never been before, Ryanair can again try to find a way around it. Either they call it a loss and risk not being a sustainable airline in the short term or they can push the limits as they never refrained from doing so when in need. In case UK chooses not to follow EU regulation and no regulation is put in place by the UK government regarding CO2 emissions and compensation of the customers, Ryanair could make an immoral choice and decide not to compensate the customers entitled and not follow the CO2 emission limits in their chaotic search of reducing costs and getting an advantage over competitors.

With an abrupt fall in the total ticket demand, Ryanair should consider not only canceling the option for buying the extra 75 aircrafts but also try to come to an agreement with Boeing and cancel the other 135 aircrafts that they agreed upon purchasing. As the demand in Europe is set to fall to its lowest points in decades, Ryanair should consider transatlantic flights towards the US, despite the fact that they publicly announced through (Independent.ie) they would never operate US-Europe flights as they solely focus on European growth currently. This decision could turn out

beneficial, especially now that Norwegian announced canceling of 25% of its winter flights connecting the US and Europe (Forbes, 2019). Since long haul aircrafts differ from those Ryanair is currently using and has ordered, the company could use this as part of their deal with Boeing and instead of going through with the current order, they could instead order long haul planes. In Europe, Ryanair should focus on providing flights within the UK through its Ryanair UK subsidiary and operate EU-EU flights with its other components with its existing fleet.

Another pressing matter Ryanair is to face if a “No deal” Brexit is to happen is regarding the ownership structure of the company and its incompatibility with the EU regulations. EU Regulation 1008/2008 requires that, in order to obtain an operating license, an EU air carrier must be owned and controlled by an EU national majority (European Parliament, 2008). Luckily, the company has thought well in advance and came up with legal solutions such as restricting non-EU shareholder voting rights and restricting the non-EU share sales. As a result of this and the focus on buy-back of shares from non-EU nationals, the company has announced that as of July 2019 it 52.2% owned by EU nationals (Ryanair - Annual report, 2019).

4.3.3.4 There is always hope.

The “There is always hope.” scenario is found in the bottom right corner of the matrix, composed of the case when no deal is agreed on between EU and UK and the economic conditions turn out to be favorable.

As the border management restrictions and visa options presented in scenario 3 will still be in place in the case of this scenario, Ryanair is looking once again at a situation where demand in different sectors can change. In this case though, since the UK economic situation is favorable the demand will not be impacted as much as in the previous scenario. First of all, due to visa and work visa requirements, parts of the illegal workers are still to relocate but since the UK’s economy is booming, many of them are likely to consider settling and working legally while the ones that were already working legally have no reason to leave anymore.

Secondly, due to the economic growth, tourism sector is set to face growth, and visa fees might not be an impediment anymore for the British citizens willing to go on holiday, therefore Ryanair’s revenue will increase in this segment. As it is nearly impossible to assess the levels to which

demand from tourism sector will increase and the one from the EU workers will decrease, it will be assumed that overall the total demand remains constant as previous to the Brexit announcement.

Under those circumstances, Ryanair should continue slowly expanding within Europe and preparing for future growth as demand is set to rise overall in Europe with IATA estimating an additional 5 million seats growth for the next year (IATA, Annual Review, 2019). The problem the company might face regards a warning IATA has issued that states the EU might cap the number of flights within EU at the numbers of 2018 (IATA, 2019). For Ryanair this means that even though the existing flights within the EU are to be protected, there is a chance of no further expansion possibilities.

As this is only a warning and since setting up new routes takes a large amount of time and require preparations in advance, Ryanair should initiate these preparations as in the case when there would not be any disruption incoming. As even in a post “No deal” Brexit situation, the environment will continue to be unstable for a certain time, not many EU airlines would be prepared or willing to prepare for the launch of new routes. The situation seems to be a high risk-high return one and if Ryanair is willing to take the risk, the results could be game changing.

With these being said regarding the orders Ryanair has, the company should respect the deal they have in place with Boeing regarding the 135 ordered aircrafts and consider acquiring only a part of the 75 aircrafts they have on order with the option of accepting or refusing them.

In order to continue being profitable, Ryanair should reconsider its strategy and reduce its focus on the flights connecting UK to Easter Europe and dedicate its resources to increasing the available seats for flights within the UK and flights connecting the UK to favorite holiday destinations within Europe.

4.3.3.5 Summary of the scenarios

Scenario	Possible outcome	Solution	Already in place
1	Slight decrease in demand	Cancel extra 75 aircrafts on order	NO
1	Lower load factor UK-UK & UK-EU routes	Redistribute resource towards EU-EU flights	NO
1&3	Higher oil prices & currency exchange risk	Increase hedged amounts of fuel and foreign currency	NO
1	Need to cut staff costs	Reduce staff number and deal with Unions or	To be determined
1		Maintain staff numbers and register a loss	To be determined
2	Increased demand	Accept the 135+75 extra aircrafts and create new orders	YES
2		Set up new routes	NO
2	Increased rivalry	Use the competitive advantages	YES
2		Invest in brand image	NO
2	Possibility to close seasonal gap	Offer return and weekend trip discounts for low season	NO
3	Considerable decrease in demand	Cancel all the aircrafts currently on order	NO
3		Shut down most of UK-Eastern Europe routes	NO
3		Introduce long haul flights connecting UK and the US	NO
3	Risk of losing EU licence	Buy back of US shares	YES
3		Deny voting rights for non EU shareholders	Used if needed
3		Acquire more subsidiaries within EU	YES
3	Higher costs than revenues	Register loss or	To be determined
3		Take advantage of lack of new legislation	To be determined
4	No change in overall demand	New routes connecting UK to touristic destinations	YES
4		Reduce flights towards Eastern Europe	NO
4		Only acquire a part of the extra 75 available aircrafts	NO

