LISBON SCHOOL OF ECONOMICS & MANAGEMENT
UNIVERSIDADE DE LISBOA

Master of Science in Finance

Masters Final Work
PROJECT

Equity Research: Ryanair Holding Plc

João Rui Correia Santana Rita

October 2019

MASTER OF SCIENCE IN
FINANCE

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EQUITY RESEARCH:
RYANAIR HOLDING PLC

JOÃO RUI CORREIA SANTANA RITA

SUPERVISOR:
PROFESSOR JORGE BARROS LUÍS

OCTOBER 2019

Abstract

As part of the Master's Final Work in Finance, and according to the recommendations of the CFA Institute, this project about Ryanair Holdings PLC (RYA), which integrates the scrupulous analysis of all its business activity, has been settled with the main purpose of knowing the intrinsic value of its shares, on the 31st December, 2020. The decision to develop this project considers its leading position in European low-cost commercial aviation sector and the successful implementation of its pioneering business strategy. Given my own personal interest for the Company and also for the industry, it was the recent controversies associated to RYA (taxation, labour crisis and financial health) that moved me to proceed with this work.

The organic structure of this project is divided into two distinct parts. The first part where RYA is analysed and also the industry in which the Company operates; the second part, in which, the information in the first part is considered and it is forecasted and measured the Company's growth, over the next few years, using valuation models as Discounted Cash Flows (DCF), Adjusted Present Value (absolute methods) and the Multiples Approach (relative method).

It should be mentioned that all of the developments of this project include information until 27th September, 2019.

With a target price of € 10.95 at the end of 2020, given the DCF Model, representing an upside potential of 6.37% over the price of € 10.29, on 27th September 2019, our investment recommendation is HOLD, that is no strong reasons for buying or selling. Considering the main features of Adjusted Present Value Model, an identical result was reached that supports the same investment recommendation. With a target price of € 11.10, which adds up to a 7.90% upside potential, the advice of HOLD is well-maintained. The combination of this analysis with the reality of RYA and the industry, it is assumed that HOLD is indeed the most reasonable recommendation, regarding the cyclical uncertainty in the sector, due to the doubt about future fuel prices, the political deadlock with Brexit agreement, the issues with the new Boeing MAX models and the high competition that has weakened some airlines. All these factors result in a medium-level investment risk for RYA.

Keywords: Ryanair Holdings PLC; Equity Research; Airlines Industry; Airlines Group; Low-Cost Carriers; Acquisitions; Discounted Cash Flow; Adjusted Present Value; Multiples Approach.

Resumo

No âmbito do trabalho final de Mestrado em Finanças, do ISEG, e de acordo com as recomendações do CFA Institute, foi elaborado este estudo sobre a Ryanair Holdings PLC (RYA) que integra a avaliação minuciosa de toda a sua atividade, com o objetivo final de se perspetivar o valor intrínseco das suas ações a 31 de Dezembro de 2020. A decisão de se desenvolver este projeto sobre a RYA surge no seguimento da posição de líder que esta empresa ocupa no atual sector europeu de aviação comercial de baixo custo, aliada à implementação da sua estratégia de negócio pioneira e de elevado sucesso. Decorrente ainda de um interesse pessoal, não só pela empresa como pela indústria, foram também as recentes polémicas associadas à RYA (a nível fiscal, laboral e financeiro) que também direcionaram este trabalho.

A estrutura orgânica do presente documento é dividida em duas partes distintas: uma primeira parte, onde se analisa e se apresenta a RYA e a indústria onde se insere e uma segunda parte, onde, considerando as informações da primeira parte, se projeta e se mensura o desenvolvimento da empresa nos próximos anos, recorrendo a modelos de avaliação como o dos Fluxos de Caixa Atualizados e o Valor Atual Ajustado (métodos absolutos) e ainda ao modelo dos Múltiplos comparáveis (método relativo).

Importa frisar que todo o conteúdo deste projeto contempla informações passíveis de análise até dia 27 de Setembro de 2019.

Com um preço-alvo de € 10,95, no final de 2020, calculado através do modelo dos Fluxos de Caixa Atualizados, representando um potencial de valorização de 6,37% considerando o preço de € 10,29, a 27 de Setembro de 2019, a nossa recomendação de investimento é MANTER, ou seja, não se considera a existência de razões fortes para a compra, nem de razões negativas para a venda. Seguindo as especificações do modelo de Valor Atual Ajustado, alcança-se um resultado idêntico que sustenta a mesma recomendação. Com um preço-alvo de € 11,10, o que totaliza um potencial de valorização de 7,90%, o conselho de MANTER, preserva-se. Aliando este parecer à realidade da RYA e da indústria, admite-se que MANTER é, de facto, o mais sensato, considerando a incerteza que paira no setor, devido à dubiedade dos preços dos combustíveis, aos impasses na saída do Reino Unido da União Europeia, às questões com os novos modelos Boeing MAX e ainda a elevada concorrência que tem levado algumas companhias aéreas à falência. Todos estes fatores acabam por se traduzir num risco de investimento de nível médio para a RYA.

Palavras-chave: Ryanair Holdings PLC; Equity Research; Indústria de Companhias Aéreas; Grupos de Companhias Aéreas; Carreiras de Baixo Custo; Aquisições; Fluxos de Caixa Descontados; Valor Atual Ajustado; Modelo dos Múltiplos.

Acknowledgements

Even that the acknowledgements are usually done towards the end, when they are presented almost as an introduction to these projects, they bring a more genuine and human meaning to certain goals that are purely personal. In fact, not having to complete any literature review or theoretical concepts, gives to this space the opportunity to look at experiences, people and values that make us reach at this stage of our lives with ¼ century lived.

So, firstly, it is important to thank, at an institutional level, the ISEG that already has followed me through 3 academic formations: the graduation, the postgraduate degree and, currently, the master's degree. It is also important to recognize the influence that Herdade Grande had at this stage of my academic career, where I developed, among vineyards, olive groves and interesting people, almost all of this project, while gained knowledge about the science of oenology and viticulture. Also, I would like to thank McDonald's for feeding me lately, saving me more time to dedicate myself to this final project.

Not only as a mentor and supervisor of this work, but also as a Professor, a special word of appreciation and thanks to Professor Jorge Barros Luís for all the help, technical contribution and the whole consideration, even with my delay in the beginning of this project. I appreciate the way that Professor accompanied me these months and how valued me as a student. A special thanks to Professor Lúcia Kubrusly, who led and carried me at the Institute of Economics of Rio de Janeiro and also to Professors and friends Paulo Martins and Paula Cosme who always made me see that being a teacher was much more than teaching a curricular plan of a specific subject, because, before anything else, as experienced and rational human beings, we have a social commitment to improve ourselves day after day.

Friends like Rita Neves, Sérgio Crispim and Filipa Valente also deserve all the additional consideration for making 200% of their time available, even though they had all their personal and professional responsibilities, to help and support me during my academic career. Without close friends like Tiago Correia, Sahib Santiago, Eddie Fernandes, António Reis and Vasco Oliveira, such goals would not be possible either. Thanks also to my friend Bernardo Gordo for destabilizing me during these recent times, thus forcing me to overcome and deal with the pressure and stress in this project.

Special thanks to David Cardoso and Catarina Ribeiro for being my greatest support since I can remember. Siblings from different mothers, the family I chose!

Thank my grandparents, and especially my Aunt Zeza and Aunt Catarina, for being a constant presence in my life and key people in the final outcome of this project. To my father, Rui Rita, for relieving all the academic pressure with our sports schedule, saying several times "Let's go boy, that's why I never went to university". And finally, to my Mother, Paula Correia, the human being that I preserve the most, who supports me and helps me in everything, whether my decisions are good or bad.

Last but not least, an endless and huge thank to my life partner Marta, my sister Rita Rita and our puppy Ozzy for sharing with me 24/7 of this reality and representing everything I value the most in my life: character, loyalty, friendship, love and companionship.

To my Uncle João Correia, my Aunt Alexandra Amaral and my younger cousins Maria and Manel, thank you so much for existing and making me what I am today! It is not by chance that all of you finish this chapter. I really appreciate you and what you are to me!

A special thanks to me, as well!

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Ryanair Holding PLC

HOLD

Medium risk

27TH September 2019

RYA: Leading Low-Cost Segment in Europe.

(YE2020 Price Target of € 10.95 (6,37%); recommendation is to HOLD)

1. RESEARCH SNAPSHOT

The final recommendation for Ryanair Holdings PLC (RYA) is HOLD, considering Discounted Cash Flow (DCF) method as the main model of valuation and based on the target price achieved, at the end of 2020, of € 10,95, meaning an upside potential of 6,37%, regarding the price of € 10,29 in 27th September, 2019. This recommendation is also supported by Adjusted Present Value (APV) method, with a target price of € 11,10, offering an upside potential of 7,90%. On the other hand, relative valuation throughout Multiples Approach gives us a downside potential of 27% with an average target price of € 7,5; however, as will be explained further, this valuation is biased given the weaknesses that aviation industry is facing along 2019 and it is expected to remain in 2020 (Table 2).2

The risk assessment for RYA investment is stablished as medium risk (Table 1) due to the factors: (i) the huge competition in the sector which has settled down operating margins and averages fares, sinking many airlines in overcapacity; (ii) the constant gaining of market share of low cost carriers (LCC) segment against full service carriers (FCS) and RYA is one of the biggest worldwide low cost airlines, leading the LCC market in Europe; (iii) the personnel strikes and the delay in delivery of new Boeing MAX, which still affect negatively how RYA brand is seen in the market, considering the flights cancellations, the closure of some routes and bases as well as the dismissals of the staff; (iv) the fact that operating expenses are growing upwards and quickly than revenues, leading to the decreasing of EBIT margins (Figure 1); (v) the Brexit agreement that seems to be non-consensual between UK and Europe, carrying along uncertainty issues that affect aviation's industry and (vi) the RYA strategy of becoming a group airlines, after acquired Laudamotion, Air Malta and settled subsidiaries as Ryanair Sun (rebranded as ''Buzz'') and Ryanair UK.

Basically, in the following two years, RYA will face uncommon levels of profitability with the final purpose of driving out its rivals and gaining extra and important market share to still outperform over its competitors and leverage its growth in the long-term that will be focused in (i) carrying a record of 200M passengers in FY2024; (ii) increasing its Load Factor; (iii) valuing even more its customers experience; (iv) stablishing new routes and increasing the frequency of service on its existing routes; (v) renewing its fleet with 210 Boeing 737-MAX that will provide high passenger capacity and lower levels of fuel consumption and (vi) taking advantage of internet to boost its ancillary revenues, while still preserving its records of safety, punctuality and quality.

Table 1 - Analyst Risk Assessment

	Medium Risk
Buy	> 15%
Hold	5% < PT < 15%
Reduce	(5%) < PT < 5%
Sell	< (5%)

Table 2 - Valuation Output. Source: Author

Valuation Method	Target Price
DCF	€ 10,95
APV	€ 11,10
Multiples - Average	€ 7,51
EV/EBITDA	€ 8,14
P/E	€ 7,02
P/CF	€ 6,45
P/S	€ 8,44
Price at 27 September, 2019	€ 10,29

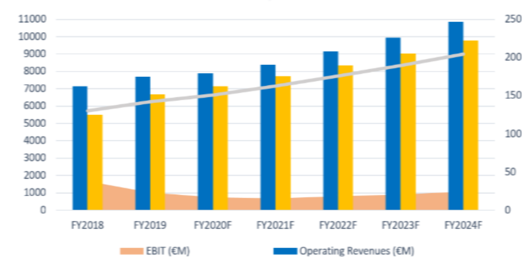


Figure 1- RYA activity estimations. Source: RYAAR and Author.

2. BUSINESS DESCRIPTION

Ryanair Holdings PLC (RYA), founded in 1985 and based in Swords (Dublin, Ireland), is an airline which operates as a LCC (low-cost carrier). With the slogan ''Low Fare, Made Simple'' and with a well-established main mission focused in offering low fares to increase its passenger traffic in combination with cost containment and operating efficiency, RYA is often recognized as ''Europe's largest airline group'', ''Europe's No. 1 on-time performance'' and ''Europe's No. 1 Low-cost airline''. In fact, when the purpose is to support these statements, the Irish airline with 86 bases around Europe comes up with impressive numbers. RYA, in FY2019 (between 1st April 2018 and 31st March 2019), operated 2,400 short-haul flights per day over 224 airports in 38 countries with a total of 142m carried passengers that paid an average fare of €37,03 (Figure 2) on a fleet composed by 455 Boeing 737-800 and another 210 on order. Another strong factor of the company is the 16,800 highly skilled aviation professionals who strive to deliver the lowest fares, the best punctuality performance, the greenest and cleanest air travel and hold an industry leading 34-year safety record.

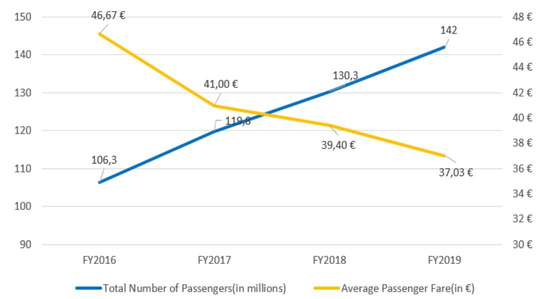


Figure 2- Total Passengers Carried and Average Passenger Fare. Source: RYA Annual Report (RYAAR).

The beginning of RYA goes back in 1985 when Ryan family set up the company with a share capital of £1 and a staff of 25 people. In the first year, RYA operated daily flights from Waterford (Ireland) to London Gatwick and carried a total of 5,000 passengers. Ten years later, RYA achieved the goal of carrying more than 1 million passengers in a year. Nowadays, after becoming in 2017 the first European airline to carry over 1 billion passengers, RYA is still spreading its growth through some acquisitions as Malta Air (Malta) and Laudamotion (Austria), and through the creation of Ryanair Sun (actually, rebranded Buzz), based in Warsaw (Poland) and Ryanair UK which is the subsidiary in UK, based in London Stansted airport.

With the final mission of enhancing the customers experience, the AGB 2019 (Always Getting Better Program) introduced new initiatives to keep the lowest fares (get money back to passengers who are able to find a cheaper fare within 3 hours), to improve punctuality (if the on-time performance measure is under 90%, RYA cut 5% off the following month's air fares and to develop customer care improvements as well (48 hours for changes of bookings and compromising to process claims within 10 days along with 24/7 customers support).

Due to its aim of being the greenest airline, RYA established an environmental plan, included in its Environmental and Social Policies, in order to minimise fuel and energy consumption, reduce noise pollution and CO2 emissions and going plastic free within 5 years. Preserve and increase a strong load factor, invest in fuel-efficient new aircraft, improve engine technology and conduct the most efficient operational procedures in the industry will be the keys to the success of its plan.

RYA ACTUALITY

On the other hand, RYA's has recently been stormed by some critical events as Brexit, delays in delivery of new Boeing 737 Max and personnel strikes.

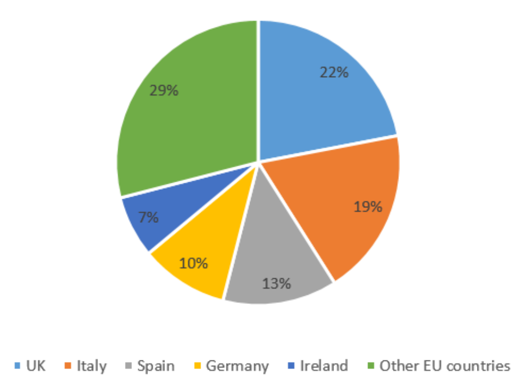


Figure 3- Revenue per County. Source: RYAAR.

All the worries on the Brexit agreement are justified by the fact that, in FY2019, 22% of revenues came from operations in UK, as can be seen in Figure 3. So, uncertain and undefined aspects as the status of the UK/EU open air transport market and freedom of people's movement can affect negatively RYA's financial condition and results of operations. However, the creation of Ryanair UK as UK's subsidiary can be used to minimize these adverse situations.

The retardment with new Boeing models delivery ends up delaying the achievement of some strategic strengths to RYA, because the 737 MAX has 4% more seats and consumes 16% less of fuel. Despite these features, the truth behind this delay is worrisome, because the aircraft models have been involved in two accidents in Ethiopia and in Indonesia and are being rectified, so the plan will be delivering 30 of these aircrafts until the summer 2020.

The last critical issue that is affecting RYA business is the labour crisis with many personnel strikes (pilots and cabin crew) in last few months. RYA personnel claims higher salaries plus better work conditions and starts to unionize and join competitors. These strikes cause a drop in credibility of RYA due to the cancellation of flights and force the increase of costs with passenger's compensations.

RYA OPERATING PERFORMANCE IN FY2019

Besides all of these considerations, in FY2019, RYA faced a reduction in its operating margin for values close to those presented in FY2015. It decreased by 39% from 1,667.3m in FY2018 to 1,016.8 in FY2019 (Figure 4). This result is supported by the fact that the total operating revenues increased just by 8%, between FY2018 and FY2019, while the total operating expenses increased by 22%, in the same time period (Figure 5). The bad performance in operating profit allied with the delay in delivery of the Boeing MAX will lead to close bases, during the FY2020.

The huge increase in operating expenses between FY2018 and FY2019, as can be seen through Table 3, was mainly originated by the increase of costs with fuel and oil (28% due to the direct cost of fuel), with airports and handling (13% due to the increase in passenger numbers) and with staff costs (33% due to increase in block hours and pilot and cabin crew pay increases), when each of these parcels weighs 36%, 16% and 15%, respectively, in the total amount of operating expenses (Figure 6).

When taking into account the operating revenues, we are able to check that RYA's has two types of core revenues: scheduled revenues and ancillary revenues, both of them related to low-fares airline activities (the only business segment of the Company).

Scheduled revenues are a function of the total passengers carried per year and the average fare charged by RYA. It increased by 2% from €5,134.0m, in FY2018, to €5,261.1m, in FY2019, which reflects the 9% increase in the number of booked passengers offset by the 6% decrease in average fare from €39.40 to €37.03, in the same period. In FY2019, scheduled revenues represents 68% of total operating revenues (Figure 7).

To complement, ancillary revenues comprise revenues from non-flight scheduled operations (excess baggage charges, administration/credit cards fees, priority boarding, allocated seats, room reservation, travel

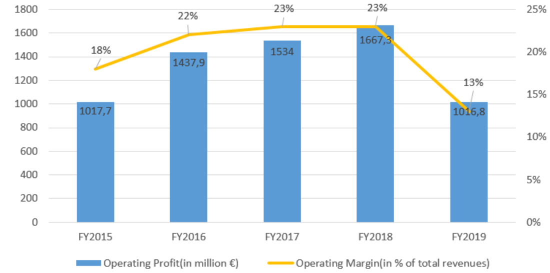


Figure 4 – Operating Profit and Margin. Source: RYAAR.

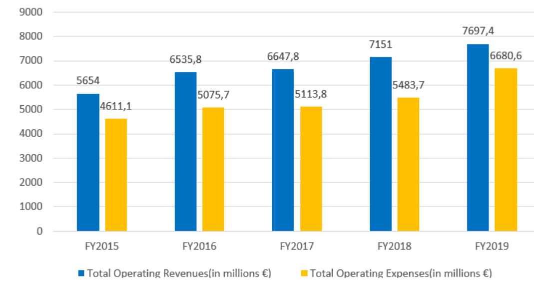


Figure 5 – Total Operating Revenues and Expenses. Source: RYAAR.

Table 3- Description of RYA Operating Expenses. Source: RYAAR.

Categories of Operating Expenses	FY2019(in € millions)	FY2018 (in € millions)	% Change
Fuel and Oil	2,427.3	1,902.8	28%
Airport and handling charges	1061.5	938.6	13%
Staff costs	984.0	738.5	33%
Routes charges	745.2	701.8	6%
Depreciation	640.5	561.0	14%
Marketing, distribution and other expenses	547.3	410.4	33%
Maintenance, materials and repairs	190.9	148.3	29%
Aircraft rentals	83.9	82.3	2%

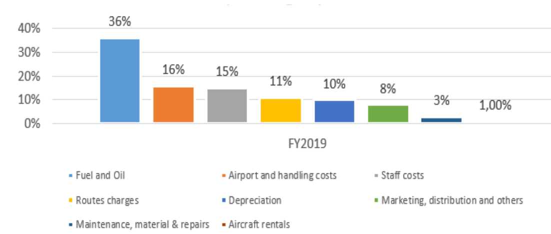


Figure 6 – Categories of Operating Expenses, as % of Total Operating Expenses. Source: RYAAR.