Figure 33: Scenario and strategic options summary

Source: Own creation

As it can be noticed in Figure 33, different scenarios resulted in different alternative strategies, with many of them contradicting each other, that Ryanair has to consider. If on one hand, matters such as the number of aircrafts to be purchased, the total number of routes and the regions on which to focus can differ from one scenario to another, there are also factors that Ryanair should consider no matter of the scenario it finds itself in such as increasing the amounts of hedged fuel and foreign currency. Worth noticing is the alarming fact that, despite preparing for the impacts of Brexit, Ryanair still finds itself in a difficult position, with many of the proposed strategic decisions not being decided on yet.

4.3.4 Indicators and signposts

This step aims at providing Ryanair a list of indicators that they have to keep an eye on in order to predict in which of the scenario they are most likely to be heading. Since the scenario results show

that the change will come from the external environment, the indicators selected will also be selected based on this criteria rather than looking at the internal indicators of Ryanair.

Regarding the economic evolution of the UK, the indicators will be the standard economic ones. Predicting a recession or a period of economic boom is a complex process that requires lots of resources. In this matter, Ryanair should invest in an economic forecast department whose main task will be to keep a series of indicators under surveillance and develop viable forecasts. It is not a single indicator that will prove a recession is coming but rather the joint simultaneous evolution of a set of indicators. In this matter, Ryanair should keep an eye on the evolution of indicators such as inflation rate, unemployment rate, periods of high volatility of the British pound, confidence indexes of the population, housing prices and it should not resume to these. The company should also pay close attention to any legislative acts taken by the government that can have a high impact on the economy. It is worth mentioning that in case the recession is to be triggered due to the Brexit decision, the changes in the economy are to develop in a fast manner therefore it is important for Ryanair to already have prepared the solution to certain scenarios.

Regarding predicting the outcome of Brexit, the situation is a bit more complex as Brexit itself does not have, as in the economic evolution's case, typical indicators to follow. A first factor worth keeping an eye on though is the extended period of postponing the decision. Voted more than three years ago, the initial date of the UK leaving was supposed to be 31st of March 2019 but as no agreement has been yet reached, it was further postponed to 31st of October 2019 and for the same reason the deadline has been moved to 31st of January 2020 (UK Government, Brexit, n.d.). It can be argued that the more it is delayed, the more tense the situation becomes and more likely to be solved through a "No deal". As the decision will be 100% political, a second factor worth looking at is the political situation within the UK and who is to take the decision. As latest developments show, the conservatives lead by Boris Johnson managed to obtain majority once again and get back in power in the UK (Institute for Government, 2019). As they are the fiercest negotiators for obtaining as many benefits for the UK as possible, and with the EU not backing up, the situation might also be heading towards a "No deal". It is crucial for Ryanair to further monitor the political situation and decisions made as a future overthrow of the power might be in sight.

Chapter 5 Discussion and conclusion

5.1 Discussion

Ryanair has proven to be the most efficient airline in Europe in the past decade, achieving and maintaining the leader position, managing to deliver the expected financial results while constantly expanding to new routes. After years of stable environment in which the company thrived, now faces a high level of uncertainty due to the announcement of Brexit, blocking therefore the possibility of Ryanair to take future strategic decisions to a certain extent. As Brexit itself can unveil in different possible scenarios, the thesis has been written around the next research question:

“How scenario planning could have helped and can still help Ryanair anticipate and adapt to the impact of Brexit? “

In order to be able to answer the research question, four scenarios have been developed in order to show what Ryanair could have and can expect from the next few years and how the company should react to these changes. To be able to set up the bases for the scenario planning analysis, a better understanding of Ryanair was needed beforehand. Regarding this matter, the thesis included subchapter “4.1 Company overview” and a “Strategic analysis” presented in subchapter 4.2.

The Company overview presented and analyzed the history of Ryanair, its corporate structure and governance, its vision and mission alongside its business model and the competitive environment. The history presented how Ryanair evolved from a single aircraft airline to the giant it is today and bringing to light the potential the company had and how it took advantage of it. The corporate structure showed how Ryanair’s corporate structure containing of 5 subsidiaries is well diversified and offering the company the flexibility it needed while its mission and vision, business model and corporate governance turned out to be key factors in the success Ryanair has into the highly competitive environment it operates in.

The strategic analysis consisted of a few separate in-depth analysis. Firstly, in order to get an overview of Ryanair’s external macro-environment and identify the key factors associated with it, a PESTEL analysis has been conducted. Secondly, Porter’s five forces analysis was used in order to analyze the airline industry and its attractiveness from a microeconomic point of view. Further, the analysis of the key industry measures evaluated how Ryanair’s operational drivers evolved

compared to its competitors. An internal analysis of the company has been provided with the use of the VRIO framework and successfully identified Ryanair's resources and competitive advantages. Finally, the findings of the above analyses have been summarized into a SWOT matrix. The strategic analysis has unveiled that currently, the highest external risks for Ryanair come from political and economic spheres to which the scarcity of the oil therefore increasing fuel prices can be added. Even though Ryanair's environment turned out to be highly competitive, the company managed to thrive, not only leading due to its size and highest profit per ASK but also has proven that its overall efficiency is above its competitors. In order to become the leader in the low cost carrier sector Ryanair fully used its four competitive advantages identified: its aircraft fleet, the bargaining power it possesses, the human resources and its cost efficiency. On the other hand, the company seems to also have a competitive disadvantage-its brand and reputation in which they have to further invest.

The last step consisted of the scenario planning. After extensive research in the field of strategic planning, the Global Business Network method as presented by Schwartz has been found to be the best fit to the analysis. In order to obtain a better fit for the thesis, a few changes have been brought to the method: firstly, as the most urgent and pressing matter, Brexit, turned out to be of the highest importance, a fixed axis has been used, letting the other one be determined as usual through the ranking analysis. Secondly, steps number two and three have been combined as the results would be to put together in the same list anyway, step 5 has been eliminated due to the fact that the "economic conditions" factor that resulted from the ranking was already broad enough. Finally, steps 6 and 7 have also been combined for the convenience of having the outcome, its implications and the solutions under the same paragraphs.

The first scenario, "*Been there, done that*" predicts a slight decrease in demand, especially on the UK-UK and UK-EU routes mainly due to the recession that is supposed to affect the UK and presents a dilemma to Ryanair regarding cutting the staff costs. On one hand, solutions such as canceling the extra 75 aircrafts on order and only operating with the current fleet and the 135 aircrafts that are to be delivered, and redistributing the resources towards EU-EU flights have been proposed. On the other hand, due to the different approaches, many times contradictory that Ryanair took regarding its staff and the labour unions, the second matter has been left to be determined by the airline.

The “*Sky is the limit*” scenario presents Ryanair in an environment where it faces increased rivalry due to the favorable conditions combined with the benefits of the deal agreed. On the other hand though, due to the same favorable environment, Ryanair is offered a growth opportunity and the option to close its seasonal gap. In order to expand, the airline should accept all the aircraft they have on order and create new orders that will be needed for setting up new routes. In order to deal with the increase in rivalry, Ryanair should continue focusing on its competitive advantages and invest in its brand image in order to get rid of its competitive disadvantage it currently possess.

The third scenario, “*Adapt or die*” is also the grimmest for the airline. With a considerable decrease in the overall demand, Ryanair has now to take a number of critical decisions. Firstly, they should cancel all the current orders and try to get Boeing to agree on a new deal for a number of long haul planes that can allow Ryanair to connect UK and US. Secondly most of the routes connecting UK and Eastern Europe should be closed down due to the lack of demand caused by the lack of attractiveness of the UK economy and the discouraging visa legislation for workers. Lastly, due to possible losses, Ryanair can face a moral decision regarding admitting the loss or finding ways around the CO2 emission and passenger rights legislation.

The “*There is always hope*” scenario presents a stagnation in the overall demand, with the tourism sector covering up for the loss from the lower demand of tickets designated for workers.

As per previous scenario, Ryanair should look at the flights towards Eastern Europe and reduce the least efficient routes. The company should therefore focus on connecting UK to new touristic destinations as the demand will be growing due to the favorable economic conditions in the UK. Regarding this matter, Ryanair should only opt for acquiring a part of the 75 aircraft on which they possess a buy option.

5.2 Conclusion

Finally, to answer the research question, a scenario planning approach put in place by Ryanair firstly helps the company get an overview of what the future that lies ahead of them looks like.. As decisions take time to implement, they need to be taken well in advance of the disruptive event taking place. As discovered in the analysis, for Ryanair the main crucial decisions that need to be taken are regarding: aircraft orders, effective ways of distributing the available resources, the ideal

number of routes and the regions in which they need to increase or decrease the flight numbers and the amount of hedging activities the company has to undergo in order to ensure an efficient risk-cost balance. Additionally, not only Ryanair will be pushed to think outside the box and consider scenarios that have never been considered and would usually take the investors out of their comfort zone, but, if a clear understanding of the future threats or opportunities is presented, the trust of the investors will increase.

On top of that, in the current case of Ryanair and Brexit, the fixed axis element turned out to be crucial and efficient due to a number of reasons. Firstly, this approach eliminates the chance of not having the matter included in the overall analysis due to lower overall ranking or the inability of clustering the pressing matter with other elements in the selection of scenario logics part. Secondly, it offers the company a clear focus for the entire analysis, helping it not deviate from it. Lastly, by using a preset issue on a fixed axis allows a new perspective, with all the other impacting elements evolving and being derived from the initial matter.