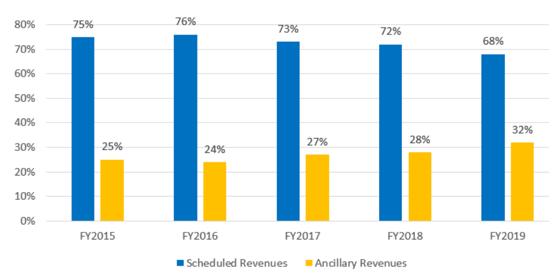


Figure 7 – Total Scheduled and Ancillary Revenues, as % of Total Operating Revenues. Source: RYAAR and Bloomberg.

insurance and car hire), from in-flight sales (food and beverage and merchandise) and internet-related services (commissions received from sales in the Company's website and other linked websites). It increased by 21% from €2,017.0m, in FY2018, to €2,436.3m, in FY2019. The overall increase in ancillary segment was stimulated by an increase in the sales of reserved seating and priority boarding.

Through this analysis, we can assume that what determined these operating results were the key drivers of revenue and profitability as the low cost fares, the high price of non-ticket services (ancillary segment), the operating cost containment and the RYA punctuality and safety records in airlines industry. Therefore, RYA exhibit interesting airline industry metrics (Figure 8) as RPK (which measures the demand for an air transportation, often referred to as airline traffic, comprising the sum of the product between the revenue passengers and the distance flown of each flight), ASK (a supply metric of an air transportation which measures available seats per kilometres, so it is a indicative of capacity) and Load Factor (which measures how much of an airline passenger carrying is used and it comprises the division of RPK by the ASK). In FY2019, RYA's achieved an impressive Load Factor of 96%, which means that in every flight 96% of the aircraft was full with revenue passengers (Figure 8). It should be noted that for RYA a boost in RPK is good because it means that more passengers are using their services and an increase in ASK is also positive because there's a company's commitment to rise its capacity demand year by year. On the other hand, the maximization of the load factor reflects an important operating efficiency but needs to match with good pricing and profitability policies.

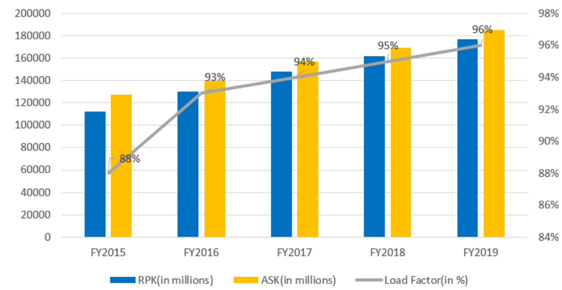


Figure 8 – Ryanair's RPK, ASK and Load Factor measures. Source: RYAAR.

RYA LONG-TERM STRATEGY

The main purpose of the Company is to establish itself in Europe's airlines market as the biggest scheduled passenger airline group implementing constants improvements and expanded offer of its low-fares service to an increasing number of passengers, year after year. To achieve this, RYA outlined the following key elements of its long-term strategy:

i. Low fares to stimulate demand from every target of the air travelers. RYA sells tickets without minimum stay requirements (called the ''one-way basis''), imposing higher fares to flights with high demand and to reservations made nearer to the departure's date and, occasionally, running special promotional fare campaigns.
ii. Customer service is a priority to the Company. In fact, RYA strives to deliver the best services and performances among its competitors. This focus on customers experience is perceivable through the 90% of punctuality and the handling's efforts to provide fewer lost bags than its competitors. In recent years, AGB introduced initiatives as a more intuitive navigation in the website, a mobile app, reduced penalty fees and more customer-friendly baggage allowances and change flight policies. All of these RYA efforts are reflected in the increasing of RPK and PLF.
iii. Frequent point-to-point flights on short-haul routes that allows to offer low fares, frequent services and direct and non-stop routes, avoiding costs for connecting passengers (as baggage transfer and

transit passenger assistance). In FY2019, the average route length was 774miles/1245.6km with the average duration of 1.9 hours.

iv. Low operating costs that is one of the key drivers of its business. Due to this, RYA needs to control and reduce its main expenses as aircraft equipment and finance costs (operating with a single type of aircraft – Boeing 737-800 – limits costs with personnel training, maintenance and the purchase and storage of spare parts); personnel costs (through compensation's payment productivity-based as bonus for on-board for cabin crew and payments based on the number of hours or sectors flown by pilots and cabin crew); customer service costs (negotiating the costs directly with the airports and eliminating travel agent commissions through the development of its own internet system booking) and airport access and handling costs (choosing airports with most competitive prices and less issues with slot requirements and operating restrictions).

v. Taking advantage of the internet globalization providing developments in its website and app, with the final purpose of simplifying the booking of flights and the purchasing of ancillary products.

vi. Commitment to safety and quality maintenance by hiring and training of the pilots, flight attendants and maintenance personnel while stipulates a policy of maintaining its aircrafts in accordance with the highest industry standards.

vii. Enhancement of operating results through ancillary services by having contracts with service providers of accommodation, airport transfer, car hire and travel insurance.

viii. Focused criteria for growth by using aggressive fare promotions to stimulate demand, increasing the frequency of service on its existing routes, initiating new and additional routes in the EU and within EU countries, continuing exploring acquisitions opportunities, connecting airports on its existing route network and initiating new routes not currently served by any carrier

ix. Responding to market challenges as balance low-fare business with volatility of fuel costs and economic contraction in some economies in which RYA operates. To face these challenges, the Company will ground around 65 aircrafts during the winter, will dispose aircraft and it will still to improve its costs containment strategies as the renegotiation of contracts with existing suppliers and airports and handling operators. During the winter, RYA will carry out its aircraft maintenance and, as was said, will stop many of its aircrafts to avoid extra cost due to higher fuel prices and higher airport charges while a seasonal decrease in operating costs and revenues is expected.

SHAREHOLDERS STRUCTURE

As it can be seen in Table 4, in the end of FY2019, the type of principal agents that hold the main participation in RYA share capital is investment advisory, while the Directors of RYA as a group owned 53,057,387 ordinary shares which represents 4.7% of RYA outstanding ordinary shares. For being considered major shareholder, it is required to hold at least 3% of total issued share capital. This status gives these shareholders the right to put a discussion topic in the AGM or present a resolution project for a

Table 4-Major Shareholders. Source: RYAAR.

Major Shareholders	Number of Shares	% of Class
Capital	100,394,424	8.9%
Harris Associates	77,228,695	6.8%
Baillie Gifford	58,805,558	5.2%
AKO Capital	51,079,882	4.5%
Michael O'Leary	44,096,725	3.9%

discussion item. On the other hand, a shareholder that detains at least 5% can request an extraordinary meeting.

Another important detail to retain, it is the fact that Directors of RYA demonstrate a special care to certify that the number of ordinary shares held by non-EU nationals does not reach a level which could put in danger the RYA to continue to hold or enjoy the benefit of any European air operator certifications. It needs to be considered because EU Regulation requires that an EU air carrier must be majority-owned and effectively controlled by EU nationals to obtain and retain an operating licence.

3. MANAGEMENT AND CORPORATE GOVERNANCE

According to Governance Metrics Report of MSCI Research, RYA achieved the highest score relative to main competitors indicating that its corporate governance practices are usually well aligned with shareholder interests.

RYA corporate governance is developed inside the Board of Directors which is responsible for the leadership and the strategic direction of the Group. The main focus of the Board is on strategy formulation, policy and control but covers others matters as treasury policy, audit and risk management, approval of the annual budget, key strategic decisions, internal control and remuneration of the Non-Executive Directors and Executive management.

The Board is headed by the same Chairman since 1996, David Bonderman, whose primary responsibilities are to ensure that the Board has a common purpose, is effective and, at individual Director Level, upholds and promote high criteria of integrity and corporate governance. The Chairman links the Board and the Company ensuring appropriate communications with shareholders.

As Deputy Chairman, the Board elected Stan McCarthy who has served the Company as Director from 2017.

Kyran McLaughlin is the Senior Independent Director who has the mission to keep in touch with shareholders about matters that cannot be addressed through the Chairman, Group CEO or CFO.

One of the biggest changes in the Board was the renunciation of Michael O'Leary as CEO, in August of 2019, who has been in RYA for more than 30 years. According to O'Leary, the main reason to justify his renunciation was considering that one of the RYA weaknesses was being associated to himself just because of his polemical speeches, in 90's, about aviation's unions. The Ex-CEO admits that his decision was taken as an opportunity to reclaim the airline's reputation. So, currently O'Leary is established as CEO of the Group with the responsibility to supervise all the four subsidiaries: Ryanair Sun, Laudamotion, Ryanair UK and Malta Air.

The Board is composed by 1 Executive and 11 Non-Executive Directors (since RYA wants to preserve its Board's independence) and 33% of the current board are female. In line with the functions of the Nomination Committee, that appoints the selection of Directors, the Board keeps its composition under analysis to guarantee that it includes the required skills and experience to accomplish its role. When we take a look at directors' biographies, we assume that the Board includes directors with extensive business experience and range of skills, knowledge and diversity, most of them in the aviation sector, what gives an advantage to the Company. As example, David Bonderman (in RYA since 1996), Michael O'Leary (in RYA since 1988), Michael Cawley (in RYA since 1997 as Deputy CEO and Chief Operating Officer who contributed significantly to the Company's growth), Kyran McLaughlin (who advised RYA during its initial flotation on Dublin stock market in 1997) and Mike O'Brien (who has a long distinguished career in the aviation industry with positions as Head of Flight Operations Inspectorate with Maltese Civil Aviation Authority and as Head of Operations Standards with Irish Aviation Authority).

Inside the Board there are five committees: audit, executive, nomination, remuneration and safety. When the matters is the independence of the Board's Directors, the Board has carried out its annual evaluation of the independence of each of its Non-Executive Directors to verify if each Director is independent in character and judgement and free from relationships or circumstances which are likely to affect the Director's judgement.

4. INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

Economic Outlook

The World GDP growth is expected to remain between 3% and 4% until 2023 (Figure 9), however, the world GDP still swallowed with the deceleration in global economic activity due to some uncertainty perspectives. Factors as the geopolitical tensions which stir energy prices; the global trade tensions mainly between US and China that contributes to slowed investment in trade-oriented sectors; the Brexit agreement; the vanishing effects of fiscal stimulus policies in US; the decline in the automobile sector in Europe; the power shortages in South Africa; the oil production cuts by OPEC and other oil producers and others natural disasters as cyclone Idai which its impacts were severely felt are determining the path of the world economy in 2019 and in the next years.

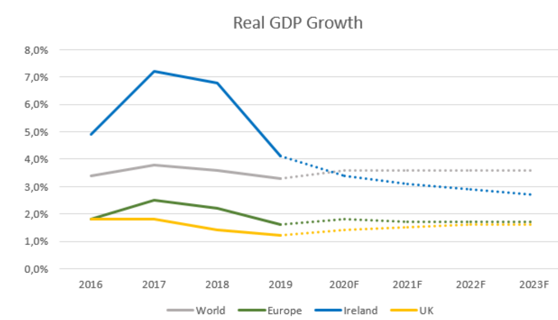


Figure 9 – Real GDP Growth. Source: IMF.

In line with these trends and guidelines, European GDP growth is forecasted to register a change around 2% a year until 2023 (Figure 9) but still clouded by the side effects of global economic issues. In fact, Brexit remains the major source of uncertainty in European economy. On the other hand, exports remain subdued and Europe's inflation is still moderate, despite rising wages and robust demand and private consumption, mainly due to bottomed down of energy price.

Ireland's GDP still growing above the European average growth rate, however this tendency is forecasted to slow down until 2023 (Figure 9). It is expected that the GDP growth of 4,1%, in 2019, starts a decreasing trend until 2023,where it is predictable a growth of 2,7%. Actually, Ireland's economy goes through good prospects due to an increasing in employment, a strong growth in wages, a dropping in unemployment rate, a robust private consumption, with its trade and investments remains seriously influenced by activities of multinationals. On the other hand, as others countries in Europe, there are some evidences of a decreasing in exports with the weakening of external demand and also a particular uncertainty given the Brexit agreement and eventual changes in the international taxation environment.

Basically, the UK's future inside the EU is one of the most important features to define the path of growth and development within the Europe and worldwide. UK's GDP growth rate is set, in 2019, at 1% and it is expected to continue changing around this value, in the following years (Figure 9). Currently, UK shows a Brexit-dependent economy with a sluggish and irregular economic activity. Due to the uncertainty, UK faces a waning in investment but, given its expansionary fiscal policy and a modestly increasing in real wages, private consumption is expected to continue thriving, filling some fragilities and gaps in the economy's growth.

Brexit

Considering that the Brexit is the next step between UK and EU, the challenge is to try to achieve an agreement, minimizing disruption to both economies. There were firmed temporary measures which allow flights to continue without any legal change for a period of 9 months after a ''no deal'' Brexit. This is an issue to many airlines companies (as well to RYA and its low cost competitors which are based on UK or have a significant share of revenue coming from UK) and regarding these considerations, a temporary measure will not remove all RYA concerns about flight rights, ownership structure, employment rules, taxation status and freedom of open aviation market between UK and Europe. It should be taken into account that adverse changes in any of these arrangements could impact on RYA financial and operating condition.

In fact, as an European company under the European regulation, RYA needs to ensure that it remains majority owned and controlled within the EU to guarantee that its licenses in Ireland, Poland, Austria and Malta will be maintained and the Company will continue to operate freely. In order to be achieved this, RYA placed the necessary legal measures to restrict non-EU shareholders voting rights and restrict also non-EU share sales for a short period of months.

An additional measure taken by RYA, as a contingency plan to tackle an event of disruption to existing traffic rights due to Brexit, was the creation of Ryanair UK, a subsidiary protected by the UK air operator certificate (AOC). This is motivated by the significant amount of revenues that came from UK aviation market which totalizes 22% of total revenues, in FY2019.

Brexit has already caused, and may continue to cause, volatility in currency exchange rate fluctuations specially the depreciation of Pound Sterling against Euro (Table 5). As the Company earns a substantial portion of its revenues in Pounds Sterling, the decline of the value of the Pound and recession in UK impacts materially on RYA financial and operating results. For the remainder of FY2020, RYA estimates that every Pence Sterling movement in the €/£ exchange rate will impact income in € 7 million. Brexit can also devaluate the € against US dollar and if this happens the Company has to spend more on fuel, whereas the price of oil is in US dollars. As we will see further, to mitigate and minimize the negative impact of these market risks relating to fluctuations in commodity prices, in currency exchanges rates and also in interest rates, RYA uses various

Table 5 - Yearly average exchange rate against €.Source: OFX.

	2015	2016	2017	2018	2019
$	1,11	1,11	1,13	1,18	1,13
£	0,73	0,82	0,88	0,88	0,88

derivative financial instruments (as currency swaps, interest rate swaps, commodity forwards and currency forward contracts). For example, RYA currently enters into forwards contracts for the purchase of some jet fuel that it expects to use; uses foreign currency forward contracts to reduce its exposure to risks related to volatility of foreign currencies against euro, namely the US dollar; and enters into interest rate contracts with the objective of fixing certain borrowing costs and hedging principal repayments, mostly of those associated with the purchase of the new Boeing 737.

Interest Rates

RYA purchase of 159 of the 455 Boeing 737-800 aircraft in the fleet has been funded by financing in the form of loans supported by a loan guarantee from Export-Import Bank (144 aircrafts), from Japanese Operating Lease with Call Option (12 aircrafts) and from commercial debt (3 aircrafts). Furthermore, the Company has raised unsecured debt via capital market bond issuances. In FY2019, the outstanding cumulative borrowings totalizes €3,644 million with a weighted average interest rate of 1,38%. RYA's defends itself from changes in interest rates through the interest rate swaps agreements to avoid negative impacts in the fair value of its liabilities. For example, if RYA did not entered into such derivatives agreements, a variation +/- 1% in interest rates would have led to an impact on its liability by €2.9 million. In line with this, a movement of +1% in interest rates would result in a decrease of €5.1 million in net interest income and a -1% change would result in an increase of €9.9 million in the same item.

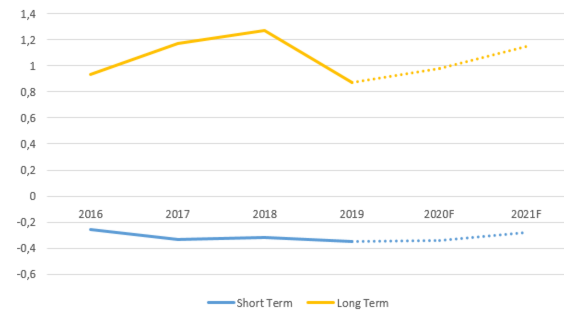


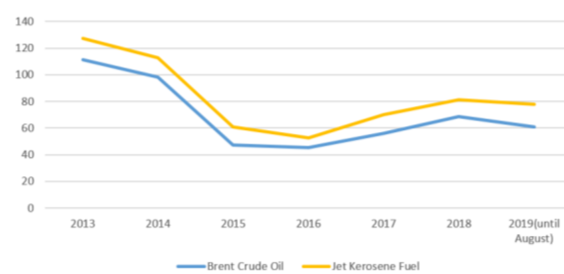
Figure 10 - Interest Rates in Euro Area, % per annum. Source: OECD.

The past and forecasted behaviour of the interest rates can be seen in Figure 10.

Fuel and Oil Prices

In airline industry, two main types of fuel are used: the Brent crude oil and the Jet kerosene, whose prices are correlated. The first one is extracted with the final purpose of being refined into common gasoline and it is characterized for being light (given its low density) and sweet (given its low sulphur composition). The second one comes from the distillation of crude oil to be used as aircraft fuel. As it can be seen through Figure 11, prices of both fuels revealed some volatility in last years and, until the end of 2019, are expected to remain around the same values.

Figure 11 – Fuel and Oil Prices. Source: IATA.



Oil price depends on geopolitical, financial, economic and social factors as global economic situation, the demand and supply for oil or the regulations and decisions to cut oil production from producers as OPEC, US or Russia. Currently, the low prices reflect trade tensions between US and China and is justified due to strategic decisions between Saudi Arabia, US and Iran that had an unexpected outcome and led to an excess of oil in the markets.

Another reason that justifies the volatility of the oil prices is the inconstancy of seasonal swings between high and low demand months. However, in 2020, with an expected increasing in oil demand and the adjustment of the US and OPEC's policies, the oil prices are forecasted to rise up.

Considering that, in FY2019, fuel cost represented 36% of RYA's total operating expenses and analysing the volatility of fuel's prices, RYA defends itself, as occurs with foreign exchange rates and interest rates, against unpredictable movements of oil prices using commodities forwards contracts, pursuant which Ryanair and a counterparty agree to exchange payments equal to the difference between a fixed price for a given quantity of jet fuel and the market price for such quantity of jet fuel at a given date in the future. With this, is stablished that RYA receives the amount of any excess of such market price over such fixed price and pays to the counterparty the amount of any deficit of such fixed price under such market price.

Based on RYA fuel consumption, in FY2019, a change of $1 in the average annual price per metric ton of jet fuel would have led to a change of €3.3 million in RYA fuel costs.

To understand the priority of these hedging strategies for RYA, on the 25th July 2019, RYA had entered into forward jet fuel contracts which covers 90% of its estimated fuel requirements for FY2020 and 37% for FY2021.

Airline Industry Outlook

The global travel and tourism, in 2018, grew at 3,9% to contribute a record of $8,8 trillion and 319 million jobs to the world economy. Airline industry is a key advent of globalization because it facilitates global trade, tourism and economic growth. However, it has been revealed a cyclical and volatile industry given its susceptibility to political, social and economic factors.

Table 6 - Data of Worldwide Airline Industry. Source: IATA.