This thesis does come with a number of limitations that have been identified. Firstly, as at the moment of this thesis being written, certain companies did not release their 2019 annual report, certain data regarding this year could not be included in the research. On top of that, due to the high secrecy regarding future decisions within Ryanair, no connection with the company has been established, therefore, only secondary data available has been used. Due to the matrix based methodology being chosen, cases in which Brexit gets canceled or indefinitely postponed could not be covered. Additionally, due to the complexity of the situation, not all aspects of Brexit could be covered within this thesis.

As for future research, if one might be interested in continuing the study, scenario planning offers a vast methodology from which one might choose. Firstly, the cases mentioned above that could not be covered in this thesis can be analyzed using different approach on scenario planning, perhaps even from a different school.

Secondly, as more data will be available following the submission of the thesis and events will slowly unfold as the Brexit is approaching, a more updated and recent study can be conducted. Lastly, if resources allow it, contact with Ryanair should be established and the data obtained used

for conducting specific probability analysis in order to forecast and better predict certain scenario outputs.

Finally, despite the certain limitations it brings, it can be argued that using a fixed axis scenario planning methodology can be further recommended in cases of major disruptions, in which the company mainly needs and wishes to obtain an overview over the selected matter with other impacting factors being of auxiliary importance.

Bibliography

Books:

Cooper, M. (2018). *Michael O'Leary: Turbulent Times for the Man Who Made Ryanair*. Penguin.

Johnson G., Scholes K., Whittington R. (2008). *Exploring Corporate Strategy* (8th Edition), Prentice Hall.

Johnson G., Whittington R., Scholes K., Angwin D., Regner P. (2014). *Exploring Strategy: Text and Cases*.

Lindgren M., Bandhold H. (2003). *Scenario Planning – The Link between Strategy and Future*. New York. Palgrave MacMillan.

Macario, R., Van de Voorde, E. (2010). *Critical Issues in Air Transport Economics and Business* 1st Edition. Routledge.

Pillkahn, U. (2008). *Using Trends and Scenarios as Tools for Strategy Development*. Munchen. Publicis Corporate Publishing.

Schwartz, P. (1991). *The art of the long view*. New York. Knopf Doubleday Publishing Group.

Schwartz, P. (1996). *The Art of the Long View: Planning for the Future in an Uncertain World*. New York. Currency.

Simons, G., Bowman, M.W. (2011). *London's Airports. Useful information on Heathrow, Gatwick, Luton, Stansted and City*. Pen & Sword Aviation.

Van Der Heijden. (2005). *The art of Strategic Conversation* (2nd ed.). Chichester: John Wiley & Sons.

Articles:

Alfonso-Lasheras, D. (2011). *Luis de Molina's De Iustitia Et Iure: Justice as Virtue in an Economic Context*. *Studies in the History of Christian Traditions*, Volume: 152. Brill.

Amer, M., Daim, T.U., Jetter, A. (2013). A review of scenario planning. *Futures* 46. 23-40.

Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management* Vol. 17, No.1, 99-120.

- Barney, J. B. (1995). *Looking Inside for Competitive Advantage. Academy of Management Executive. The Academy of Management Executive Vol. 9, No. 4, 49-61.*
- Bishop, P., Hines A., Collins, T. (2007). The current state of scenario development: an overview of techniques. *Foresight, Vol. 9 No.1. 5-25.*
- Chermack, T.J., Lynham S.A., Ruona W.E.A., (2001) A review of scenario planning literature, *Futures Research Quarterly 17, 7–31*
- Durand, J. (1972). A new method for constructing scenarios. *Futures Volume 4, Issue 4. 325-330.*
- Duus, H. J. (2016). Strategic scenario construction made easy. *International Journal of Foresight and Innovation Policy, Vol. 11, No. 1/2/3. 167-183.*
- Galea D., Bonnici T.S. (2015). PEST analysis. *Wiley Encyclopedia of Management. John Wiley & Sons Ltd.*
- Gordon, T. J. (1994). Trend impact analysis. *Futures Research Methodology.*
- Honorene, J. (2017). Understanding the role of triangulation in research. *Scholarly research journal for interdisciplinary studies, 4/31. 91-95.*
- Huss, W.R., Honton, E.J. (1987). Alternative methods for developing business scenarios. *Technological Forecasting and Social Change Volume 31, Issue 3. 219-238*
- Huss W. R. (1988). A move toward scenario analysis. *International Journal of Forecasting, Vol. 4, Issue 3. 377-388.*
- Jeffrey C. (2017). Overbooking. *Journal of the European Economic Association, Volume 15, Issue 6. 1258-1301.*
- Mietzner, D. (2005). Advantages and disadvantages of scenario. *International Journal of Technology Intelligence and Planning. Vol. 1, No. 2. 220-238*
- Milton, T. (2013). Recession and its effects in tourism and hospitality industry.
- Porter, M. E. (1979). How Competitive Forces Shape Strategy. *Harvard Business Review, 137-145.*

Rust, R.T., Huang, M.H. (2012), Optimizing Service Productivity. *Journal of Marketing* 76(2). 47-66.