Worldwide Airline Industry	2017	2018	2019F
Spend on air transportation, $/billion	787	845	899
RPK - World, billion	7758	8330	8740
RPK - World, % change over year	8,10%	7,40%	5%
ASK - World, billion	9519	10171	10646
ASK - World, % change over year	6,70%	6,90%	4,70%
PLF	81,50%	81,90%	82,10%
RPK - Europe, % change over year	9,10%	7,50%	4,90%
ASK - Europe, % change over year	6,70%	6,60%	5,60%
PLF - Europe	74,30%	74,80%	74%
Revenues, $ billion	755	812	865
Revenue Passenger, $ billion	534	561	589
Expenses, $ billion	698	765	822
Labor expenses, $ billion	170	181	190
Fuel expenses, $ billion	149	180	206
Operating profit, $ billion	56,6	47	43,6

Currently, 1% of world GDP is spent on air transportation, totalizing $899 billion (Table 6). The airline industry in last years has suffered many changes as the boost in capacity to serve an increasing in demand, the reduce in average fares that has abled more passengers to fly, the rising costs mainly due to personnel and fuel costs and operating margins negatively affected by the huge competition. And these are the main reasons to assume that is a challenge to thrive in air transportation sector. Nowadays, the biggest challenges to be faced in the industry is the expected increasing price of jet fuel, the rising of labour costs, the offsetting of carbon emissions regarding strict environmental regulation, some regional and political instabilities and the impact of capacity growth on an already constrained infrastructure (in the air with overworked air traffic controllers and in the ground with overly congested airports).

In the EU, since 2017, the social media has noticed a bunch of airlines which ceased its operations due to competition and low cost business models. So, in the industry, it has begun a battle of growing capacity and revenue while it is primordial maintaining and improving operational resilience.

Airline passengers industry is segmented in two fractions that are full service carriers (FSC) and low cost carriers (LCC). The first one operates with flights in big and main hub airports around the world, connecting major cities and providing a high standard level as comfortable seats, free food and beverage on-board and in-flight entertainment. FSC should be divided in Hub Airline Companies (HAC) and Luxury Airline Companies (LAC). HAC has its business focus on cost leadership plus differentiation and LAC has a differentiation focus which connotes luxury service based on excellence and quality. On the other hand, LCC operates with aircrafts with less comfort and with a high seat density on point-to-point flights connecting secondary airports, usually with no free food and beverage and without in-flight entertainment with the scope of enabling efficiency improvements in its operating processes and cost reduction.

In the last years, LCC are representing a bigger share of total air transportation market (Figure 12). In 2016, LCC had 25% of total flights around the world and, in 2018, increased its share to 31%. In fact, with low average fares due to its business focus, LCC has enabled more passengers to fly, achieving an important target in the market.

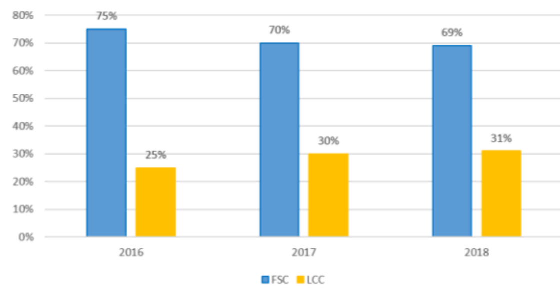


Figure 12 – Air Transportation Market Share. Source: Statista.

Demand and Supply

Mainly, due to LCC business models which allowed more people to fly and a strengthening global economy, the demand and supply in airlines industry has been booming in the last years.

In the end of 2019, it is expected to reach the record of 4,6 billion passengers carried by airlines companies, which means an increase of 5%, since the end of 2018, and an increase of 31%, since 2015 (Figure 13). It is also forecasted an estimated annual growth rate for passengers air traffic, between 2019 and 2038, of 4,6% in the global market and 3,6% in European market, where RYA rolls its main operations (Figure 14).

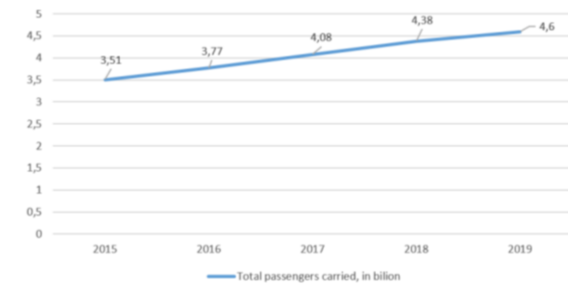


Figure 13 – Total Passengers Carried. Source: Statista.

Regarding the eight biggest national markets based on passengers traffic, until 2022, it is projected to include countries as UK, Spain, Germany and Italy (Table 7), where RYA operates and extract a significant part of its operating revenues.

When the purpose is measuring, analysing and comparing the demand and supply in airlines industry, we need to take into account metrics, previously mentioned, as RPK, ASK and PLF (Table 6).

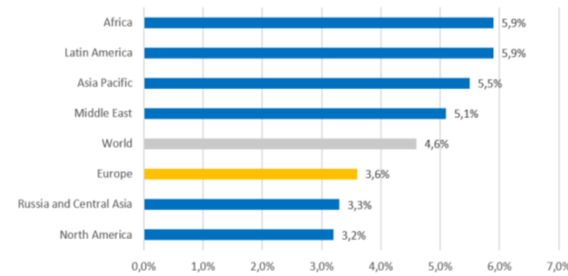


Figure 14 – Estimated Annual Growths Rates for Passenge Air Traffic from 2019 to 2038. Source: Statista.

RPK is a metric focused on the demand, often referred as airlines traffic, and, since 2017, in the global air passenger market, has increased around 13%, expecting to totalize 8740 billion by the end of 2019. In Europe, was registered a trend with identical behaviour, but with fewer positive changes year over year.

Table 7 - Ranking of countries with biggest passenger traffic. Source: IATA.

	2018	2019	2020F	2021F	2022F
US	1ST	1ST	1ST	1ST	1ST
CHINA	2ND	2ND	2ND	2ND	2ND
UK	3RD	3RD	3RD	3RD	3RD
SPAIN	4TH	4TH	4TH	4TH	4TH
JAPAN	5TH	6TH	7TH	7TH	7TH
GERMANY	6TH	5TH	6TH	6TH	6TH
INDIA	7TH	7TH	5TH	5TH	5TH
ITALY	8TH	8TH	8TH	8TH	8TH

ASK, in the supply's side, measures the capacity of airlines companies and registered, in the global air passenger market, a positive variation of 12%, since 2017, considering the forecasted value of 10 646 billion, in 2019. In Europe, ASK growth rate occurred with major positive variations year over year.

The combination of these two metrics results in another important measure that is PLF which measures how much of airlines capacity is used, basically, how full aircrafts are during the flights. And given the forecasted value for PLF, in 2019 for the global air passenger market, of 82,1% can be seen an additional raise in PLF. In an antagonistic perspective, the PLF, in Europe, was reduced due to increasing in ASK and a lower growing in RPK. Basically, we can assume that European demand didn't go along with the supply.

Linking both data on Figure 15 and Table 6, it is perceptible another present issue on airlines industry that is the past and forecasted behaviour for the revenues and expenses and its impact in the operating profit.

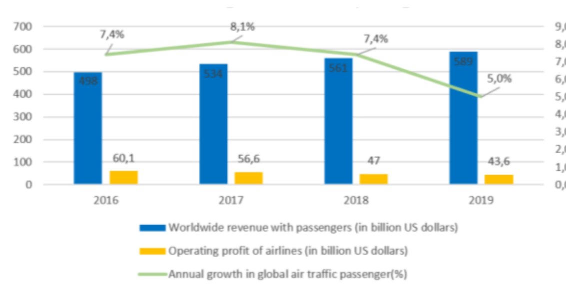


Figure 15 – Worldwide Passenger Revenue, Operating Profit and Annual Growth in Traffic Passenger. Source: IATA and Statista.

Given the intense competition among all airlines and the increasing in its expenses, the operating profit is declining. In fact, according to prospect, by the end of 2019, revenues will totalize $865 billion (+15% than in 2017) mostly due to the increasing in revenue passenger that will be set at $589 billion (+10% than in 2017). On the other hand, expenses will totalize $822 billion (+18% than in 2017). This escalation in expenses incorporates more costs with two main sources of expense as fuel (+18% since 2017) and personnel (+12% since 2017), which is explained by the fact of having more industry capacity, meaning more aircrafts and implying more staff allocation and more fuel consumption. Personnel expenses has another theoretical reason behind that is the legal aggravation of required compensation framework in case of flight cancellations and delays. These operating considerations will lead, by the end of 2019, of an industry operating profit of $43,6 billion (-23% than in 2017).

Competitors and Peers Group Analysis

Considering the number of the passengers carried (Figure 16), RYA competes against any other worldwide airline company. So, RYA main competitors are European HAC as Lufthansa Group, Air France-KLM, IAG and Turkish Airlines; and European LCC as EasyJet, Wizz Air and Norwegian Air Shuttle.

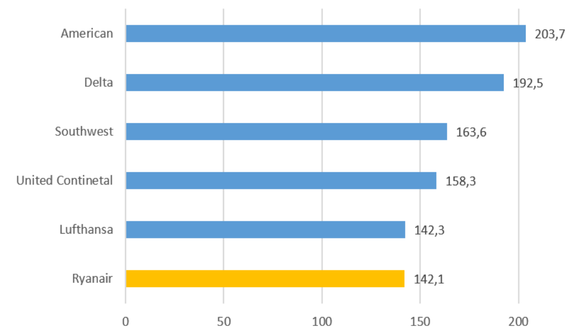


Figure 16 – Leading Airlines based on number of Passengers in Million. Source: Statista.

In this list, we can set the RYA peers following two assumptions that are being a company which operates in Europe and being a low-cost airline with the same type of any LCC's strategy. Consequently, Vueling (IAG), Eurowings (Lufthansa Group), Transavia (Air France-KLM), EasyJet, Wizz Air and Norwegian Air Shuttle are considered as peers.

In order to situate RYA in its peers group, we do a comparison using five indicators as the number of passengers carried, the operating profit, RPK, ASK and PLF (Table 8).

Table 8 - Peers Group comparison. Source: Annual Reports from each Peer.

		RyanAir	EasyJet	Wizz	Noruegian Air Shuttle	Eurowings	Transavia	Vueling
2016	Passengers Carried (in million)	119,8	73,1	23,8	29,3	18,4	NDF	NDF
	Operating Profit (in million €)	1534	588,7	247,4	200,7	-103	NDF	NDF
	RPK (in million)	147,813	81,496	37,628	50,798	20,11	NDF	NDF
	ASK (in million)	156,654	87,724	41,691	57,91	25,264	NDF	NDF
	PLF (% of ASK)	94%	91,60%	90,10%	87,70%	79,60%	NDF	NDF
2017	Passengers Carried (in million)	130,3	80,2	29,6	33,1	32,6	12,3	29,6
	Operating Profit (in million €)	1667,3	460,9	293	-203,4	-33	72	188
	RPK (in million)	161,635	89,685	47,21	63,32	42,651	NDF	29,118
	ASK (in million)	169,176	95,792	51,537	72,341	53,381	NDF	34,378
	PLF (% of ASK)	95%	92,60%	91,30%	87,50%	79,90%	90,50%	84,70%
2018	Passengers Carried (in million)	142	88,5	34,6	37,3	42,7	15,8	31,9
	Operating Profit (in million €)	1016,8	516,8	300	-387,1	-231	75	200
	RPK (in million)	176,961	98,522	55,994	85,129	52,64	NDF	31,966
	ASK (in million)	184,838	104,8	60,284	99,22	64,748	NDF	37,431
	PLF (% of ASK)	96%	92,90%	92,80%	85,80%	81,30%	91,80%	85,40%

In FY2019, RYA led its peers in all of the considered indicators. RYA carried 142 million of passengers (more 53,5 million than EasyJet with the best performance among the peers) and totalize an operating profit of

€1016,8 million (more €500 million than EasyJet). According to PLF, RYA still outperforms over its peer group with a Load Factor of 96% (leaving the second place to EasyJet with 92,9%). When we take into account the demand and supply metrics as RPK and ASK, RYA show numbers, in million, as 176,961 and 184,838, respectively (while EasyJet stays with values of 98,522 million and 104,800 million, respectively).

Acquisitions: Lauda and Air Malta

Since the beginning of 2019, RYA made a good progress in developing its group airlines. In January, RYA acquired 100% of Laudamotion (currently, known as Lauda), Austrian no1 low fares airline. RYA stablished an ambitious growth initiatives as (i) in summer 2020, totalize a fleet of 30 aircrafts; (ii) grow its traffic from 4 million passengers to 6 million in FY2020 and 7,5 million in FY2021; (iii) operate in four bases with the main focus on Vienna to secure its position as no2 Austrian airline behind Austrian Airlines; (iv) increasing 20 new routes and (v) integrate new 400 pilots, cabin crew and engineers. The main challenge is the management and maintenance of its Airbus fleet, however, the Group look at this fact as a growth opportunity. On the other hand, Lauda provides access to valuable landing slots at slot constrained airports in Germany, Austria and Spain.

In June, RYA purchased Malta Air from the government of Malta in order to grow its presence in Malta, to access non-EU markets as North Africa and to reduce operating costs due to Maltese legal taxation regulations. RYA stablished growth initiatives as (i) switch 6 Malta based aircrafts onto the Maltese register; (ii) compose a Maltese based crew of 200 people; (iii) increase its Malta based fleet to 10 aircrafts and (iv) create 350 jobs within 3 years.

Buzz: Rebranded Ryanair Sun

During 2019, the old Ryanair Sun will be rebranded as Buzz and it was profitable already in its first year. The main goal of RYA with the Polish subsidiary is to stablish Buzz as Poland no1 charter airline in FY2020. Currently, Buzz fleet is composed by 7 aircraft in the charter market and 17 of RYA aircrafts based in Poland.

Competitive Positioning

At the end of 2017, the RYA Board defined as strategic progression axis the operation of long-haul flights. So, a commercial agreement was done with Air Europa in order to allow customers to book their long-haul flights (operated by Air Europa) to US and Latin America, through RYA website. In the early months of 2019, this agreement was suspended due to a lower bookings than expected.

However, in addition to Lauda and Air Malta acquisitions, the launch of Ryanair UK, the rebranding of Ryanair Sun, RYA is aiming the boost of its strength as airlines Group. In FY2019, RYA launched 316 new routes across its network, invested in the renewal of its fleet through the purchase of the new and more efficient Boeing 737-MAX-200 and managed its environmental impacts delineating a strict Environmental Policy. The Company has invested heavily to improve its punctuality and resilience despite all air traffic controllers and staff strikes.

Another key element in its growth's strategy is the AGB Program that, as mentioned before, is focused on delivering real benefits for Company's guests. The 6th year of the program is driven by the slogan ''More Choice, Lower Fares and Great Care''. The AGB's priorities are the lowest fares, punctuality, the customer care charter and care improvements.

In order to approach RYA competitive positioning, the management tools as SWOT Analysis and Porter's Five Forces Model have a main role in this analysis. The first one, SWOT Analysis identifies strengths and weaknesses of the Company that could give advantages or disadvantages to the business model; and opportunities and threats in the environment that could exploit or damage Company's business (Table 9). The Porter's Five Forces Model analyses the five forces that shape the industry (Figure 17).

Swot Analysis

Table 9 - SWOT Analysis. Source: Author.

STRENGTHS	WEAKNESSES
Efficient and effective Low Fare Policy Low cost Model well implemented Single model aircraft Operating in secondary airports (cost cointainment) Punctuality Safety Comissions free for bookings Website strength Innovations in LCC Model Network and fleet size Effective cost management Fast turnaround	No brand loyalty Operating in secondary airports (far away from cities centers) Dependence on Boeing as supplier Personnel strikes Seasonality of revenues Treated by social media as uncaring airline Seasonally grounded aircraft
OPPORTUNITIES	**THREATS**
US-EU open air passengers traffic Insolvency and restructuration of many European airlines Consider other acquisitions Open new routes Increase frequency on existing routes Promotions to enhance PLF Social media expansion AGB Program Business travellers New aircraft Boeing 737-MAX-200 Increasing of air passengers annual rate growth Ancillary revenues	Dependent on new regulations High competitive industry Volatility of fuel prices Foreign exchange rate risk Brexit agreement Terrorism and war Political, social and economic tensions Environmental factors Accidents Increase in Irish Corporation tax rates EU Regulation on passenger compensation External weather events

Porter's Five Forces Model

- Threats of New Entrants (Low)

Entering and stablishing in the airline industry is a really huge challenge mostly due to the high cost of the aircrafts which require large capital to invest and also because it is difficult to implement a strong brand position. In fact, it can take many years due to the high quality and safety standards of many airlines. As mentioned previously, the distribution channels are becoming even busy in the air with overworked air traffic controllers and in the ground with overly congested airports. By the way, the threats of new entrants are not remote so far, mainly because of many HAC that are creating its own LCC or, in other cases, change its business strategy to low-cost models.

- Threats of Substitute Products (Low)

The main substitute products are passenger's transportation by car, bus, boat and train; and when we compare to the air transportation it is visible that air transport provides high standards of quality, comfort, safety, quickness and trip lengths, all of this at an affordable price.

- Bargaining Power of Consumers (Medium-High)

In fact, the switching costs to choose among all airlines are not very high, which enables consumers to pick the best flight according to their needs. This mixed with a low brand loyalty in the industry, gives a considerable bargaining power to customers. This industry force was the principal reason to set high levels of rivalry and competition between airlines companies, which are forced to reduce costs in order to practice low fares.

- Bargaining Power of Suppliers (Low-Medium)

In Europe, the main airline companies work with two main aircraft suppliers - Airbus and Boeing. The switching cost to change from one to another is high because it implies huge capital requirements and different trainings to the pilots, cabin crew and engineers. The latest progress was developed by Chinese aircraft producers as Comac, presenting jets with more seats and with higher level of efficiency in fuel consumption. In response to this, Boeing created the new generation aircraft Boeing 737-MAX-200 with identical features. This will be the choice of RYA to regenerate its fleet.

- Competitive Rivalry (High)

As explained before, rivalry in airlines industry is roughly high, competing for best offerings of prices and services. Due to this, many airlines are considering changing its business strategy in order to earn a superior market share. Basically, these features are the main reason to the decreasing of the operating profit margins in the industry.

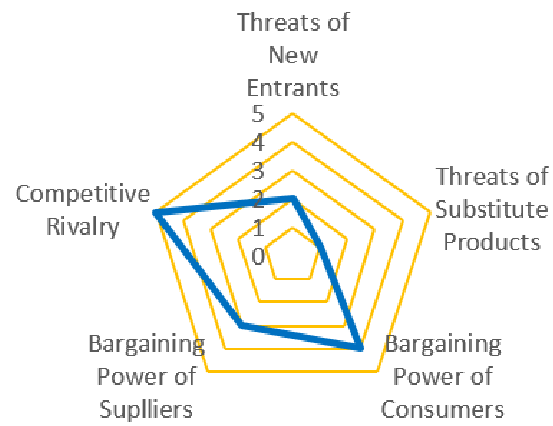


Figure 17 – Porter's 5 Forces Model. Source: Author

5. INVESTMENT SUMMARY

With the ultimate goal of evaluating RYA, two absolute valuation models (Discounted Cash Flow Approach – DCF - and Adjusted Present Value Approach - APV) were used. A relative analysis was also elaborated, using a relative valuation model, the Multiples Approach.

According to DCF, the main model used to support the final recommendation of HOLD, we achieved a target price of € 10,95, meaning an upside potential of 6,37%, considering the reference price of RYA shares € 10,29 at 27th September of 2019. To complement the analysis, we reinforced the investment guidance with APV model, through which we obtained a slightly higher target price of €11,1. Representing an upside potential of 7,9%, we kept the HOLD recommendation (Table 10).

Taking into account the relative model of Multiples, the scenario is completely different regarding the price achieved, reaching an average target price of €7,5, which means a downside potential around 27%.

Although, this situation can be seen as biased given the weaknesses that the aviation industry is facing along in 2019 and are prospected to remain in 2020. In fact, the huge competition has settled down operating margins, overthrown brutally average fares, sinking many airlines in overcapacity issues. Last year was critical due to the bankruptcy of many competitors or some airlines being acquired by strong airlines groups given its operating and financial fragilities. It is expected more to follow this trend. For that reason, this result is not taken into consideration as completely valid because RYA business structure is well-established and defined, what can make RYA more resistant to negative cyclical shock in the industry.

Table 10 - Valuation Summary. Source: Author.