Schoemaker, P.J.H. (1993). Multiple scenario development: its conceptual and behavioral foundation. *Strategic Management Journal* 14, 193-213.

Schoemaker, P.J.H. (1995). Scenario Planning: A Tool for Strategic Thinking. MIT Sloan Management Review, Vol. 36, No.2. 25-40

Turoff, M. (1971). An Alternative Approach to Cross Impact Analysis. *Technological Forecasting and Social Change*, 309-339.

Van Der Heijden, K., Bradfield, R., Wright, G., Burt, G. (2005). The origins and evolution of scenario techniques in long range business planning. *Futures* 37. 795-812

Vught, F.A. (1987). Pitfalls of forecasting: Fundamental problems for the methodology of forecasting from the philosophy of science. *Futures* Volume 19, Issue 2. 184-196.

Wack, P. (1985). Scenarios: uncharted waters ahead. *Harvard Business Review*.

Wack, P. (1985). The gentle art of re-perceiving. *Harvard Business Review*.

Wind, Y. J. (1988). Positioning analysis and strategy. Wharton School, University of Pennsylvania, Marketing Department. 388-412

Zhou, Y., & Zhongmin, L. a. (2005). Empirical research on the relationship between the development of China's civil aviation and economic growth. *Journal of Tianjin University of Technology*.

Internet:

Airbus (2016). Norwegian selects 30 A321LR for first transatlantic routes. Available at <https://www.airbus.com/newsroom/press-releases/en/2016/07/norwegian-selects-30-a321lr-for-first-transatlantic-routes.html>

Business Insider/Khetany S. (27.06.2012). Spain's No. 4 Airline Has Gone Bust. Available at: <https://www.businessinsider.com/spains-no-4-airline-has-gone-bust-2012-1>

Corporate Ryanair (2019). Our partners. Available at: <https://www.ryanair.com/ie/en/useful-info/about-ryanair/corporate-partners>

Corporate Ryanair (2019). History of Ryanair. Available at: <https://corporate.ryanair.com/about-us/history-of-ryanair/>

Corporate Ryanair (2019). Ryanair Sun To Be Rebranded As Buzz In Autumn 2019. Available at: <https://corporate.ryanair.com/news/ryanair-sun-to-be-rebranded-as-buzz-in-autumn-2019/>

Connor, P., Jeffrey S. P. (13.11.2019). Europe's Unauthorized Immigrant Population Peaks in 2016, then Levels Off. Available at: <https://www.pewresearch.org/global/2019/11/13/europes-unauthorized-immigrant-population-peaks-in-2016-then-levels-off/>

EasyJet (2019). Route map. Available at: <http://www.easyjet.com/en/routemap>

Forbes (2019). Norwegian Cancels 25% Of U.S. Winter Flights To Europe. Available at: <https://www.forbes.com/sites/davidnikel/2019/07/22/norwegian-cancels-25-of-u-s-winter-flights-to-europe/#4778934a22b0>

Independente.ie (12.01.2020). Ryanair rules out transatlantic flights, but welcomes Norwegian's €69 fares. Available at: <https://www.independent.ie/life/travel/travel-news/ryanair-rules-out-transatlantic-flights-but-welcomes-norwegians-69-fares-35478636.html>

Institute for Government. (2019). *Analysis of House of Commons library election results*. Available at: <https://www.instituteforgovernment.org.uk/sites/default/files/publications/parliamentary-monitor-2019-snapshot-WEB.pdf>

Morningstar. (n.d.). Evolution of British Pound. Available at: <https://www.morningstar.com/etfs/arcx/fxb/quote>

Norwegian (2019). Our Story. Available at: <https://www.norwegian.com/en/about/our-story/>

Personnel Today/Berry M. (26.06.2006) Unions strike deal with EasyJet. Available at: <https://www.personneltoday.com/hr/unions-strike-deal-with-easyjet/>

Railway Technology (27.11.2013). The 10 fastest high-speed trains in Europe. Available at: <https://www.railway-technology.com/features/feature-the-10-fastest-high-speed-trains-in-europe/>

Reuters/Halpin P. (7.08.2009). Ryanair's lean, mean strategy a recession winner. Available at: <https://uk.reuters.com/article/analysis-ryanair/ryanairs-lean-mean-strategy-a-recession-winner-idUKLNE57601P20090807>

Reuters. (3.04.2012). Danish airline Cimber Sterling files for bankruptcy. Available at: <https://www.reuters.com/article/uk-cimber/danish-airline-cimber-sterling-files-for-bankruptcy-idUSLNE84200P20120503>

Rome2Rio (2019). Vienna to Budapest. Available at: <https://www.rome2rio.com/map/Vienna/Budapest-Airport-BUD>

Ryanair. (2019). What is Ryanair's boarding procedure? Available at: <https://www.ryanair.com/ba/en/useful-info/help-centre/faq-overview/Online-check-in-airport-bag-drop-desks/TnC-what-is-Ryanairs-boarding-procedure>

Shell. (n.d.). Shell Scenarios. Available at: <https://www.shell.com/energy-and-innovation/the-energy-future/scenarios.html>

The Geography of Transport Systems. Point-to-Point versus Hub-and-Spoke Networks. Available at: https://transportgeography.org/?page_id=653

The Irish Times. (26.09.2017). Should reputational damage at Ryanair scare off investors? Available at: <https://www.irishtimes.com/business/personal-finance/should-reputational-damage-at-ryanair-scare-off-investors-1.3229220>

The Irish Times/ Paul M. (3.11.2017). Ryanair's governance critics are growing bored of its 'independent' board. Available at: <https://www.irishtimes.com/business/transport-and-tourism/ryanair-s-governance-critics-are-growing-bored-of-its-independent-board-1.3277989>

The Sunday Times/O'Connell D. (2016). Oman breaks Heathrow record with deal for slots. Available at: <https://www.thetimes.co.uk/article/oman-breaks-heathrow-record-with-deal-for-slots-5mhdls23mn>

Views and News from Norway/Berglund N. (21.8.2012). Pilots land on tax authorities' radar. Available at: <https://www.newsinenglish.no/2012/08/21/pilots-land-on-tax-authorities-radar/>

Which.co.uk. (2019). *Passengers rate Ryanair worst airline, with British Airways not far behind.* Available at: <https://www.which.co.uk/reviews/airlines/article/airlines/best-and-worst-airlines>

WizzAir (2019). *Route Map*. Available at: <https://wizzair.com/en-gb/flights/map>

Annual reports:

Ryanair annual report - (2014-2019).

Available at <https://investor.ryanair.com/results/>

EasyJet annual reports - (2014-2018).

Available at <http://corporate.easyjet.com/investors/reports-and-presentations/2019>

Annual reports - Norwegian air shuttle. (2014-2018).

Available at <https://www.norwegian.com/nl/about/company/investor-relations/reports-and-presentations/>

WizzAir Annual reports - (2014-2018).

Available at: <https://wizzair.com/en-gb/information-and-services/investor-relations/investors/annual-reports>

Other:

CAPA (1.04.2018). Europe's airlines: Who's growing fastest? Look at fleet orders. Available at: <https://centreforaviation.com/analysis/reports/europes-airlines-whos-growing-fastest-look-at-fleet-orders-414795>

CAPA (21.3.2019). European airline group structures: Ryanair – cloning IAG. Available at: <https://centreforaviation.com/analysis/reports/european-airline-group-structures-ryanair--cloning-iag-460664>

European Commission (2019). European Partnership for transforming Europe's rail system

Available at: https://ec.europa.eu/info/law/betterregulation/initiatives/ares-2019-4980251_en

European Commission (2019). Erasmus+ Factsheet. Available at:

https://ec.europa.eu/programmes/erasmus-plus/about/factsheets_en

European Parliament (2008). Regulation (EC) No 1008/2008 of the European Parliament and of the Council. Available at:

<https://eurlex.europa.eu/legalcontent/EN/ALL/?uri=CELEX%3A32008R1008>

IATA (2019). Annual Review. Available at: <https://www.iata.org/en/publications/annual-review/>

IATA. (2019). Statement: Current Flights Protected, but Future Growth at Risk from No Deal Brexit. Available at: <https://www.iata.org/en/pressroom/pr/2019-01-15-01/>

IATA. (2019). *Worldwide Airport Slots*. Available at: <https://www.iata.org/en/policy/slots>

IATA. (2019). Fuel Monitor. Available at: <https://www.iata.org/en/publications/economics/fuel-monitor/>

ICAO. (2016). *Manual on the regulation of international air transport, Third edition*. Available at: https://www.icao.int/Meetings/a39/Documents/Provisional_Doc_9626.pdf

IMF (2003). *Economic prospects and policies. World Economic Outlook Public Debt in Emerging Markets*. Available at: <https://www.imf.org/external/pubs/ft/weo/2003/02/>

KPMG. (2019). No-deal Brexit could trigger a recession next year. Available at: <https://home.kpmg/uk/en/home/media/press-releases/2019/09/no-deal-brex-it-could-trigger-a-recession-next-year.html>

OECD (2019). Barriers to Exit – Background Note. Available at: [https://one.oecd.org/document/DAF/COMP\(2019\)15/en/pdf](https://one.oecd.org/document/DAF/COMP(2019)15/en/pdf)

ONS (2019). Migration Statistics Quarterly Report. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/migrationstatisticsquarterlyreport/previousReleases>

ONS. (n.d.). *CPIH ANNUAL RATE*. Available at: <https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/155o/mm23>.