DCF Valuation	
Target Price	€ 10,95
Upside Potential	6,37%
APV Valuation	
Target Price	€ 11,10
Upside Potential	7,90%
Multiples Valuation	
EV/EBITDA Target Price	€ 8,14
P/E Target Price	€ 7,02
P/CF Target Price	€ 6,45
P/S Target Price	€ 8,44
Average Target Price	€ 7,51
Average Downside Potential	-27%
Difference DCF and Multiples	
€ 3,44	31,4%
Difference APV and Multiples	
€ 3,59	32,3%
Difference DCF and APV	
-€ 0,15	-1,4%

The HOLD recommendation is mainly supported by the following key drivers:

- Guidelines of the airline industry future

Along with the projected European GDP growth around 1,8% for the next years, inside airline industry is expected to register YoY increases in key metrics as RPK and ASK. On the other hand, it is expected for PLF to be damaged as ASK is projected to increase at a quicker pace than RPK. It can raise overcapacity issues and drives down the average fares. The same could happen with the revenues and expenses increasing both, although expenses are forecasted to grow quickly, causing the reduction of operating profit.

RYA is aware of the situation, what led Michael O'Leary to assume that, for the next two years, the main axis of growth progression will be the aggressive cuts in fares with the main purpose of driving out rivals. Those strategies can be painful to operating and financial results with profits broadly flats. In fact, RYA should follow trend of the industry, in order to thrive in the near future. So, basically, RYA will lead a load-active strategy, filling its aircrafts even if it is needed even more lower fares.

In FY2019, RYA presented the worst profit in last five years, turning down its increasing tendency until FY2018, due to boosts in fuel and personnel expenses and given Lauda losses. At the time that annual report was formally presented, RYA shares immediately devaluated, recovering its value within few days as people showed up willing to accept the fact that the RYA Board expects lower profitability for the next couple years in return for gaining much more market share.

Another fact that should be taken into account, is the LCC's constant gains in market share. For that reason, as RYA still leading the European LCC market, is expected to be the first to take and explore all advantages of that.

- Cost containment

The cost containment is one of the most important key drivers of RYA business strategy. This is what enables to operate with lower fares. Additionally, RYA continues to deliver the lowest unit cost of any EU airline and the cost gap between RYA and its competitors has widened in these last years. To maintain and preserve this competitive advantage, in

2020, RYA plans to close, cut or reduce activity in some bases and routes that have been revealed inefficient for its growth strategy. In line with this, during the winter, RYA will ground, seasonally, 65 aircrafts in order to reduce fuel, staff and airport expenses due to a period with lower traffic and lower levels of revenues.

Besides the mentioned above, another main expense is the personnel costs and RYA plans to manage its staff surplus of 900 people (500 pilots and 400 cabin crew) with transferences to other bases. With unpaid leaves and with the allocation of staff, some of them in Lauda and Buzz, it will be possible to avoid collective dismissals.

RYA will also renegotiate contracts with existing suppliers, airports and handling operators in order to reduce existing expenses.

As will be dealt and explained ahead, the cost reduction with fuel and oil will be very dependent on the arriving of new Boeing MAX that enables to increase passenger capacity per aircraft allied with the cut of fuel consumption, around of 16% per seat.

- Long-term strategy well defined to prosper

Since the early 90's, RYA reproduced the successful low cost business model of Southwest Airlines, in the USA. With the first mover advantage, in Europe, RYA stablished strong operational and organizational synergies that enables the Company to lead European and worldwide LCC segment. Even with some diseconomies of scale and overcapacity issues, decreasing of profits and high levels of expenses with fuel and staff, RYA is focused in its passengers' growth YoY, in increasing and renewing its fleet to take advantages of that, creating subsidiaries and acquiring other small airlines in order to benefit from local markets positions and define even more routes.

Along with this, RYA is still to preserve its commitment to quality, safety and punctuality maintenance, while taking some advantage of internet to boost its ancillary revenues.

- Brexit

Given the last news about this topic, until the last days of October, UK expects to firm its exit from EU with or without a consensual agreement. In the last months, since the British people voted for Brexit, RYA take measures to minimize or avoid eventual consequences of Brexit, as was said and explained before. Besides the assurance of still being a majority owned and controlled within EU to maintain its European flight licenses, RYA created Ryanair UK, a subsidiary secured by UK's AOC, conducive to provide contingency in the event of disruption to existing traffics rights. However, it is expected that open skies will remain.

Despite all these plans, the uncertainty around Brexit agreement can raise issues that cannot be contained as the depreciation of pound sterling against Euro and an eventual devaluation of euro against US dollar, what would impact RYA financial and operating condition. These unpredictable movements in foreign currency rates can be so abrupt that, even with RYA hedging policy, cannot be detained, resulting in tough coverage losses.

- Boeing 737-MAX-200

Considered as the ''game changer'', this new aircraft is the pillar to sustain new guidelines of RYA's growth. Basically, the Company is in the waiting list to receive 210 aircrafts of this model, until 2024, since they were taken out of the market after being involved in two air fatal accidents.

Boeing MAX ends up delivering 4% more seats combined with 16% lower fuel consumption per seat, which means the capacity of carrying more passengers with a considerable reduction in operating costs. That's why this new airplane is a critical component for cost efficiency and its delay is causing a negative impact in RYA growth. Taking a wide look to the dimension of that issue, the Board admits that the ground of Boeing Max is one of the main reasons to strike the closure of bases and routes and which motivate the surplus in staff. However, RYA paused payments to Boeing due to the late delivery of the airplanes. But, for RYA this is not the solution, because without the new Boeing model its growth is doomed.

In short term, RYA expects to operate with 30 Boeing 737-MAX until the summer of 2020 and for the FY2021 the advantages of this investment will start to prosper.

- Strikes

The strike waves in RYA around Europe harms the Company's condition with cancelation costs and its impact in operating activities. In fact, the dispute between RYA and its staff will be solved as RYA manage the surplus in its staff and subsequently could set some requirements of this personnel as better working and salary conditions, pensions and insurances similar to the other airlines.

- Passengers and PLF still to increase

With an estimated passenger air traffic annual growth of 3,6% between 2019 and 2038, in Europe, RYA sets the goal of carrying 200M passengers in FY2024, representing more 58 million than in FY2019 and meaning the annual average passenger growth around 8%. Another metric to preserve is its PLF that are placed on a record of 96% and which are being stimulated in these last 10 years.

Lower fares, aggressive promotional campaigns, the settlement of new routes and seize the opportunity of the bankruptcy of some competitors are defined plans to boost PLF and achieve the goal of 200M passengers carried.

- Expected rise up of fuel prices in 2020

Another pivotal aspect in order to forecast RYA's activities, is the expected behaviour of fuel prices in the next years, as this is the largest component of the Company's expenses. Since 2015, fuel prices have reached a historic low and remained more or less around these lower values until 2019, however, the reality is about to change. For the next year of 2020, fuel prices are projected to rise given the increasing in oil demand and the adjustment of US and OPEC policies.

Basically, RYA already has shown concerns on that market conjecture and entered into forward jet fuel contracts which covers 90% of its estimated requirements for FY2020 and 37% for FY2021.

- RYA growth as group airline

RYA is investing in its growth as group low cost airline with the main goal of leading some local markets (as in Poland, Austria and Malta), benefiting from legal regulations to implement even more lower levels of operating costs. In line with this strategy, the acquisition of Lauda and Air Malta was concluded and the most recent subsidiaries as Buzz and Ryanair UK were created.

6. VALUATION

Before taking into account any development of the valuation models used, it is essential to explain and justify all the defined assumptions to reach the most reliable and accurate forecast prediction. In order to achieve this goal, a deep analysis was performed about RYA business model, structure, industry environment and tendencies that will be reflected in the expected future behaviour of each component in income statement, balance sheet and cash flow statement.

Following this line of reasoning, all these assumptions were applied in the three types of valuation models: the absolute methods of the Discounted Cash Flow Model (DCF) and the Adjusted Present Value Model (APV), as long as the relative method known as the Multiples Approach.

Forecast Analysis

RYA has launched its Annual Report of FY2019 with some signs of deterioration in its financial accounts, showing the worst net income of the last 4 years. Michael O'Leary headed a call conference to communicate with the shareholders about the main aspects of FY2019 and outlined the next years. For example, (i) the profits ''broadly flats'' until the middle of FY2021 with an expected profit between € 700 million and € 950 million in FY2020; (ii) the expectation of average fares continue to decrease around 4%-6% with a slightly recovery during the winter; (iii) the overcapacity, in Europe, will remain as the passengers are still conservative about the processing of Brexit; (iv) at least, 50 new Boeings will be operating until the summer of FY2021 expecting a first delivery of 20 airplanes expected in February or March, 2020; (v) RYA forecasting indicates a total of carried passengers of 153 million, in FY2020, reinforcing its plans to reach the mark of 200 million passengers in FY2024; (vi) the grounding of 65 aircrafts during the winter in order to reduce operating expenses and to initiate its complete and periodical maintenance; (vii) the strategy will be adding capacity as quick as possible in all markets that RYA operates to agitate the biggest part of its direct competition, even if that could be a painful strategy within 1 or 2 years; (viii) the low fares and low profit would be cyclical stages of growth; (ix) the earnings could fall further, such as European airlines' wages, due to ''fare wars'' and (x) the sharp fall in profitability regarding the overcapacity in the industry, has motivated the recent acquisitions of Lauda and recently Malta Air.

Income Statement

After all of these Michael O'Leary's considerations, we draw a conservative adjusted future behaviour for the expected operating revenues and expenses.

As the operating revenues include scheduled and ancillary revenues, it is expected to grow around +2%, in FY2020; +6,5%, in FY2021 and around +9% between FY2022 and FY2024 (Figure 18). Scheduled revenues that comprise a function of passengers traffic and the charged average fare is expected to increase by 0,6%, in FY2020, as well as the increase of the number of passengers carried around 150,5 million (+6% than in FY2019 but 2,5 million less than O'Leary predictions given the continuous delay with new Boeings – Figure 19) and the fall by 6% in average fare (the worst expected for O'Leary) to values around € 35,18 caused by an huge competition and overcapacity ''fare war''(Figure 19). In FY2021, scheduled income is expected to grow 6% with the delivery of, at least, 50 new Boeings (with more capacity) and with a predicted increasing in traffic of 8%, totalizing 162,5 passengers carried. After these tough years, with the total receiving of Boeings aircrafts, the weakened competition, the stabilization of average fares and giving the increasing in traffic to reach 200 million passengers in FY2024, it is expected that scheduled revenues grow around 7,5% (Figure 20). Further details can be seen in Appendix 7.

In line with these prognosis, ancillary income is forecasted to grow above scheduled revenues by 6%, in FY2020, as RYA shows intentions to strengths its operating profit even more with the ancillary revenues, justifying its intentions of shifts to digital along with the benefits and guidelines of AGB Program. For the same reason, RYA has been restricting the amount paid for ticket including just the passenger transportation, therefore, every ancillary service is included in reserved seating, cabin luggage and priority boarding, that explains the huge growth of this parcel at 20,8%, in FY2019, due to a wider acceptance and adhesion of ancillary services. In FY2021, we set a positive progression of 8% given the expected increasing in traffic and in capacity of the RYA fleet. After this period, considering the recovery of the Company and industry, we forecasted a continuous growth pacing around 12% (Figure 20).

The combination of these statements in the scheduled and ancillary revenues will contribute to operating revenues expansion +2,3%, in FY2020; +6,5%, in FY2021 and +8,9% between FY2022 and FY2024(Figure 18).

As far as the operating expenses are concerned, a special attention should be taken to the components with bigger weight expression in total costs, such as fuel and oil, airport and handling charges, route charges and staff costs.

Fuel and Oil expenses, that is RYA's main operating cost, are forecasted to increase by 5%, totalizing an amount of € 2 548,7m, in FY2020,

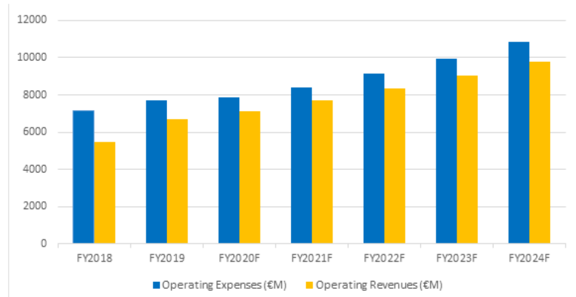


Figure 18 - Forecasted Operating Revenues and Expenses. Source: RYAAR and Author.

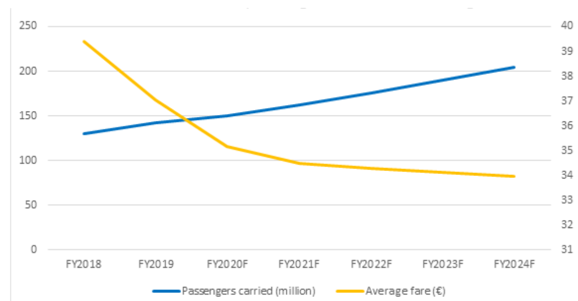


Figure 19 - Forecasted Number of Passengers Carried and Average Fare. Source: RYAAR and Author.

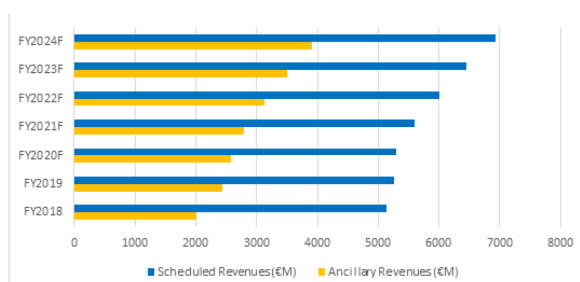


Figure 20 - Forecasted Revenues: Scheduled and Ancillary Segment. Source: RYAAR and Author.

considering the growth in passengers traffic, the fuel prices broadly flat (around $ 65 US dollars per barrel), the grounding of 65 aircrafts during the winter and the delay in the delivery of the new Boeing MAX. From FY2021 until FY2024, we set a continuous increase by 7% due to a particular large demand, to the step-by-step increasing in Brent crude oil prices offset by the gradual delivery of new aircrafts causing the reduction of fuel consumption by -16% per passenger (Figure 21).

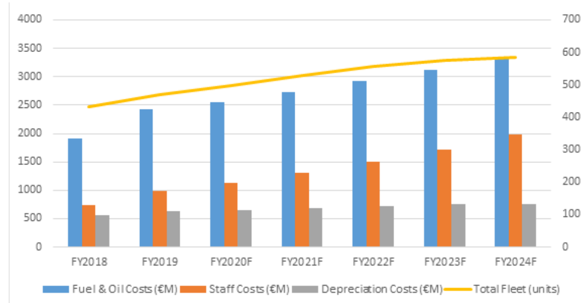


Figure 21 - Forecasted Operating Expenses and the Total Fleet. Source: RYAAR and Author.

Staff costs are expected to increase by 15% YoY as shown by its historic average variation. We considered this as a valid prediction assumption due to the annual expansion in staff members of 11%, what is according to RYA's growth strategy expectations (large fleet, more capacity, more routes and flights, more passengers and the focusing on staff elements in recent acquisitions of Lauda and Malta Air). Considering this issue, one of the last factors to be taken into account, which could explain this behaviour, is the increasing pressure by unions (Figure 21).

Depreciations focus on PPE components as aircrafts, hangar and buildings, plant and equipment, fixtures and fittings and motor vehicles. The assumption behind depreciation's progress is under the statement that only the depreciation with aircrafts will increase thanks to the fleet expansion, while other PPE elements will remain at the same values. Given this assumption, the yield of depreciation per airplane was calculated and multiplied by the expected fleet for each year predicted. In the end, the depreciation will grow at rates of 1%-6%, over the next 5 years (Figure 21). Further information can be seen in Appendix 7.

Airport and handling charges are expected to grow by 9% YoY as percentage of increase in revenues (in line with large traffic – passengers and flights), given its average growth in the last 5 years.

Route charges are forecasted to increase by 8% YoY regarding its historic average growth rate as result of the acquisitions of Lauda and Air Malta; the focus on Ryanair UK and Ryanair Sun (Buzz); the increasing in fleet and in passengers' traffic, as long as more routes and flights are expected.

Costs with maintenance, materials and repairs will grow at a pace of 5,5%, even though, its historic average rate is 8%, considering the last 5 years. With the expected arriving of 210 new Boeing aircrafts until FY2024, around 31% of the fleet will be renewed. For that reason, we consider fair to set lower values for the growth regarding the ponderation range of this component.

Expenses with marketing, distribution and others are mainly attributed to AGB Program. As AGB is expected to remain focused on digital as in FY2019, we forecast an increasing of 2% in FY2020 because of the cost containment. In FY2021, it is expected to totalize an increase of 4%, going along with RYA expansion and growth.

Aircraft rentals component is foreseen to decrease 4,5% YoY due to its average growth rate in last 5 years. This assumption is in line with IFRS 16 Leases, imposing an inclusion of all leases values in the balance sheet in order to reduce the probability of artificial low operating incomes and artificial high returns on capital.

In the end, the combination of these statements considering every component of operating costs, will contribute to operating expenses expansion of 6,7%, in FY2020 and 8,2% between FY2021 and FY2024.

Finance expense (coming from interest payables), finance income and foreign exchange gain or loss are parcels forecasted to converge to a nominal average historic value of the last 5 years, as we found no relevant information to expect a sudden increase or decrease.

The gain on disposals of available for sale financial asset is assuming a null value, the same registered since FY2017. In FY2016, this parcel was included in the income statement to recognize the gain with the sale of RYA participation in Aer Lingus to IAG.

The gains on associate's sale and the share of associate losses are correlated with the acquisition of Lauda, so, since this process is already concluded, these components are predicted to assume a null value.

The prediction for tax expense is to set the historical flat value of 10%. In FY2019, tax expense was around 6,7% by cause of the losses of Lauda that were taxed on others rates.

Balance Sheet

As PPE (Property, Plant and Equipment) already includes every component explained before, it is expected to grow through the formula used in RYA AR. Essentially, the value of PPE in the present FY is given by the PPE value in previous FY plus the change in capital expenditure on the current FY, minus the depreciation in current FY. The formula above was considered:

$$\boxed{\mathbf{PPEt = PPEt - 1 + \Delta CapExt - \Delta Depreciationt}}$$

Since the intangible assets are landing rights slots, increased from Lauda and Buzz, it is expected to remain equal to previous values, from FY2019.

Deferred tax, in FY2019, was € 43,2 million due to the recognition of tax losses in acquisitions operations, thus, from FY2020 until FY2024, it is forecasted to remain at null value as verified in last common years.

DFI (non-current assets and current assets) showed huge volatility and reveals itself very inaccurate to predict. That way, we expect the growth converging gradually to the average historic value of last 5 years.

Inventories, other assets, trade receivables, restricted cash and financial assets as cash > 3 months are projected to converge to its average historical values of the last 5 years or grow by its average growth rate in the last 5 years.

In the side of current liabilities, regarding the increasing and renewing of fleet, we forecasted a growth of +3% YoY for trade receivables, as this component comprises amounts related to the payments for suppliers.

Accrued expenses and other liabilities are expected to continue following the trend similar to the historical average growth rate of +14%, due to the behaviour of remaining values of accruals, indirect tax and duties and unearned revenues.

DFI (current liabilities), given the volatility of the values that this component revealed in last years, still being very inaccurate to predict, so, we expect the convergence into the historical average value in the last 5 years.

Considering the parcel of non-current liabilities, the provisions, the deferred tax and the DFI are forecasted to remain at the same FY2019 values. Other creditors will assume null values because the Company will not enter into sale-and-leaseback arrangements for any new Boeing.

As non-current maturities of debt comprise the long-term debt to be paid in the following fiscal years, it is expected to follow increasing tendency of 5% due to the RYA investments in renewal fleet, reflecting in a large portion of debt repayment.

Forecasted values of issued capital, share premium account, other reserves and other undenominated capital will remain equal to nominal FY209 values. The retained earnings, as re-measurement parcel, are expected to be affected negatively by virtue of the decreasing shareholders return (revision in corporate guidelines of buy-back RYA program), the reduction on net income and the arising of liquidity issues.

Cash Flow Statement

The share-based payments are reported because RYA engages in equity-settled and share-based payment transactions regarding services received from certain employees. Considering this, this parcel is estimated to increase given its average yearly growth rate.

The total amount of Capital expenditures (CapEx) is forecasted to follow a decreasing tendency as the delays with new Boeings are expected to be gradually solved and RYA starts receiving the new aircrafts as shown in Appendix 7.