Taylor Airey, Frontier Economics. (2018). *A study of the effects of the United Kingdom leaving the European Union on airlines flying to and from the UK*. Available at: <https://www.iata.org/contentassets/e22c55cf063a47d5915886f6675c1f39/iata-brex-it-study.pdf>

Transport and Environment (2019). 24% of Ryanair airports likely to be propped up by subsidies – fueling rapid emissions growth. Available at: <https://www.transportenvironment.org/press/24-ryanair-airports-likely-be-propped-subsidies-%E2%80%93-fueling-rapid-emissions-growth>

The UK Electoral Commission (2016). Results and turnout at the EU referendum. Available at: <https://www.electoralcommission.org.uk/who-we-are-and-what-we-do/elections-and-referendums/past-elections-and-referendums/eu-referendum/results-and-turnout-eu-referendum>

UK Government. (2018). EU exit - Long-term economic analysis. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/760484/28_November_EU_Exit_-_Long-term_economic_analysis_1_.pdf

UK Government. (n.d.). Brexit. Available at: <https://www.gov.uk/brexit>

World Bank Group (April, 2019). Commodity markets outlook. Available at: <http://documents.worldbank.org/curated/en/992831556034429620/pdf/Commodity-Markets-Outlook-April-2019.pdf>

Appendices

Appendix 1: Abbreviations

ASK-Available Seat Kilometer

BA-British Airways

CAA-United Kingdom's Civil Aviation Authority

CAPA-Centre for aviation

CASK-Cost per Available Seat Kilometer

CIA-Cross impact analysis

CORSIA-Carbon Offsetting and Reduction Scheme for International Aviation

EASA-European Union Aviation Safety Agency

EBT-Earnings before tax

ESN-Erasmus Student Network

EU-European Union

GBN-Global Business Network

GDP-Gross domestic product

IATA-International Air Transport Association

ICAO- International Civil Aviation Organization

LCC-Low cost carrier

NAS-Norwegian Air Shuttle

NASDAQ-National Association of Securities Dealers Automated Quotations System

PASK-Profit per Available Seat Kilometer

PMT-Probabilistic modified trends

RASK-Revenue per Available Seat Kilometer

RPK-Revenue Passenger Kilometer

SME-Small and medium-sized enterprises

SRI-Stanford Research Institute

TAIDA-Tracking, Analyzing, Imagining, Deciding and Acting

TIA-Trend Impact Analysis

UK-United Kingdom

ULCC-Ultra low cost carriers

US-United States

Appendix 2: Board of directors

Name	Role	Independent	Years	Committees				
				Audit	Executive	Nomination	Remuneration	Safety
Mr. D. Bonderman	Chairman	Yes	23	-	Member	Member	-	-
Mr. S. McCarthy	Dep-Chairman	Yes	2	-	Member	-	Member	-
Mr. K. McLaughlin	Senior Indep.	Yes	18	-	Chair	-	-	-
Ms. R. Brennan (i)	Non-Exec.	Yes	1	Member	-	-	-	-
Mr. M. Cawley	Non-Exec.	Yes	5	-	-	Chair	-	-
Ms. E. Daly	Non-Exec.	Yes	1	Member	-	-	-	-
Mr. H. Millar	Non-Exec.	Yes	4	-	-	-	Chair	-
Mr. D. Milliken	Non-Exec.	Yes	6	Chair	-	-	-	-
Mr. M. O'Brien	Non-Exec.	Yes	3	-	-	-	-	Co. Chair
Mr. M. O'Leary	Exec/Group CEO	No	23	-	Member	-	-	-
Ms. J. O'Neill	Non-Exec.	Yes	6	-	-	-	Member	-
Ms. L. Phelan	Non-Exec.	Yes	6	-	-	Member	-	-

Source: Ryanair annual report 2019

Appendix 3: Real GDP per capita in Euro

Real GDP per capita (€)	2009	2010	2011	2012	2013
European Union - 28 countries average	25,000	25,500	25,900	25,700	25,700
Ireland	36,300	36,800	36,800	36,700	37,000
United Kingdom	29420	29750	29960	30200	30660
	2014	2015	2016	2017	2018
European Union - 28 countries average	26100	26600	27100	27700	28200
Ireland	39900	49500	50700	54200	58000
United Kingdom	31220	31700	32050	32460	32700

Source: Own creation

Data: worldbank.org

Appendix 3: Exchange rates

	2014	2015	2016	2017	2018	2019
GBP/EUR	1.240494	1.377982	1.224833	1.141317	1.130081	1.132447
NOK/EUR	0.119702	0.111943	0.107605	0.107233	0.104102	0.10221

Source: Own creation

Data: ofx.com

Appendix 4: Average price/Ticket

2018	Average price/Ticket	
Ryanair	€ 37.00	€ 37.00
Norwegian	873.00 kr	€ 90.88
Easyjet	£65.20	€ 73.77
Wizzair	€ 65.40	€ 65.40

Source: Own creation

Data: Annual reports 2018

*Conversion made at the rate presented in Appendix 3

Appendix 5: Airline specific metrics - Ryanair

Ryanair	2014	2015	2016	2017	2018
ASK (Million)	125,395	128,248	140,738	157,569	170,164
RPK (Million)	103,754	113,186	130,592	148,676	162,579
Traffic Revenue (Million €)	5,037	5,654	6,536	6,648	7,151
Operational expenses (Million €)	4,378	4,611	5,076	5,114	5,484
RASK(Traffic Revenue/ASK) in €	0.040	0.044	0.046	0.042	0.042
CASK(Operational expenses/ASK) in €	0.035	0.036	0.036	0.032	0.032
Yield(Traffic Revenue/RPK) in €	0.049	0.05	0.05	0.045	0.044
Load Factor(RPK/ASK)	0.827	0.883	0.928	0.944	0.955