The shareholders returns are projected to continue decreasing by the same growth rate of FY2019 while the decreasing in the operating profit is expected to happen. After an operating recovery, it is acceptable to converge to the preserved buy-back program's rate of 3% of total issued share capital.

Proceeds from long-term borrowings are envisioned to increase by the same growth rate of FY2019 because the main part of these loans are raised for general growth corporate purposes. In line with this prediction, the repayments of long-term borrowings are projected to grow to the average value in previous 5 years.

DCF

Discounted Cash Flow Model is an approach based on the idea of the asset value being equal to the current value for all the future monetary benefits (in this case, future cash flows). Sharpening the way to achieve an accurate estimation of how much RYA shares will value, on 31st December 2020, we assume that this feature is manly related with the capacity of the Company to generate favourable cash flows in the future.

Besides future cash flows representing a monetary amount in a period ahead, it is also necessary to know how much this is worth at today's date. So, it is taken into account the concept of WACC (Weighted Average Cost of Capital), used as discount rate for all future monetary benefits. WACC represents how much a company pays for capital borrowing or selling equity. Its calculation, which includes the assumptions presented in Table 11, was made considering the main formula below.

$$\boxed{WACC = We \times Ke + Wd \times Kd \times (1-T)}$$

Explaining each variable of the formula above, that should be noted that We component comprises the weight of equity in capital structure as long as Wd represents the weight of Debt. Kd is the rate that RYA pays over its debt and, by assumption, it is given by cost of debt for air transportation, in Damodaran online. T represents the corporate tax rate, in Ireland, valued of 12,50%, according to Damodaran. As a note, to reach the right value to Ke (cost of equity) component, the traditional formula of Capital Asset Pricing Model was used:

$$\boxed{Ke = Rf + Bl \times EMRP + CRPI}$$

In the formula above, Rf, representing the Risk Free Rate (theoretical rate or return of an investment with zero risk), is given by the yield of AAA-rated euro area central government bonds with maturity of 10 years, according to ECB data. As long as AAA rating comprises the minimum level of risk, we consider this assumption as reasonable. EMRP (equity market risk premium) and CRPI (country risk premium – Ireland) equals the values shown in Damodaran database. Bl, that represents the systematic risk, was calculate using the Bu (Beta Unlevered, given by Damodaran database), the debt-to-equity ratio and the corporate tax rate with the formula:

$$\boxed{Bl = Bu \times [1 + D/E \times (1-T)]}$$

After these calculations and assumptions, in order to perform DCF Model, the Free Cash Flow to the Firm (FCFF) was obtained by the sum of net income and depreciation minus the changes in net working capital and minus the forecasted value for CapEx. The detailed results of FCFF can be seen in the Appendix 8.

The Terminal Value of FCFF for the next 5 years was calculated considering the WACC for each period and the terminal growth rate of 1,80%, represented by the forecasted European GDP growth rate, according to IMF. In the end, a perpetuity terminal value was obtained using a WACC-to-perpetuity, which includes, by definition, an expected average value of the previous 5 years.

Table 11 - Valuation Assumptions. Source: Author.

Risk free rate (Rf)	-0,6591%
Country risk premium – Ireland (CRPI)	1,18%
Equity market risk premium (EMRP)	7,14%
Beta unlevered (Bu)	0,61
Beta levered (Bl)	1,43
Cost of debt (Kd)	4,18%
Terminal growth rate (g)	1,80%
Corporate marginal rate	12,50%

Table 12 -DCF/FCFF Output. Source: Author.

DCF/FCFF - Enterprise Value(EV)	
PV of FCFF	3162,5
Terminal Value	15137,3
PV of Terminal Value	10306,8
EV	13469,3
Net Debt	1514,9
Equity Value	11954,4
Number of shares outstanding	1092,1
Target Price	**10,95**
Price at 27 September, 2019	10,29
Upside potential	6,37%
Investment Recommendation	HOLD

As can be seen in the Table 12, the RYA Enterprise Value equals the sum between the present value of FCFF and the Terminal Value to perpetuity. After this calculation, the Equity Value of RYA (obtained by Enterprise Value minus the net debt) divided by forecasted number of shares outstanding, gives us the target price of € 10,95, representing an upside potential of 6,37% over the price of €10,29 in 27th of September, 2019. This sustains the investment recommendation of HOLD. Detailed information regarding all calculations can be observed in the Appendix 8.

APV

The Adjusted Present Value is an additional absolute valuation method, often used in academic projects, and postulate the scenario of the Company being financed by equity plus the value of its financial benefits. In this model, is considered the benefit of the tax shields from interest short-term payments. Mostly used for leverage companies, the APV Approach was computed as a complementary method and all calculations are presented in Appendix 9.

Table 13 - APV Output. Source: Author.

APV - Enterprise Value(EV)	
EV Unlevered	13565,45
PV (ITS)	75,62
EV	13641,07
Net Debt	1514,94
Equity Value	12126,13
Number of shares outstanding	1092,14
Price Target	11,10
Price at 27 September, 2019	10,29
Upside Potential	7,90%
Investment Recommendation	HOLD

The inputs used to calculate the target price, according to APV model, come from DCF Model. So, it is considered the WACC for each year, Wd, Kd, T and the pre-tax WACC that is a weighted average cost of the capital that does not include the effect of the corporate tax rate.

Primarily, the FCFF are obtained according to the same formula in DCF Model and its present value (PV) is calculated using the WACC for the period. After this computation, the Debt Capacity Short-term (DCST) is achieved considering the product between the PV of FCFF and the respective Wd for each year. In order to get the interest paid short-term (IPST), DCST is multiplied by the expected Kd. In the end, the interest tax shield short-term (ITS) is achieved applying the pre-tax WACC to the IPST.

The Enterprise Value (Table 13) is the sum of EV Unlevered (present value for each FCFF using the pre-tax WACC) and the present value of ITS. After all of these computations, the final Equity Value (obtained by EV minus net debt) divided by forecasted number of share outstanding, gives us a target price of € 11,10, meaning an upside potential of 7,90%, sustaining the investment recommendation of HOLD.

Detailed information about APV calculations can be seen in Appendix 9.

Multiples

The Multiples Approach valuation is supported by the theoretical statement that identical assets can be valued based on comparable prices of other market assets. In agreement with this assumption, RYA can be evaluated according to the performance of its peers group in the airlines industry. The Multiples Approach seeks to value similar companies using the same financial metrics, including operating margins, cash flows and revenues.

In order to compute this model, an elementary assumption was made with RYA's peer group. Given that Eurowings, Vueling and Transavia are included in the big airline's groups and its financial metrics represents the performance of the whole Group, they were not taken into account to perform the valuation through Multiples, what weakens this method, biasing the final results.

For performing this valuation model, there were used the main financial metrics as EV/EBITDA, the P/E (price-to-earnings), the P/CF (price-to-cash flow) and the P/S (price-to-share), given the complete Bloomberg's information about these ratios.

As can be seen in Table 14, all of the four multiples calculated stands the SELL as investment recommendation, with an average price target of € 7,5 (downside potential of 27%), which is not in line with the two absolute valuation models. In fact, this complementary method, is biased reflecting the vulnerable framework of airlines industry (failures, bankruptcy, financial problems and acquisitions), aggravated by the huge and intense competition. In Appendix 10, it is evident that many peers show very divergent and disparate values, which completely biased the average peer's ratio, leading to inconsistent results.

Detailed information about Multiples calculations can be seen in Appendix 10.

Table 14 - Multiples Output. Source: Author.

Multiples Valuation	
EV/EBITDA Target Price	€ 8,14
P/E Target Price	€ 7,02
P/CF Target Price	€ 6,45
P/S Target Price	€ 8,44
Average Target Price	€ 7,51
Average Downside Potential	-27%

Price Target - Sensitive Analysis

In order to understand and quantify how much the price target can vary according to changes in the main assumptions, a sensitive analysis was performed, as shown in Table 15.

Regarding the individual variations in the terminal growth rate (g), if $g > 2{,}30\%$ the investment recommendation is BUY. If $g < 1{,}70\%$ REDUCE is recommended. However, if $g < 0{,}98\%$ the investment recommendation stands for SELL.

Considering additional and single changes in WACC, if WACC < 7,57%, BUY is recommended. If WACC > 8,06% the investment recommendation is REDUCE. If WACC > 8,65%, the final recommendation is SELL.

The eventual individual variations in beta levered (Bl), can lead to BUY recommendation if Bl < 1,355; to REDUCE if Bl > 1,447 and to SELL if Bl > 1,553.

Regarding the single changes in market risk premium (EMRP), if EMRP < 6,75% the investment recommendation is BUY. If EMRP > 7,21% REDUCE is recommended. And, if EMRP > 7,74% the final recommendation is SELL.

More detailed information as mixed scenarios of multiples variations in the assumptions can be seen in Appendix 12.

Table 15 - Sensitivity Analysis. Source: Author.

Individual sensitivity analysis									
Terminal Growth Rate	0,50%	0,98%	1,30%	1,70%	1,80%	2%	2,30%	2,50%	3,00%
DCF Target Price	€ 9,21	€ 9,77	€ 10,20	€ 10,79		€ 11,28	€ 11,83	€ 12,22	€ 13,35
Recommendation									
WACC	6%	7,50%	7,57%	7,70%	7,99%	8,06%	8,50%	8,65%	8,70%
DCF Target Price	€ 16,77	€ 11,99	€ 11,83	€ 11,54		€ 10,79	€ 10,03	€ 9,78	€ 9,70
Recommendation									
Beta levered	1,3	1,35	1,355	1,4	1,43	1,447	1,55	1,553	1,6
DCF Target Price	€ 12,51	€ 11,88	€ 11,82	€ 11,30		€ 10,79	€ 9,80	€ 9,77	€ 9,37
Recommendation									
Market Risk Premium	6,00%	6,74%	6,75%	7%	7,14%	7,21%	7,6%	7,74%	7,8%
DCF Target Price	€ 13,88	€ 11,85	€ 11,83	€ 11,25		€ 10,80	€ 10,03	€ 9,77	€ 9,67
Recommendation									

7. FINANCIAL ANALYSIS

The FY2019 was full of challenges to the actual and future growth of RYA. With an increasing of 9% in passengers traffic, from 130,3 million passengers carried, in FY2018, to 142 million, in FY2019, and a PLF record value of 96%, RYA's operating and financial performance were really negatively affected by external aspects as the delays in the delivery of new Boeing model, the losses from Lauda, the Brexit uncertainty, the increasing in expenses at a fast pace than revenue's growth, the overcapacity in the industry and the flight cancellations mainly due to personnel strikes.

RYA, in last FY, disclosed the worst financial result in the last 5 years with an increasing in revenues around 7,6%, while operating expenses growth at 22%. It led to a tragically decreasing around 39% in operating profit (that was € 1 667,3 million, in FY2018, and € 1 016,8 million, in FY2019) which impacted negatively the net income in the same percentage (€ 885 million in FY2019, while, in FY2018, was € 1 450,2 million).

For understanding what had happened with the Company, there were plotted some ratios that indicate more specific information about RYA profitability, liquidity, efficiency and solvency. But, before taking these ratios into account, it is mostly determinant to do a brief explanation about the main drivers of RYA activity: operating revenues and operating expenses.

RYA revenues in FY2019 totalled € 7 697,4 million with a growth of 7,6%. This change is primarily explained by the behaviour of ancillary revenues that increased by 21%, representing 32% of total revenues with an amount of € 2 436,3 million. This outcome reflects much more importance and accession of sales related to reserved seating, priority boarding, hand luggage carrying and others online low cost services, such as car rental, hotel accommodation and insurance travel. On the other hand, scheduled revenues increased just by 2,5%, to an amount of € 5 261,1, totalizing 68% of total revenues. Scheduled revenues were broadly flat in line with the decreasing of 6% in average fares mixed with the growth traffic of 9%. Given our forecasting, it is expected that the ancillary revenues trending to gain even more share in the total of revenues, due to dissemination and strengthening of RYA website, while scheduled revenues will grow slowly regarding the current decreasing trend in average fares.

As far as the operating expenses are concerned, it totalled an amount of € 6 680,6 million, increased by 22% and representing 87% of the amount of revenues. This trend is mostly clarified with an increasing in the costs with fuel and oil of € 2 427,3 million (representing 36% of total expenses with a growth rate of 27,5%); the costs with airport and handling charges of € 1 061,5 million (representing around 16% of total expenses with a growth rate of 13%) and the personnel expenses of € 984 million (representing around 15% of total operating costs with a growth rate of 33%). The main reason to explain the escalation in operating costs is the increasing of the fleet and the total number of flights. This growth strategy implied more staff to serve the flights and, proportionally, more fuel consumption. Consequently, charges with routes and expenses with handling and airports were also increased. Considering our forecasting, these main expenses will continue to increase due to RYA strategy, with personnel costs growing faster than the other rubrics.

In the end, operating profit and the net income were impacted negatively, as explained before, representing margins of 13% and 11% of total revenues, respectively. Due to the expected behaviour for operating revenues and expenses, these levels of operating results will remain lower, thus, a new operating and financial reality will be stablished in the next years.
Further information about values presented are available in the Appendix 1 and Appendix 7.

Table 16 - Key Financial Ratios. Source: RYAAR and Author.

	FY2018	FY2019	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
Liquidity							
Current Ratio	1,23	0,93	0,64	0,48	0,41	0,38	0,40
Quick Ratio	1,09	0,79	0,50	0,37	0,29	0,27	0,30
Cash Ratio	1,07	0,77	0,49	0,35	0,28	0,26	0,29
Efficiency							
Assets Turnover	0,58	0,58	0,60	0,63	0,68	0,71	0,74
Receivables Turnover	124,15	129,37	132,31	141,21	157,37	169,30	184,14
Inventory Turnover	1932,70	2654,28	2607,66	2618,20	2833,60	3102,31	3488,59
Payables Turnover	28,65	13,41	13,32	13,78	14,57	15,42	16,32
Profitability							
Gross Profit Margin	32,31%	22,62%	18,71%	17,13%	17,31%	17,45%	17,55%
EBITDA Margin	31,16%	21,53%	17,69%	16,22%	16,51%	16,75%	16,93%
EBIT Margin	23,32%	13,21%	9,45%	8,03%	8,62%	9,24%	9,95%
Net Profit Margin	20,28%	11,50%	7,88%	6,66%	7,26%	7,87%	8,56%
ROA	11,73%	6,68%	4,71%	4,21%	4,90%	5,61%	6,34%
ROE	32,45%	16,97%	14,12%	14,24%	18,75%	25,04%	32,30%
EPS	1,22	0,77	0,57	0,54	0,67	0,82	1,02
Solvency							
Short-Term Debt Ratio	3,52%	2,33%	2,16%	1,98%	1,78%	1,59%	1,39%
Long-Term Debt Ratio	28,54%	25,17%	26,60%	27,75%	28,53%	29,00%	29,07%
Debt to Equity Ratio	1,77	1,54	2,00	2,38	2,83	3,47	4,09
Equity Multiplier	2,77	2,54	3,00	3,38	3,83	4,47	5,09
Interest Coverage Ratio	10,35	16,11	10,80	10,86	10,69	10,57	10,47

Liquidity Ratios

In the FY2019, RYA revealed some liquidity issues as can be seen throughout the analysis of the three main liquidity ratios. The Current Ratio, the broadest liquidity ratio, reflects the ability of the Company to pay its short-term obligations and the way how RYA maximize its current assets in order to cover its current debt. Despite that, in last years, RYA seems to have a suitable current ratio, it is expected that, as already occurred in FY2019, this ratio will trend towards reduction. The expected mismatch between current debts and current assets, is explained by the verified decreasing in financial assets as cash > 3 months and the increasing in the current liabilities' rubrics as trade payables, accrued expenses and other liabilities, due to the large debt payments.

For those reasons and regarding the previous explained operating RYA framework, this tendency is expected to remain with a deterioration of all liquidity ratios.

In fact, given the bottommost levels of net income mixed with significant values of Capital expenditures and the high amounts of the long-term borrowings repayments, the cash flows are expected to decline, harming RYA's liquidity structure.

Efficiency Ratios

In order to evaluate RYA efficiency, the assets turnover ratio outperforms, giving to the Company some solid measures to support its business structure. As this ratio comprises the total amount of revenues relative to the value of total assets, in FY2019, RYA has 58% of its revenues generated by its assets.

The main assets generating revenue are the Boeing fleet that is expected to be renewed and increased by more 210 planes, until FY2024. However, with the delays with new Boeings, the assets turnover ratio has stagnated, between FY2018 and FY2019. As this issue starts to be solved it is expected to verify an increasing in this ratio over the next years.

Profitability Ratios

As long that RYA profitability was already introduced with the explanation of the behaviour of operating revenues and expenses in the past and in the near future, we still to assume that profitability level of the Company will be reduced in the following years. In line with these arguments, ratios as gross profit margin, EBITDA margin, EBIT margin and net profit margin are expected to decrease.

When we take into account measures as ROA and ROE, there is a rising concern with RYA performance. In fact, as ROA measures the profitability relative to total assets, in FY2019, RYA ROA suffered a brutal decreasing from 11,7%, in FY2018, to 6,7%. It is expected that this situation will be maintained and worsened in the next years due to the forecasted behaviour of assets and profits in the future.

ROE indicates another sign of RYA weakening profitability. Even with an increasing of ROE, these high values of the ratio comprises even smaller amounts of the equity component, which suggests the high risks associated of borrowing aggressively to support the growth plan of the Company.

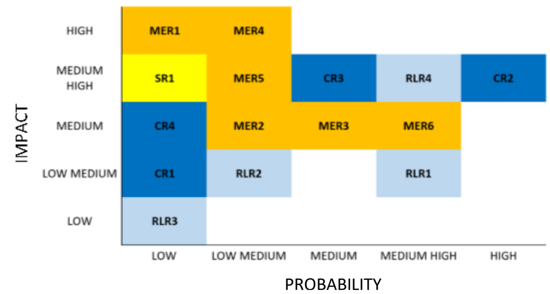


Figure 22 - Risk Matrix. Source: Author.

Considering all of these guidelines, earnings per share are about to go along with these decreasing tendencies over the following years.

Solvency Ratios

The solvency policy of RYA is also shaken and tight, as can be seen through the analysis of long-term debt ratio and debt to equity ratio. The long-term term debt ratio that covers the percentage of assets financed with long-term debt (loans and other debt with maturity over 1 year) shows that, in the following years, RYA financial long-term position will increase, meaning that a larger component of assets will be sustained by non-current debts. As the leverage of the Company remains increasing, Debt to Equity ratio will also increase, exposing the Company to higher leverage risks.

Further details about key financial ratios can be seen in Appendix 4 and Appendix 11.

8. INVESTMENT RISKS

SAFETY RISK – Accidents and Terrorism (SR1)

About two years ago, in 2017, aviation’s industry set a safety record. Currently, 160 aviation crashes were registered in 2018, 13 of them fatal, meaning that 92% of aircraft crashes did not resulted in deaths. Aviation’s accidents could happen due to environmental factors (as weather), human errors or technical issues (as mechanical failures), however, due to the high standard level of required maintenance and professional competences, air transportation is considered the safest way to travel. RYA leads an unblemished safety record of 34 years in the industry, because the Company has never been involved in an aircraft fatal crash.

Terrorism events in the 21st Century involving air transportation, namely the 9/11 in 2001, triggered the review of security measures in aviation and airports. Consequently, countries all over the world are currently employ stricter controls in order to avoid these events.

Nonetheless, the impact of a potential accident or terrorist attack is still huge, by affecting reputation and passengers demand, impacting very adversely of financial accounts, even we set a remote probability of happening these events.

MARKET AND ECONOMIC RISK – Economic Conditions (MER1)

The airline industry depends on economics conditions, which means that unfavourable conditions as austerity measures, uncertainty from Brexit, high unemployment rates, high inflation or constrained credit markets can reduce the passengers spending in leisure and business travel. Facing with this picture, RYA could register losses under severe but unlikely scenarios. Nevertheless, we set an isolated probability of happening, because RYA business model is well established and structured to keep the low fares, so, for that main reason, will be always the first cheapest option to book a flight.

MARKET AND ECONOMIC RISK – Exchange Rate Risk (MER2)

As explained previously, even though the largest part of financial transactions is in Euro, RYA also depends on revenues in pound sterling (22% of its revenues come from the UK) and on fuel expenses valued in US dollars. If adverse movements in exchange rates of these currencies against euro occur, may impact on RYA financial and operating structure. However, there is a low probability of occurring, due to the RYA hedging policy against that fluctuations.

MARKET AND ECONOMIC RISK – Brexit (MER3)

Brexit's issues were also clearly explained before. As long as this topic can affect RYA activities, the main worries on Brexit agreement are exactly about EU open air transport market, freedom of movement between UK and EU, employment rules between UK and EU and the tax status of an EU member company operating in UK. Step by step, RYA shows itself conscious about what is happening and anticipate some strategies in order to minimize or avoid Brexit changes. Examples of these strategies were the creation of a subsidiary Ryanair UK and some new regulations on RYA shareholder structure, which holds the arguments behind the medium probability of this risk occur.

MARKET AND ECONOMIC RISK – Fuel Price Risk (MER4)

Fuel expenses totalize 36% of the total of operating expenses, in FY2019. Considering that the jet fuel is subject to wide price changes as a result of many and unpredictable factors as geopolitical and economic factors (sudden disruptions in supply, market speculation and increases in demand), it could affect RYA's profitability. However, we consider that there is a low probability of adverse impacts, due to the RYA hedging policy against this volatility.

MARKET AND ECONOMIC RISK – Interest Rate Risk (MER5)

Considering that RYA supports its constant investments in renewal fleet through bank loans, adverse movements in interest rates could affect RYA financial accounts. But, considering the hedging policy of the Company against these fluctuations, we can set a low probability of happening.

MARKET AND ECONOMIC RISK – Political and Social Tensions Risks (MER6)

The main expected political and social factor that could affect RYA activity is the trade tensions, mostly between US and China. Actually, we are facing some protectionist measures as imposing trade tariffs and sanctions. This could increase the price of goods and services globally and may affect RYA, which has exposure to certain materials, including steel used for aircrafts and jet fuel. These details can have an adverse effect on demand for RYA services, its costs, customers, suppliers and, thus, its business and financial results. We set a medium-high probability of occurring, because there is no evidence in the slowing down of this ‘’trade war’’.

REGULATORY AND LEGAL RISK – Government Taxes on Travel (RLR1)

Travel taxes are applied per passenger basis in many destiny’s countries where RYA operates. In the UK, £13 per adult passenger is applied, in Germany, €7,5; in Morocco (€9); Norway (NOK80); Sweden (SEK60); Italy (€6,5) and Austria (€3,5). For RYA, the imposition of travel taxes reduces the growth potential of a market as fares do not increase by the amount of the tax. The introduction of further government taxes on travel across Europe could have a material adverse effect on Ryanair’s financial results. Given that these taxes are spreading across all countries, the probability is medium-high.

REGULATORY AND LEGAL RISK – Passengers Compensation (RLR2)

EU Regulation requires airlines to compensate passengers who have been denied boarding or whose flight has been cancelled or delayed more than 3 hours on arrival. This compensation can include meals, phone calls and accommodation. For delays of over 5 hours, the airline is also required to offer option of a refund of the cost of the ticket. In some scenario with the increase of cancelled and delayed flights, RYA will incur in some extra costs that can increase its operating costs.

REGULATORY AND LEGAL RISK – Emissions and Noise Legislation (RLR3)

The compliance with Environmental Regulation, as Emissions and Noise Legislation, can require significant expenditures, and violations can lead to significant fines, penalties and reputational damage. Under the legislation, airlines are granted initial CO2 allowances based on historical performance and a CO2 efficiency benchmark. The cost of such allowances increased significantly during the fiscal year 2019 and is expected to continue to rise in the fiscal year of 2020 which could have a material adverse effect on the Company’s business, operating results, and financial conditions. We set a low probability due to RYA position as greenest airline.

REGULATORY AND LEGAL RISK – Irish Corporation Tax Rates (RLR4)

The majority of RYA profits are subjected to the Irish corporation tax rate of 12,5%, lower than that applied by most European Union members states. If the tax rate increases, RYA will face an adverse impact in its cash flows and financial position. Given that the Irish government is permanently suffering pressures to review this rate, we set a medium-high probability.

CORPORATE RISK – Competition of LCC (CR1)

RYA faces significant price pressures in a strong competitive environment. Given the increasing number of LCC operating in Europe and the HAC intentions to enter in LCC market, RYA needs to be aware of these changes in the industry. However, RYA business model is well established and structured with many competitive advantages what positions RYA at the top of LCC worldwide. Accordingly, there is a low probability to any LCC overtake RYA.

CORPORATE RISK – Strikes (CR2)

Since 2018, RYA was clouded by several and intensified personnel strikes. These events affect operations with cancelations of flights, aggravating the costs with passenger's compensations and impacting its credibility as airline what can reduce future bookings. These considerations could impact Company performance and its operating and financial structure. As it is expected that this ‘’strike wave’’ will last, we set a high probability of happening.

CORPORATE RISK – Investment Grade Rating and New Boeing 737-MAX-200 (CR3)

RYA holds a credit rating of BBB+ and uses the bond markets to finance the Company capital requirements. If this rating is downgraded, RYA will be unable to access most of these financing and hedging instruments, which could lead to a higher cost of finance, leading to the large risks exposition. As its rating is more or less stable, the probability of happening is medium.

Most of these capital needs are motivated by the renewal of its fleet with new Boeing 737-MAX-200. In fact, these aircrafts were involved in two tragic accidents in December, 2018 and in March, 2019. Due to this, new Boeing model were legally grounded to be improved and reviewed. If any of these disasters happened with the Company, RYA reputation will be damaged and that would mean losses in its operating and financial position. So, the public perception of the safety of the new Boeing will be a key driver to enable RYA growth.

CORPORATE RISK – Cyber Security Risks (CR4)

RYA may incur in increasing costs to minimize cyber security risks. As almost all RYA bookings are made in its own website, security breaches could expose the Company to a risk of loss or misuse of customer information. This eventual happening if was brought to the social media and allied with the fact of RYA being treated as uncaring airline could damage RYA branding and its financial accounts due to the weakening of its corporate position. By the way, RYA is aware of these threats and invest in its security systems, so, the probability of happening is low.

Appendices

Appendix 1: Income Statement

1-1: Income Statement last five FY

Income Statement					
(€M)	FY2015	FY2016	FY2017	FY2018	FY2019
Operating Revenues					
Scheduled revenues	4 260,3	4 967,2	4 868,2	5 134,0	5 261,1
Ancillary revenues	1 393,7	1 568,6	1 779,6	2 017,0	2 436,3
Total Operating Revenues	5 654,0	6 535,8	6 647,8	7 151,0	7 697,4
Operating Expenses					
Fuel and oil	-1 992,1	-2 071,4	-1 913,4	-1 902,8	-2 427,3
Airport and handling charges	-712,8	-830,6	-864,8	-938,6	-1 061,5
Route charges	-547,4	-622,9	-655,7	-701,8	-745,2
Staff costs	-502,9	-585,4	-633,0	-738,5	-984,0
Depreciation	-377,7	-427,3	-497,5	-561,0	-640,5
Marketing, distribution and other	-233,9	-292,7	-322,3	-410,4	-547,3
Maintenance, materials and repairs	-134,9	-130,3	-141,0	-148,3	-190,9
Aircraft rentals	-109,4	-115,1	-86,1	-82,3	-83,9
Total Operating Expenses	-4 611,1	-5 075,7	-5 113,8	-5 483,7	-6 680,6
Operating Profit	1 042,9	1 460,1	1 534,0	1 667,3	1 016,8
Other income/(expense)					
Gain on disposal of available for sale financial asset	0,0	317,5	0,0	0,0	0,0
Finance expense	-74,2	-71,1	-67,2	-60,1	-59,1
Finance income	17,9	17,9	4,2	2,0	3,7
Foreign exchange gain/(loss)	-4,2	-2,5	-0,7	2,1	-3,5
Gain on sale of associate	0,0	0,0	0,0	0,0	6,0
Share of associate losses	0,0	0,0	0,0	0,0	-15,8
Total Other Income/(Expenses)	-60,5	261,8	-63,7	-56,0	-68,7
Profit Before Tax	982,4	1 721,9	1 470,3	1 611,3	948,1
Tax expense on profit	-115,7	-162,8	-154,4	-161,1	-63,1
Profit for the Year	866,7	1 559,1	1 315,9	1 450,2	885,0
Basic earnings per ordinary share (euro cent)	62,59	116,26	105,30	121,51	77,39
Diluted earnings per ordinary share (euro cent)	62,46	115,63	104,64	120,45	76,65
Number of ordinary shares (in Ms)	1 384,7	1 341,0	1 249,7	1 193,5	1 143,6
Number of diluted shares (in Ms)	1 387,6	1 348,4	1 257,5	1 204,0	1 154,6

Source: RYAAR

1-2: Income Statement Forecasted

Income Statement

(€M)	FY2018	FY2019	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
Operating Revenues							
Scheduled revenues	5 134,0	5 261,1	5292,7	5599,6	6014,0	6459,1	6937,0
Ancillary revenues	2 017,0	2 436,3	2582,5	2789,1	3123,8	3498,6	3918,5
Total Operating Revenues	7 151,0	7 697,4	7875,1	8388,7	9137,8	9957,7	10855,5
Operating Expenses							
Fuel and oil	-1 902,8	-2 427,3	-2548,7	-2727,1	-2918,0	-3122,2	-3340,8
Airport and handling charges	-938,6	-1 061,5	-1157,0	-1261,2	-1374,7	-1498,4	-1633,2
Route charges	-701,8	-745,2	-804,8	-869,2	-938,7	-1013,8	-1094,9
Staff costs	-738,5	-984,0	-1131,6	-1301,3	-1496,5	-1721,0	-1979,2
Depreciation	-561,0	-640,5	-648,7	-686,8	-721,1	-747,7	-757,8
Marketing, distribution and other	-410,4	-547,3	-558,2	-580,6	-603,8	-628,0	-653,1
Maintenance, materials and repairs	-148,3	-190,9	-201,4	-212,5	-224,2	-236,5	-249,5
Aircraft rentals	-82,3	-83,9	-80,1	-76,5	-73,1	-69,8	-66,6
Total Operating Expenses	-5 483,7	-6 680,6	-7130,6	-7715,1	-8350,0	-9037,4	-9775,2
Operating Profit	1 667,3	1 016,8	744,5	673,6	787,8	920,3	1080,3
Other income/(expense)							
Gain on disposal of available for sale financial asset	0,0	0,0	0,00	0,00	0,00	0,00	0,00
Finance expense	-60,1	-59,1	-56,74	-54,47	-52,29	-50,20	-48,19
Finance income	2,0	3,7	3,11	2,61	2,19	1,84	1,55
Foreign exchange gain/(loss)	2,1	-3,5	-1,76	-1,27	-1,03	-1,09	-1,73
Gain on sale of associate	0,0	6,0	0,00	0,00	0,00	0,00	0,00
Share of associate losses	0,0	-15,8	0,00	0,00	0,00	0,00	0,00
Total Other Income/(Expenses)	-56,0	-68,7	-55,4	-53,1	-51,1	-49,4	-48,4
Profit Before Tax	1 611,3	948,1	689,1	620,4	736,7	870,8	1 031,9
Tax expense on profit	-161,1	-63,1	-68,91	-62,04	-73,67	-87,08	-103,19
Profit for the Year	1 450,2	885,0	620,2	558,4	663,0	783,7	928,7
Basic earnings per ordinary share (euro cent)	121,51	77,39	56,8	53,5	66,6	82,4	102,2
Diluted earnings per ordinary share (euro cent)	120,45	76,65	56,2	53,0	65,9	81,6	101,3
Number of ordinary shares (in Ms)	1 193,5	1 143,6	1092,1	1043,0	996,1	951,2	908,4
Number of diluted shares (in Ms)	1 204,0	1 154,6	1102,6	1053,0	1005,6	960,4	917,2

Source: RYAAR and Author

Appendix 2: Balance Sheet

2-1: Balance Sheet last five FY

BALANCE SHEET

(in €M)	FY2015	FY2016	FY2017	FY2018	FY2019
Non-Current Assets					
Property, plant and equipment	5 471,1	6 261,5	7 213,8	8 123,4	9 029,6
Intangible assets	46,8	46,8	46,8	46,8	146,4
Available for sale financial asset	371,0	0,0	0,0	0,0	0,0
Derivative financial instruments	554,5	88,5	23,0	2,6	227,5
Deferred tax	0,0	0,0	0,0	0,0	43,2
Total Non-Current Assets	6 443,4	6 396,8	7 283,6	8 172,8	9 446,7
Current Assets					
Inventories	2,1	3,3	3,1	3,7	2,9
Other assets	138,7	148,5	222,1	235,5	238,0
Current tax	0,8	0,0	0,0	0,0	0,0
Trade receivables	60,1	66,1	54,3	57,6	59,5
Derivative financial instruments	744,4	269,1	286,3	212,1	308,7
Restricted cash	6,7	13,0	11,8	34,6	34,9
Financial assets: cash > 3 months	3 604,6	3 062,3	2 904,5	2 130,5	1 484,4
Cash and cash equivalents	1 184,6	1 259,2	1 224,0	1 515,0	1 675,6
Total Current Assets	5 742,0	4 821,5	4 706,1	4 189,0	3 804,0
Total Assets	12 185,4	11 218,3	11 989,7	12 361,8	13 250,7
Current Liabilities					
Trade payables	196,5	230,6	294,1	249,6	573,8
Accrued expenses and other liabilities	1 938,2	2 112,7	2 257,2	2 502,2	2 992,1
Current maturities of debt	399,6	449,9	455,9	434,6	309,4
Current tax	0,0	20,9	2,9	36,0	31,6
Derivative financial instruments	811,7	555,4	1,7	190,5	189,7
Total Current Liabilities	3 346,0	3 369,5	3 011,8	3 412,9	4 096,6
Non-Current Liabilities					
Provisions	180,8	149,3	138,2	138,1	135,6
Derivative financial instruments	73,4	111,6	2,6	415,5	8,0
Deferred tax	462,3	385,5	473,1	395,2	460,6
Other creditors	55,8	32,5	12,4	2,8	0,0
Non-current maturities of debt	4 032,0	3 573,1	3 928,6	3 528,4	3 335,0
Total non-current liabilities	4 804,3	4 252,0	4 554,9	4 480,0	3 939,2
Shareholders' Equity					
Issued share capital	8,7	7,7	7,3	7,0	6,8
Share premium account	718,6	719,4	719,4	719,4	719,4
Other undenominated capital	1,3	2,3	2,7	3,0	3,2
Retained earnings	2 706,2	3 166,1	3 456,8	4 077,9	4 181,9
Other reserves	600,3	-298,7	236,8	-338,4	303,6
Shareholders' Equity	4 035,1	3 596,8	4 423,0	4 468,9	5 214,9
Total Liabilities and Shareholders' Equity	12 185,4	11 218,3	11 989,7	12 361,8	13 250,7

Source: RYAAR

2-2: Balance Sheet Forecasted

BALANCE SHEET

(in €M)	FY2018	FY2019	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
Non-Current Assets							
Property, plant and equipment	8 123,4	9 029,6	9 788,4	10 382,4	10 826,9	11 139,8	11 347,2
Intangible assets	46,8	146,4	146,4	146,4	146,4	146,4	146,4
Available for sale financial asset	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Derivative financial instruments	2,6	227,5	250,3	275,3	302,8	333,1	366,4
Deferred tax	0,0	43,2	0,0	0,0	0,0	0,0	0,0
Total Non-Current Assets	8 172,8	9 446,7	10 185,0	10 804,1	11 276,1	11 619,3	11 860,0
Current Assets							
Inventories	3,7	2,9	3,0	3,2	3,2	3,2	3,1
Other assets	235,5	238,0	261,8	288,0	316,8	348,5	372,8
Current tax	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Trade receivables	57,6	59,5	59,5	59,4	58,1	58,8	59,0
Derivative financial instruments	212,1	308,7	364,1	288,1	291,9	293,0	291,0
Restricted cash	34,6	34,9	20,2	22,9	24,9	27,5	23,9
Financial assets: cash > 3 months	2 130,5	1 484,4	1 321,1	1 175,8	1 046,5	931,3	828,9
Cash and cash equivalents	1 515,0	1 675,6	950,3	610,2	513,7	696,4	1 205,1
Total Current Assets	4 189,0	3 804,0	2 980,1	2 447,5	2 255,0	2 358,7	2 783,8
Total Assets	12 361,8	13 250,7	13 165,1	13 251,6	13 531,1	13 978,0	14 643,8
Current Liabilities							
Trade payables	249,6	573,8	591,0	608,7	627,0	645,8	665,2
Accrued expenses and other liabilities	2 502,2	2 992,1	3 411,0	3 888,5	4 432,9	5 053,5	5 761,0
Current maturities of debt	434,6	309,4	284,6	261,9	240,9	221,7	203,9
Current tax	36,0	31,6	31,6	31,6	31,6	31,6	31,6
Derivative financial instruments	190,5	189,7	349,8	257,4	197,8	237,0	246,4
Total Current Liabilities	3 412,9	4 096,6	4 668,1	5 048,2	5 530,3	6 189,7	6 908,1
Non-Current Liabilities							
Provisions	138,1	135,6	135,6	135,6	135,6	135,6	135,6
Derivative financial instruments	415,5	8,0	8,0	8,0	8,0	8,0	8,0
Deferred tax	395,2	460,6	460,6	460,6	460,6	460,6	460,6
Other creditors	2,8	0,0	0,0	0,0	0,0	0,0	0,0
Non-current maturities of debt	3 528,4	3 335,0	3 501,8	3 676,8	3 860,7	4 053,7	4 256,4
Total non-current liabilities	4 480,0	3 939,2	4 106,0	4 281,0	4 464,9	4 657,9	4 860,6
Shareholders' Equity							
Issued share capital	7,0	6,8	6,8	6,8	6,8	6,8	6,8
Share premium account	719,4	719,4	719,4	719,4	719,4	719,4	719,4
Other undenominated capital	3,0	3,2	3,2	3,2	3,2	3,2	3,2
Retained earnings	4 077,9	4 181,9	3 561,0	3 092,2	2 705,9	2 300,3	2 045,0
Other reserves	-338,4	303,6	100,7	100,7	100,7	100,7	100,7
Shareholders' Equity	4 468,9	5 214,9	4 391,1	3 922,4	3 536,0	3 130,4	2 875,1
Total Liabilities and Shareholders' Equity	12 361,8	13 250,7	13 165,1	13 251,6	13 531,1	13 978,0	14 643,8

Source: RYAAR and Author

Appendix 3: Cash Flow Statement

3-1: Cash Flow Statement last five FY

Cash Flows Statement					
(€M)	FY2015	FY2016	FY2017	FY2018	FY2019
Operating activities					
Profit after tax	866,7	1 559,1	1 315,9	1 450,20	885,0
Adjustments to reconcile profit after tax to net cash provided by operating activities					
Depreciation	377,7	427,3	497,5	561,0	640,5
Retirement costs	0,2	0,2	0,0	0,0	0,0
Tax expense on profit on ordinary activities	115,7	162,8	154,4	161,1	63,1
Share-based payments charge	0,5	5,9	5,7	6,4	7,7
Decrease/(increase) in inventories	0,4	-1,2	0,2	-0,6	0,8
Decrease/(increase) in trade receivables	-2,0	-6,0	11,8	-3,3	-1,9
Increase in other current assets	-12,3	-11,2	-76	-14,1	-2,1
Increase in trade payables	46,5	34,1	63,5	-44,5	324,2
Increase in accrued expenses	364,4	175,0	144,7	241,1	198,6
Decrease in other creditors	-34,6	-23,3	-20,1	-9,6	-2,8
(Decrease)/increase in provisions	44,0	-31,8	-11,0	-0,1	-2,5
Gain on disposal of available for sale financial asset	0,0	-317,5	0,0	0,0	0,0
Decrease/(increase) in finance income	-2,2	1,4	2,4	0,7	-0,5
(Decrease)/increase in finance expense	12,8	-1	-0,2	3,8	-1,5
Gain on sale of associate	0,0	0,0	0,0	0,0	-6,0
Share of associate losses	0,0	0,0	0,0	0,0	15,8
Income tax paid	-88,4	-127,5	-161,6	-118,9	-100,9
Net cash provided by operating activities	1 689,4	1 846,3	1 927,2	2 233,2	2 017,5
Investing Activities					
Capital expenditure (purchase of property, plant and equipment)	-788,5	-1 217,7	-1 449,8	-1 470,6	-1 546,7
Disposal of available for sale asset	0,0	398,1	0,0	0,0	0,00
Decrease/(increase) in restricted cash	6,6	-6,3	1,2	-22,8	-0,3
Decrease/(increase) in financial assets: cash > 3 months	-2 106,3	542,3	157,8	774,0	646,1
Acquisition of subsidiary (net of cash acquired)	0,0	0,0	0,0	0,0	-86,5
Investment in associate	0,0	0,0	0,0	0,0	-15,0
Net cash used in investing activities	-2 888,2	-283,6	-1 290,8	-719,4	-1 002,4
Financing Activities					
Net proceeds from shares issued	14,4	0,8	0,0	0,0	0,0
Shareholder returns	-632,3	-1 104,0	-1 017,9	-829,1	-531,6
Proceeds from long term borrowings	1 690,9	0,0	793,4	65,2	99,9
Repayments of long term borrowings	-419,7	-384,9	-447,1	-458,9	-422,8
Net cash (used in)/provided by financing activities	653,3	-1488,1	-671,6	-1 222,8	-854,5
(Decrease)/increase in cash and cash equivalents	-545,5	74,6	-35,2	291,0	160,6
Cash and cash equivalents at beginning of year	1 730,1	1 184,6	1 259,2	1 224,0	1 515,0
Cash and cash equivalents at end of year	1 184,6	1 259,2	1 224,0	1 515,0	1 675,6