Source: Own creation

Data: Ryanair annual reports 2014-2018

Appendix 6: Airline specific metrics – Norwegian Air Shuttle

Norwegian	2014	2015	2016	2017	2018
ASK (Million)	46,479	49,028	57,910	72,341	99,220
RPK (Million)	37,615	42,284	50,798	63,320	85,124
Traffic Revenue (Million €)	2,338	2,518	2,792	3,319	4,192
Operational expenses (Million €)	2,508	2,479	2,608	3,533	4,593
RASK(Traffic Revenue/ASK) in €	0.050	0.051	0.048	0.046	0.042
CASK(Operational expenses/ASK) in €	0.054	0.051	0.045	0.049	0.046
Yield(Traffic Revenue/RPK) in €	0.062	0.06	0.055	0.052	0.049
Load Factor(RPK/ASK)	0.809	0.862	0.877	0.875	0.858

Source: Own creation

Data: NAS annual reports 2014-2018

Appendix 7: Airline specific metrics – Easyjet

EasyJet	2014	2015	2016	2017	2018
ASK (Million)	79,525	83,846	87,724	95,792	104,800
RPK (Million)	72,933	77,619	81,496	89,685	98,522
Traffic Revenue (Million €)	5,616	6,457	5,719	5,760	6,665
Operational expenses (Million €)	4,895	5,512	5,112	5,295	6,012
RASK(Traffic Revenue/ASK) in €	0.071	0.077	0.065	0.06	0.064
CASK(Operational expenses/ASK) in €	0.062	0.066	0.058	0.055	0.057
Yield(Traffic Revenue/RPK) in €	0.077	0.083	0.07	0.064	0.068
Load Factor(RPK/ASK)	0.917	0.926	0.929	0.936	0.94

Source: Own creation

Data: Easyjet annual reports 2014-2018

Appendix 8: Airline specific metrics – WizzAir

WizzAir	2014	2015	2016	2017	2018
ASK (Million)	24,385	29,266	34,844	41,690	51,536
RPK (Million)	20,867	25,350	30,786	37,627	47,209
Traffic Revenue (Million €)	1,012	1,227	1,429	1,571	1,948
Operational expenses (Million €)	902	1,060	1,194	1,315	1,646
RASK(Traffic Revenue/ASK) in €	0.041	0.042	0.041	0.038	0.038
CASK(Operational expenses/ASK) in €	0.037	0.036	0.034	0.032	0.032
Yield(Traffic Revenue/RPK) in €	0.048	0.048	0.046	0.042	0.041
Load Factor(RPK/ASK)	0.856	0.866	0.884	0.903	0.916

Source: Own creation

Data: Wizzair annual reports 2014-2018

Appendix 8: Comparison of specific airline metrics

ASK	2014	2015	2016	2017	2018
Ryanair	125,395	128,248	140,738	157,569	170,164
Norwegian	46,479	49,028	57,910	72,341	99,220
EasyJet	79,525	83,846	87,724	95,792	104,800
WizzAir	24,385	29,266	34,844	41,690	51,536

RPK	2014	2015	2016	2017	2018
Ryanair	103,754	113,186	130,592	148,676	162,579
Norwegian	37,615	42,284	50,798	63,320	85,124
EasyJet	72,933	77,619	81,496	89,685	98,522
WizzAir	20,867	25,350	30,786	37,627	47,209

Load Factor	2014	2015	2016	2017	2018
Ryanair	82.70%	88.30%	92.80%	94.40%	95.50%
Norwegian	80.90%	86.20%	87.70%	87.50%	85.80%
EasyJet	91.70%	92.60%	92.90%	93.60%	94.00%
WizzAir	85.60%	86.60%	88.40%	90.30%	91.60%

Yield	2014	2015	2016	2017	2018
Ryanair	0.049	0.05	0.05	0.045	0.044
Norwegian	0.062	0.06	0.055	0.052	0.049
EasyJet	0.077	0.083	0.07	0.064	0.068
WizzAir	0.048	0.048	0.046	0.042	0.041

RASK	2014	2015	2016	2017	2018
Ryanair	0.040	0.044	0.046	0.042	0.042
Norwegian	0.050	0.051	0.048	0.046	0.042
EasyJet	0.071	0.077	0.065	0.06	0.064
WizzAir	0.041	0.042	0.041	0.038	0.038

CASK	2014	2015	2016	2017	2018
Ryanair	0.035	0.036	0.036	0.032	0.032
Norwegian	0.054	0.051	0.045	0.049	0.046
EasyJet	0.062	0.066	0.058	0.055	0.057
WizzAir	0.037	0.036	0.034	0.032	0.032

Source: Own creation

Data: Annual reports 2014-2018