Source: RYAAR

3-2: Cash Flow Statement Forecasted

Cash Flows Statement							
(€M)	FY2018	FY2019	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
Operating activities							
Profit after tax	1 450,20	885,0	620,2	558,4	663,0	783,7	928,7
Adjustments to reconcile profit after tax to net cash provided by oprt. actv.							
Depreciation	561,0	640,5	648,7	686,8	721,1	747,7	757,8
Retirement costs	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Tax expense on profit on ordinary activities	161,1	63,1	68,9	62,0	73,7	87,1	103,2
Share-based payments charge	6,4	7,7	8,2	8,8	9,4	10,1	10,8
Decrease/(increase) in inventories	-0,6	0,8	-0,1	-0,2	0,0	0,0	0,1
Decrease/(increase) in trade receivables	-3,3	-1,9	0,0	0,1	1,3	-0,8	-0,1
Increase in other current assets	-14,1	-2,1	23,8	26,2	28,8	31,7	24,4
Increase in trade payables	-44,5	324,2	17,2	17,7	18,3	18,8	19,4
Increase in accrued expenses	241,1	198,6	418,9	477,5	544,4	620,6	707,5
Decrease in other creditors	-9,6	-2,8	0,0	0,0	0,0	0,0	0,0
(Decrease)/increase in provisions	-0,1	-2,5	0,0	0,0	0,0	0,0	0,0
Gain on disposal of available for sale financial asset	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Decrease/(increase) in finance income	0,7	-0,5	0,6	0,5	0,4	0,4	0,3
(Decrease)/increase in finance expense	3,8	-1,5	2,4	2,3	2,2	2,1	2,0
Gain on sale of associate	0,0	-6,0	0,0	0,0	0,0	0,0	0,0
Share of associate losses	0,0	15,8	0,0	0,0	0,0	0,0	0,0
Income tax paid	-118,9	-100,9	-62,0	-55,8	-66,3	-78,4	-92,9
Net cash provided by operating activities	2 233,2	2 017,5	1126,6	1226,0	1333,2	1439,3	1532,5
Investing Activities							
Capital expenditure (purchase of property, plant and equipment)	-1 470,6	-1 546,7	-1407,5	-1280,8	-1165,5	-1060,6	-965,2
Disposal of available for sale asset	0,0	0,00	0,0	0,0	0,0	0,0	0,0
Decrease/(increase) in restricted cash	-22,8	-0,3	14,7	-2,7	-2,0	-2,6	3,6
Decrease/(increase) in financial assets: cash > 3 months	774,0	646,1	163,3	145,3	129,3	115,1	102,4
Acquisition of subsidiary (net of cash acquired)	0,0	-86,5	0,0	0,0	0,0	0,0	0,0
Investment in associate	0,0	-15,0	0,0	0,0	0,0	0,0	0,0
Net cash used in investing activities	-719,4	-1 002,4	-1229,5	-1138,2	-1038,2	-948,2	-859,1
Financing Activities							
Net proceeds from shares issued	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Shareholder returns	-829,1	-531,6	-345,5	-224,6	-292,0	-379,6	-493,4
Proceeds from long term borrowings	65,2	99,9	149,9	224,8	337,2	505,7	758,6
Repayments of long term borrowings	-458,9	-422,8	-426,7	-428,1	-436,7	-434,6	-429,8
Net cash (used in)/provided by financing activities	-1 222,8	-854,5	-622,4	-427,9	-391,5	-308,5	-164,6
(Decrease)/increase in cash and cash equivalents	291,0	160,6	-725,3	-340,1	-96,5	182,7	508,8
Cash and cash equivalents at beginning of year	1 224,0	1 515,0	1675,6	950,3	610,2	513,7	696,4
Cash and cash equivalents at end of year	1 515,0	1 675,6	950,3	610,2	513,7	696,4	1205,1

Source: RYAAR and Author

Appendix 4: Key Financial Ratios

	FY2018	FY2019	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
Liquidity							
Current Ratio	1,23	0,93	0,64	0,48	0,41	0,38	0,40
Quick Ratio	1,09	0,79	0,50	0,37	0,29	0,27	0,30
Cash Ratio	1,07	0,77	0,49	0,35	0,28	0,26	0,29
Efficiency							
Assets Turnover	0,58	0,58	0,60	0,63	0,68	0,71	0,74
Receivables Turnover	124,15	129,37	132,31	141,21	157,37	169,30	184,14
Inventory Turnover	1932,70	2654,28	2607,66	2618,20	2833,60	3102,31	3488,59
Payables Turnover	28,65	13,41	13,32	13,78	14,57	15,42	16,32
Profitability							
Gross Profit Margin	32,31%	22,62%	18,71%	17,13%	17,31%	17,45%	17,55%
EBITDA Margin	31,16%	21,53%	17,69%	16,22%	16,51%	16,75%	16,93%
EBIT Margin	23,32%	13,21%	9,45%	8,03%	8,62%	9,24%	9,95%
Net Profit Margin	20,28%	11,50%	7,88%	6,66%	7,26%	7,87%	8,56%
ROA	11,73%	6,68%	4,71%	4,21%	4,90%	5,61%	6,34%
ROE	32,45%	16,97%	14,12%	14,24%	18,75%	25,04%	32,30%
EPS	1,22	0,77	0,57	0,54	0,67	0,82	1,02
Solvency							
Short-Term Debt Ratio	3,52%	2,33%	2,16%	1,98%	1,78%	1,59%	1,39%
Long-Term Debt Ratio	28,54%	25,17%	26,60%	27,75%	28,53%	29,00%	29,07%
Debt to Equity Ratio	1,77	1,54	2,00	2,38	2,83	3,47	4,09
Equity Multiplier	2,77	2,54	3,00	3,38	3,83	4,47	5,09
Interest Coverage Ratio	10,35	16,11	10,80	10,86	10,69	10,57	10,47

Source: Author

Legend:

Current Ratios = total current assets / total current liabilities

Quick Ratios = (cash and equivalents + trade receivables + financial assets: cash > 3 months) / total current liabilities

Cash Ratio = (cash and equivalents + financial assets: cash > 3 months) / total current liabilities

Assets Turnover = total revenues / total assets

Receivables Turnover = total revenues / total receivables

Inventory Turnover = total revenues / total inventory

Payables Turnover = total revenues / total payables

Gross Profit Margin = EBITDAR / total revenues

EBITDA Margin = EBITDA / total revenues

EBIT Margin = EBIT / total revenues

Net Profit Margin = net income / total revenues

ROA = net income / total assets

ROE = net income / total equity

EPS = net income / number of ordinary shares

Short-Term Debt Ratio = short-term debt / total assets

Long-Term Debt Ratio = long-term debt / total assets

Debt to Equity Ratio = total liabilities / total equity

Equity Multiplier = total assets / total equity

Interest Coverage Ratio = operating profit / tax expense on profit

Appendix 5: Common-Size Income Statement

5-1: Common-Size Income Statement in last five FY

	FY2015	FY2016	FY2017	FY2018	FY2019
Operating Revenues					
Scheduled revenues	75,35%	76,00%	73,23%	71,79%	68,35%
Ancillary revenues	24,65%	24,00%	26,77%	28,21%	31,65%
Total Operating Revenues	100,00%	100,00%	100,00%	100,00%	100,00%
Operating Expenses					
Fuel and oil	43,20%	40,81%	37,42%	34,70%	36,33%
Airport and handling charges	15,46%	16,36%	16,91%	17,12%	15,89%
Route charges	11,87%	12,27%	12,82%	12,80%	11,15%
Staff costs	10,91%	11,53%	12,38%	13,47%	14,73%
Depreciation	8,19%	8,42%	9,73%	10,23%	9,59%
Marketing, distribution and other	5,07%	5,77%	6,30%	7,48%	8,19%
Maintenance, materials and repairs	2,93%	2,57%	2,76%	2,70%	2,86%
Aircraft rentals	2,37%	2,27%	1,68%	1,50%	1,26%
Total Operating Expenses	-81,55%	-77,66%	-76,92%	-76,68%	-86,79%
Operating Profit	18,45%	22,34%	23,08%	23,32%	13,21%
Other income/(expense)					
Gain on disposal of available for sale financial asset	0,00%	4,86%	0,00%	0,00%	0,00%
Finance expense	-1,31%	-1,09%	-1,01%	-0,84%	-0,77%
Finance income	0,32%	0,27%	-6,59%	0,03%	0,05%
Foreign exchange gain/(loss)	-0,07%	-0,04%	1,10%	0,03%	-0,05%
Gain on sale of associate	0,00%	0,00%	0,00%	0,00%	0,08%
Share of associate losses	0,00%	0,00%	0,00%	0,00%	-0,21%
Total Other Income/(Expenses)	-1,07%	4,01%	-0,96%	-0,78%	-0,89%
Profit Before Tax	17,38%	26,35%	22,12%	22,53%	12,32%
Tax expense on profit	-2,05%	-2,49%	-2,32%	-2,25%	-0,82%
Profit for the Year	15,33%	23,85%	19,79%	20,28%	11,50%

Source: Author

5-2: Common-Size Income Statement Forecasted

	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
Operating Revenues					
Scheduled revenues	67,21%	66,75%	65,81%	64,87%	63,90%
Ancillary revenues	32,79%	33,25%	34,19%	35,13%	36,10%
Total Operating Revenues	100,00%	100,00%	100,00%	100,00%	100,00%
Operating Expenses					
Fuel and oil	35,74%	35,35%	34,95%	34,55%	34,18%
Airport and handling charges	16,23%	16,35%	16,46%	16,58%	16,71%
Route charges	11,29%	11,27%	11,24%	11,22%	11,20%
Staff costs	15,87%	16,87%	17,92%	19,04%	20,25%
Depreciation	9,10%	8,90%	8,64%	8,27%	7,75%
Marketing, distribution and other	7,83%	7,53%	7,23%	6,95%	6,68%
Maintenance, materials and repairs	2,82%	2,75%	2,68%	2,62%	2,55%
Aircraft rentals	1,12%	0,99%	0,88%	0,77%	0,68%
Total Operating Expenses	-90,55%	-91,97%	-91,38%	-90,76%	-90,05%
Operating Profit	9,45%	8,03%	8,62%	9,24%	9,95%
Other income/(expense)					
Gain on disposal of available for sale financial asset	0,00%	0,00%	0,00%	0,00%	0,00%
Finance expense	-0,72%	-0,65%	-0,57%	-0,50%	-0,44%
Finance income	0,04%	0,03%	0,02%	0,02%	0,01%
Foreign exchange gain/(loss)	-0,02%	-0,02%	-0,01%	-0,01%	-0,02%
Gain on sale of associate	0,00%	0,00%	0,00%	0,00%	0,00%
Share of associate losses	0,00%	0,00%	0,00%	0,00%	0,00%
Total Other Income/(Expenses)	-0,70%	-0,63%	-0,56%	-0,50%	-0,45%
Profit Before Tax	8,75%	7,40%	8,06%	8,75%	9,51%
Tax expense on profit	-0,88%	-0,74%	-0,81%	-0,87%	-0,95%
Profit for the Year	7,88%	6,66%	7,26%	7,87%	8,56%

Source: Author

Appendix 6: Common-Size Balance Sheet

6-1: Common-Size Balance Sheet in last five FY

	FY2015	FY2016	FY2017	FY2018	FY2019
Non-Current Assets					
Property, plant and equipment	84,9%	97,9%	99,0%	99,4%	95,6%
Intangible assets	0,7%	0,7%	0,6%	0,6%	1,5%
Available for sale financial asset	5,8%	0,0%	0,0%	0,0%	0,0%
Derivative financial instruments	8,6%	1,4%	0,3%	0,0%	2,4%
Deferred tax	0,0%	0,0%	0,0%	0,0%	0,5%
Total Non-Current Assets	52,9%	57,0%	60,7%	66,1%	71,3%
Current Assets					
Inventories	0,0%	0,1%	0,1%	0,1%	0,1%
Other assets	2,4%	3,1%	4,7%	5,6%	6,3%
Current tax	0,0%	0,0%	0,0%	0,0%	0,0%
Trade receivables	1,0%	1,4%	1,2%	1,4%	1,6%
Derivative financial instruments	13,0%	5,6%	6,1%	5,1%	8,1%
Restricted cash	0,1%	0,3%	0,3%	0,8%	0,9%
Financial assets: cash > 3 months	62,8%	63,5%	61,7%	50,9%	39,0%
Cash and cash equivalents	20,6%	26,1%	26,0%	36,2%	44,0%
Total Current Assets	47,1%	43,0%	39,3%	33,9%	28,7%
Total Assets	100,0%	100,0%	100,0%	100,0%	100,0%
Current Liabilities					
Trade payables	5,9%	6,8%	9,8%	7,3%	14,0%
Accrued expenses and other liabilities	57,9%	62,7%	74,9%	73,3%	73,0%
Current maturities of debt	11,9%	13,4%	15,1%	12,7%	7,6%
Current tax	0,0%	0,6%	0,1%	1,1%	0,8%
Derivative financial instruments	24,3%	16,5%	0,1%	5,6%	4,6%
Total Current Liabilities	27,5%	30,0%	25,1%	27,6%	30,9%
Non-Current Liabilities					
Provisions	3,8%	3,5%	3,0%	3,1%	3,4%
Derivative financial instruments	1,5%	2,6%	0,1%	9,3%	0,2%
Deferred tax	9,6%	9,1%	10,4%	8,8%	11,7%
Other creditors	1,2%	0,8%	0,3%	0,1%	0,0%
Non-current maturities of debt	83,9%	84,0%	86,2%	78,8%	84,7%
Total non-current liabilities	39,4%	37,9%	38,0%	36,2%	29,7%
Shareholders' Equity					
Issued share capital	0,2%	0,2%	0,2%	0,2%	0,1%
Share premium account	17,8%	20,0%	16,3%	16,1%	13,8%
Other undenominated capital	0,0%	0,1%	0,1%	0,1%	0,1%
Retained earnings	67,1%	88,0%	78,2%	91,3%	80,2%
Other reserves	14,9%	-8,3%	5,4%	-7,6%	5,8%
Shareholders' Equity	33,1%	32,1%	36,9%	36,2%	39,4%
Total Liabilities and Shareholders' Equity	100,0%	100,0%	100,0%	100,0%	100,0%

Source: Author

6-2: Common-Size Balance Sheet Forecasted

	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
Non-Current Assets					
Property, plant and equipment	95,6%	96,1%	96,1%	96,0%	95,9%
Intangible assets	1,5%	1,4%	1,4%	1,3%	1,3%
Available for sale financial asset	0,0%	0,0%	0,0%	0,0%	0,0%
Derivative financial instruments	2,4%	2,5%	2,5%	2,7%	2,9%
Deferred tax	0,5%	0,0%	0,0%	0,0%	0,0%
Total Non-Current Assets	77,4%	81,5%	83,3%	83,1%	81,0%
Current Assets					
Inventories	0,1%	0,1%	0,1%	0,1%	0,1%
Other assets	8,8%	11,8%	14,0%	14,8%	13,4%
Current tax	0,0%	0,0%	0,0%	0,0%	0,0%
Trade receivables	2,0%	2,4%	2,6%	2,5%	2,1%
Derivative financial instruments	12,2%	11,8%	12,9%	12,4%	10,5%
Restricted cash	0,7%	0,9%	1,1%	1,2%	0,9%
Financial assets: cash > 3 months	44,3%	48,0%	46,4%	39,5%	29,8%
Cash and cash equivalents	31,9%	24,9%	22,8%	29,5%	43,3%
Total Current Assets	22,6%	18,5%	16,7%	16,9%	19,0%
Total Assets	100,0%	100,0%	100,0%	100,0%	100,0%
Current Liabilities					
Trade payables	12,7%	12,1%	11,3%	10,4%	9,6%
Accrued expenses and other liabilities	73,1%	77,0%	80,2%	81,6%	83,4%
Current maturities of debt	6,1%	5,2%	4,4%	3,6%	3,0%
Current tax	0,7%	0,6%	0,6%	0,5%	0,5%
Derivative financial instruments	7,5%	5,1%	3,6%	3,8%	3,6%
Total Current Liabilities	35,5%	38,1%	40,9%	44,3%	47,2%
Non-Current Liabilities					
Provisions	3,3%	3,2%	3,0%	2,9%	2,8%
Derivative financial instruments	0,2%	0,2%	0,2%	0,2%	0,2%
Deferred tax	11,2%	10,8%	10,3%	9,9%	9,5%
Other creditors	0,0%	0,0%	0,0%	0,0%	0,0%
Non-current maturities of debt	85,3%	85,9%	86,5%	87,0%	87,6%
Total non-current liabilities	31,2%	32,3%	33,0%	33,3%	33,2%
Shareholders' Equity					
Issued share capital	0,2%	0,2%	0,2%	0,2%	0,2%
Share premium account	16,4%	18,3%	20,3%	23,0%	25,0%
Other undenominated capital	0,1%	0,1%	0,1%	0,1%	0,1%
Retained earnings	81,1%	78,8%	76,5%	73,5%	71,1%
Other reserves	2,3%	2,6%	2,8%	3,2%	3,5%
Shareholders' Equity	33,4%	29,6%	26,1%	22,4%	19,6%
Total Liabilities and Shareholders' Equity	100,0%	100,0%	100,0%	100,0%	100,0%

Source: Author

Appendix 7: Forecast Assumptions

7-1: Income Statement Assumptions

	FY2020F	*FY2021F*	*FY2022F*	*FY2023F*	*FY2024F*	*Assumption*
Scheduled revenues	0,6%	5,8%	7,4%	7,4%	7,4%	See table revenues on Appendix 7
Ancillary revenues	6%	8%	12%	12%	12%	Expected a humble change of 6% in FY2020 given the 65 airplanes grounded during the winter. With the arriving of new Boeing model and with AGB improvements expected increasing of 8% in FY2021. From FY2022, is expected to increase to 12% given more capacity, increasing in passengers and flights traffic and the boost in the website
Fuel and oil	5%	7%	7%	7%	7%	Increasing of 5% in FY2020, just considering passengers growth, because is expected the remaining of fuel prices around the same values verified in FY2019. From FY2021, is expected the increasing of 7% given the delivery of new aircrafts. Increasing in fleet due to acquisitions were considered.
Airport and handling charges	9%	9%	9%	9%	9%	Considering an historical average in its growth rate in last 5 years, also motivated by an expecting increase in total passengers and flights what can attribute more bargaining power to RYA for negotiating costs with airports given the expression of its traffic
Route charges	8%	8%	8%	8%	8%	Regarding historical average in its growth rate in last 5 years and aspects as (i) acquisitions of Lauda and Air Malta (ii) bet on Ryanair UK and Ryanair Sun (Buzz) (iii) increasing in fleet and in passengers (iv) more routes and flights
Staff costs	15,0%	15,0%	15,0%	15,0%	15,0%	In last 5 years, staff costs were increased by an average variation of 15% per year. We set this as a valid forecast assumption until FY2024 due to an increase in staff members of 11%/year according to RYA's growth strategy (bigger fleet, more capacity, more routes, more passengers). Bet on personnel factors in Lauda and Air Malta were also considered.
Depreciation	1,3%	5,9%	5,0%	3,7%	1,4%	Depreciations with hangar and buildings, plant and equipment, fixtures and fittings and motor vehicles are expected to stand at the same values registered in last 3 years. By the way, depreciation will increase due to the increase in fleet (see table of depreciation in Appendix 7)
Marketing, distribution and others	2,0%	4,0%	4,0%	4,0%	4,0%	Given corporate guidelines, these main costs are attributed to AGB Program. As AGB is expected to stay focus on digital as in FY2019, we forecast an increasing of 2% in FY2020 due to costs containment. From FY2021, is expected to totalize increasing of 4% to go along with RYA expansion and growth
Maintenance, materials and repairs	5,5%	5,5%	5,5%	5,5%	5,5%	Average of 8% in last 5 years but with the expected arriving of 210 new Boeing aircrafts until FY2024, around 31% of the fleet will be renew so we consider fair to set lower the growth of this parcel at a 5,5% level per year
Aircraft rentals	-4,5%	-4,5%	-4,5%	-4,5%	-4,5%	Historical data points to an average growth rate decreasing by -4,5% in last 5 years
Available financial asset for sale	0,0%	0,0%	0,0%	0,0%	0,0%	This parcel just assumes a positive value of €317,5 million in FY2016 where RYA accepts IAG offer to purchase its participation in Aer Lingus. As we expect no kind of these operations, the expect value is 0
Finance expense	-4,0%	-4,0%	-4,0%	-4,0%	-4,0%	Historical average in its growth rate of -4% in last 5 years due to the bought of 200 aircrafts Boeing between FY2014 and FY2019. Expected to maintain given the new contract to bought 210

						new generation Boeing to be delivered between FY2020 and FY2024
Finance income	-16,0%	-16,0%	-16,0%	-16,0%	-16,0%	Scenario given by the historical data that shows a constant average variation of -16% per year in last 5 years
Foreign exchange gain/(loss)	-49,7%	-27,7%	-19,3%	6,4%	58,5%	Expected to be equal to the average value in last 5 years due to RYA entering in cross-currency interest swaps to avoid negative effects caused by variations in interest and foreign exchange rates
Gain sale of associate	-100,0%	0,0%	0,0%	0,0%	0,0%	Assume value 0, because were operations related to Lauda acquisition in FY2019
Share associate losses	-100,0%	0,0%	0,0%	0,0%	0,0%	Assume value 0, because were operations related to Lauda acquisition in FY2019
Tax expense	10,0%	10,0%	10,0%	10,0%	10,0%	Expected tax set at 10% as verified in FY2017 and FY2018, because in FY2019 this tax suffered a decreasing to 6,7% due to some losses (from Lauda) taxed on other rates

7-1-1: Table Assumptions: Scheduled Revenues

	Passengers	*%Passengers*	*Average fare*	*%Average fare*	*Scheduled revenues*	*% Scheduled revenues*	*Comments*
FY2016	106,3	-	46,67	-	-	-	-
FY2017	119,8	12,7%	41	-12,1%	-	-	-
FY2018	130,3	8,8%	39,4	-3,9%	-	-	-
FY2019	142	9,0%	37,03	-6,0%	5261,1	-	-
FY2020F	150,5	6,0%	35,18	-5,0%	5294,6	0,64%	aggressive ''fare war''; ground 65 aircrafts during winter; overcapacity; new 20 Boeing will be received in February or March, 2020
FY2021F	162,5	8,0%	34,48	-2,0%	5603,0	5,83%	first signals of recover due to more aircrafts and lower fares
FY2022F	175,5	8,0%	34,3	-0,5%	6019,7	7,44%	process of reach 200 million passengers carried in 2024, stabilization of average fares after weaken competition
FY2023F	189,5	8,0%	34,12	-0,5%	6465,7	7,41%	process of reach 200 million passengers carried in 2024, stabilization of average fares after weaken competition
FY2024F	204,7	8,0%	33,95	-0,5%	6949,6	7,48%	process of reach 200 million passengers carried in 2024, stabilization of average fares after weaken competition

Source: Author

7-1-2: Table Assumptions: Fleet

	FY2019	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*	*Total*
Opening fleet	431	471	499	529	556	577	431
Deliveries under 2013 Boeing Contract	29	-	-	-	-	-	29
Firm deliveries under 2014 Boeing Contract	-	20	52	29	24	10	135
Option aircraft under 2014 Boeing Contract	0	-	8	28	25	14	75
Planned returns or disposals	-5	-11	-30	-30	-28	-16	-120
A320 operating leases	16	19	-	-	-	-	35
Closing Fleet	**471**	**499**	**529**	**556**	**577**	**585**	**585**

Source: Author

7-1-3: Table Assumptions: Depreciation

	Total fleet	*Aircraft Depreciation Value*	*Deprect./plane*	*% in aircrafts depreciation*	*Depreciation with others PPE rubrics*	*Total Depreciation*	*% Total Depreciation*
FY2017	400	484,2	1,21	-	-	-	-
FY2018	431	547	1,27	-	-	-	-
FY2019	471	624,9	1,33	-	-	-	-
FY2020F	499	633,13	1,269	1,3%	15,6	648,73	1,3%
FY2021F	529	671,19	1,269	6,0%	15,6	686,79	5,9%
FY2022F	556	705,45	1,269	5,1%	15,6	721,05	5,0%
FY2023F	577	732,10	1,269	3,8%	15,6	747,70	3,7%
FY2024F	585	742,25	1,269	1,4%	15,6	757,85	1,4%

Source: Author

7-2: Balance Sheet Assumptions

	FY2020	FY2021	FY2022	FY2023	FY2024	ASSUMPTION
PPE	8%	6%	4%	3%	2%	PPE which includes aircrafts, hangar and building, plant and equipment, fixtures and fittings and motor vehicles is expected to grow through the formula used in RYAAR. PPEt= PPEt-1 + ΔCapExt - ΔDepreciationt
Intangible assets	0%	0%	0%	0%	0%	Intangible assets are landing rights slots and were increased from Lauda and Buzz added slots. So, is expected to remain at the same value.
Available for sale financial asset	0%	0%	0%	0%	0%	Since 2015, when RYA accept IAG offer to purchase its participation in Aer Lingus, this parcel assumes null value and is projected to remain
DFI (non-current assets)	10%	10%	10%	10%	10%	Given the volatility of the values this parcel reveals very inaccurate to predict. We expect the growth converging to the average value of last 5 years.
Deferred tax (non-current assets)	0%	0%	0%	0%	0%	Deffered tax includes recognition of tax losses of acquisition operations in FY2019. So, it is expected to assume null values, as verified in last common years.
Inventories	4%	6%	1%	0%	-3%	Projected to growth converging to average values of last 5 years
Other assets	10%	10%	10%	10%	7%	Projected to growth considering its growth rate average of last 5 years, what explains the variations of prepayments and interest receivable
Current Tax (current assets)	0%	0%	0%	0%	0%	Expected to be equal to nominal value of last years.
Trade receivables	0%	0%	-2%	1%	0%	Projected to growth converging to average values of last 5 years
DFI (current assets)	18%	-21%	1%	0%	-1%	Given the volatility of the values this parcel reveals very inaccurate to predict. We expect the growth converging to the average value of last 5 years.
Restricted cash	-42%	13%	9%	11%	-13%	The amount of cash for certain legal causes and appeals is projected to growth converging to average values of last 5 years
Financial assets: cash > 3 months	-11%	-11%	-11%	-11%	-11%	Expected to still following a decrease tendency in order of 11% due to the average of its growth rate in last 5 years
Trade payables	3%	3%	3%	3%	3%	As trade payables are amounts relative to payments to suppliers considering goods delivered or services consumes, as RYA expects to ground aircrafts seasonally every year, we assume a conservative growth of 3%
Accrued expenses and other liabilities	14%	14%	14%	14%	14%	Continue following its historical average growth rate tendency in increasing by 12% due to the behaviour of remain values of accruals, indirect tax and duties and unearned revenues
Current maturities of debt	-8%	-8%	-8%	-8%	-8%	As it comprises the long-term debt to be paid in the current year, it is expected to follow decreasing tendency due to its historical average growth rate in last years
Current tax (current liabilities)	0%	0%	0%	0%	0%	Expected to remain on identical FY2019 values
DFI (current liabilities)	84%	-26%	-23%	20%	4%	Given the volatility of the values this parcel reveals very inaccurate to predict. We expect the

						growth converging to the average value of last 5 years.
Provisions	0%	0%	0%	0%	0%	Expected to remain on identical FY2019 values, due to a stabilization of the values in last years
DFI (non-current liabilities)	0%	0%	0%	0%	0%	Given the volatility of the values this parcel reveals very inaccurate to predict. We expected to remain on identical FY2019 values
Deferred Tax (non-current liabilities)	0%	0%	0%	0%	0%	Reconciliation of this rubric includes temporary differences on property, plant and equipment, derivatives pensions and other items and is expected to remain equal o FY2019 values
Other creditors	0%	0%	0%	0%	0%	RYA will not enter into sale-and-leaseback arrangements for any new Boeing so this value will remain at 0
Non-current maturities of debt	5%	5%	5%	5%	5%	As it comprises the long-term debt to be paid in the following fiscal years, it is expected to follow increasing tendency due to its investments in renewal fleet
Issued capital	0%	0%	0%	0%	0%	Expected to remain on identical values on FY2019
Share premium account	0%	0%	0%	0%	0%	Expected to remain on identical values on FY2020 due to equal values on last years
Other undenominated capital	0%	0%	0%	0%	0%	Comprising the amount required to be created by Irish law to preserve permanent capital in the parent company, we expect to be equal to FY2019 values
Retained earnings	-15%	-13%	-12%	-15%	-11%	Based valuation on historical lower values of net income what will affect negatively this rubric in decrease of shareholders return due to revision in corporate guidelines of buy-back RYA program (based on compared financial information of FY2015)
Other reserves	0%	0%	0%	0%	0%	Given the volatility of this parcel, we expected this to converge to the average value of last 5 years until FY2024

Source: Author

7-3: Cash Flow Assumptions

	FY2020	FY2021	FY2022	FY2023	FY2024	ASSUMPTION
Retirement costs	0,0%	0,0%	0,0%	0,0%	0,0%	Expected to remain a null value as in last years
Shared-based payments	7,0%	7,0%	7,0%	7,0%	7,0%	RYA engages in equity-settled, share-based payment transactions in respect of services received from certain employees. Expected to increase considering its average growth rate in last 4 years
Income tax paid	10,0%	10,0%	10,0%	10,0%	10,0%	Consider common value registered in FY2017 and FY2018 of 10% given that, in FY2019, whereas was included unusual net operating losses of Lauda, taxable at 25%, the income tax paid was 6,7%
Capital Expenditure	-9,0%	-9,0%	-9,0%	-9,0%	-9,0%	Considering the receiving of new 210 Boeing aircrafts until FY2024
Acquisition of subsidiary	0,0%	0,0%	0,0%	0,0%	0,0%	There are no expected acquisitions until FY2024. Air Malta cannot be considered because any information was given at the date.
Investment in associate	0,0%	0,0%	0,0%	0,0%	0,0%	There are no expected acquisitions until FY2024. Air Malta cannot be considered because any information was given at the date.
Net proceeds from long term borrowings	0,0%	0,0%	0,0%	0,0%	0,0%	Expected to continue showing a null value as in last years
Shareholders returns	-35,0%	-35,0%	30,0%	30,0%	30,0%	Projected to continue decreasing by the same growth rate of FY2019 while decreasing of operating profit is expected to happen. After an operating recover is acceptable to return to preserved buy-back program's rate of 3% of total issued share capital
Proceeds from long term borrowings	50,0%	50,0%	50,0%	50,0%	50,0%	Projected to continue increasing by the same growth rate of FY2020 because the main part of these loans is raised for general growth corporate purposes
Repayments of long-term borrowings	0,9%	0,3%	2,0%	-0,5%	-1,1%	Including the repayments of amounts borrowed this rubric is projected to growth at the average value in previous 5 years

Source: Author

Appendix 8: DCF Model – FCFF Computations

8-1: General Assumptions – WACC

	VALUE	ASSUMPTION	SOURCE
Risk-free rate (Rf)	-0,6591%	AAA-rated euro area central government bonds 10 years yield	ECB
Country risk premium - Ireland (CRPI)	1,18%	Country Risk Premium	Damodaran
Equity Market risk premium (EMRP)	7,14%	Equity Risk Premium	Damodaran
Beta unlevered (Bu)	0,61	Unlevered beta for Air Transport Industry	Damodaran
Beta levered (Bl)	1,43	Calculated through Bl=Bu*[1+(1-tax rate)*(D/E)]	Bl formula
Cost of debt (Kd)	4,18%	Cost of debt for Air Transport Industry	Damodaran
Terminal growth rate	1,80%	Forecasted Europe GDP growth rate	IMF
Corporate marginal rate(T)	12,50%	Corporate Tax Rate	Damodaran

8-2: WACC Computations

Weighted Average Cost of Capital-WACC	WACC= [We*Ke + Wd*Kd]*(1-T)

	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	
Rf	-0,659%	-0,659%	-0,659%	-0,659%	-0,659%	
CRPI	1,18%	1,18%	1,18%	1,18%	1,18%	
EMRP	7,14%	7,14%	7,14%	7,14%	7,14%	
Bl	1,43	1,43	1,43	1,43	1,43	
Cost of Equity (Ke)	10,75%	10,75%	10,75%	10,75%	10,75%	(Ke=Rf+Bl*EMRP+CRPI)
Cost of Debt (Kd)	4,18%	4,18%	4,18%	4,18%	4,18%	
T	12,50%	12,50%	12,50%	12,50%	12,50%	
Weight of equity (We)	0,74	0,65	0,58	0,54	0,54	
Weight of debt (Wd)	0,26	0,35	0,42	0,46	0,46	WACC-to-perpetuity
WACC	8,93%	8,24%	7,78%	7,50%	7,50%	7,99%

8-2: FCFF Computations

	FY2019	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	Perpetuity
Total operating revenues	7697,4	7875,1	8388,7	9137,8	9957,7	10855,5	
Total operating expenses	-6680,6	-7130,6	-7715,1	-8350,0	-9037,4	-9775,2	
EBIT	1016,8	744,5	673,6	787,8	920,3	1080,3	
Net Income	889,7	651,5	589,4	689,3	805,2	945,2	
Depreciation	640,5	648,7	686,8	721,1	747,7	757,8	
NWC	-188,3	-511,4	-528,5	-546,1	-565,7	-583,8	
Change in NWC		-323,1	-17,1	-17,7	-19,6	-18,1	
CapEx	-1546,7	-1407,5	-1280,8	-1165,5	-1060,6	-965,2	
FCFF		404,1	523,8	790,9	1058,0	1321,7	
Year		1	2	3	4	5	
Discounted FCFF		371,0	447,1	631,7	792,2	920,5	
Cumulative FCFF		371,0	818,1	1449,8	2242,0	3162,5	
Terminal Value		5296,7	7072,5	10747,1	14150,8	16430,1	15137,32

8-3: EV and Price Target Computations

Enterprise Value - EV	
PV of FCFF	3162,5
Terminal Value	15137,3
PV of Terminal Value	10306,8
EV	13469,3
Net Debt	1514,9
Equity Value	11954,4
Number of shares outstanding	1092,1
Target Price	**10,95**
Price at 27 September, 2019	10,29
Upside potential	6,37%

Appendix 9: APV Method Computations

9-1: APV Inputs

Inputs	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
WACC	8,93%	8,24%	7,78%	7,50%	7,50%
Wd	25,65%	35,44%	41,82%	45,82%	45,77%
Kd	4,18%	4,18%	4,18%	4,18%	4,18%
Tax Rate	12,50%	12,50%	12,50%	12,50%	12,50%
Pre-tax WACC	9,06%	8,42%	8,00%	7,74%	7,74%

9-2: APV Computations

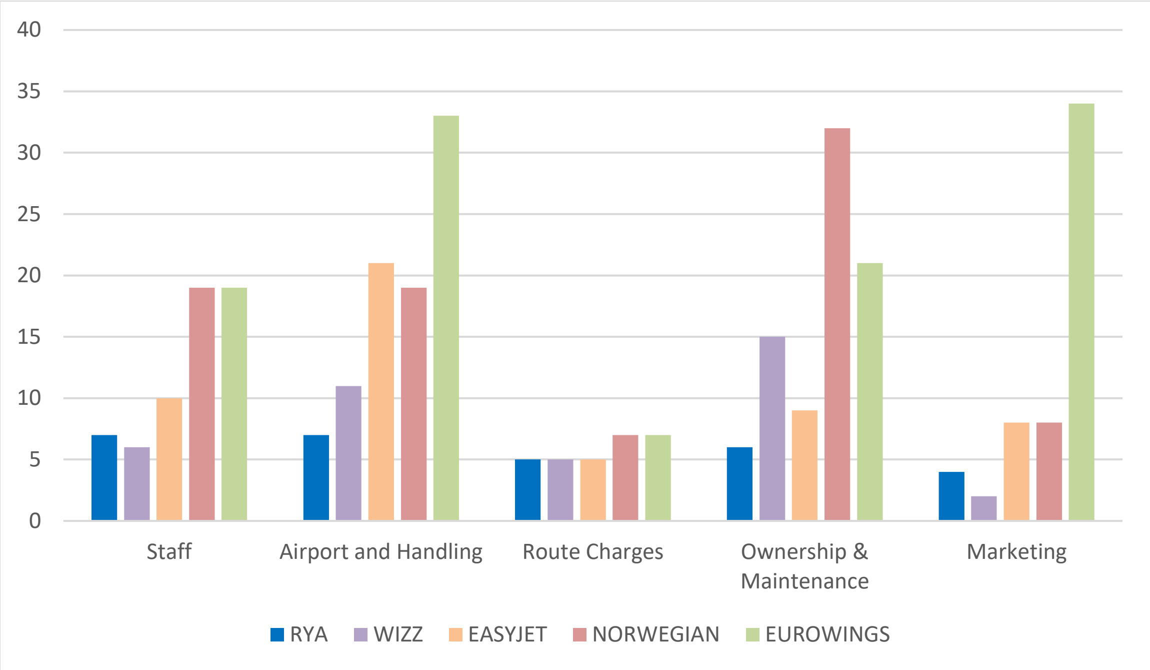
	FY2019	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F	Perpetuity
FCFF		404,1	523,8	790,9	1058,0	1321,7	16459
PVt	12889,5	14036,7	14895,5	15377,0	15471,1		
Debt Capacity Short-term	3306,2	4973,9	6229,0	7046,1	7080,7		
Interest Paid Short-term		138,2	207,9	260,4	294,5	296,0	
Interest Tax Shield Short-term		12,5	17,5	20,8	22,8	22,9	

9-3: EV and Price Target Computations

EV Unlevered	13565,45
PV (ITS)	75,62
EV	13641,07
Net Debt	1514,94
Equity Value	12126,13
Number of shares outstanding	1092,14
Price Target	11,10
Price at 27 September, 2019	10,29
Upside Potential	7,90%

Appendix 10: Relative Valuation – Multiples Computations

10-1: RYA and peers cost comparison



Source: RYAAR and Author

	RYA	*WIZZ*	*EASYJET*	*NORWEGIAN*	*EUROWINGS*
TOTAL UNITY COSTS	€29	€39	€53	€85	€114

Source: RYAAR and Author

10-1: EV/EBITDA

EnterpriseValue/EBITDA **Price Target from Multiples**	**2019**
Ryanair	8,27
Wizz Air	3,17
Norwegian Air Shuttle	9,16
Easyjet	7,15
Eurowings	5,54
Vueling	2,92
Transavia	2,57
Average (without airlines groups)	7,47
Average Total Peer Group	6,69

Source: Bloomberg

EV/EBITDA	
RYA EBITDA	1393,3
Average Peer EV/EBITDA	7,47
RYA EV by peer estimate	10405,5
Net Debt	1514,9
Total shares outstanding	1092,1
Price Target	8,14
Downside potential	-20,89%

Source: Author

10-2: P/E

Price/Earnings Price Target from Multiples	2019
Ryanair	15,07
Wizz Air	8,59
Norwegian Air Shuttle	-
Easyjet	13,42
Eurowings	2,85
Vueling	4,85
Transavia	7,57
Average (without airlines groups)	12,36
Average Total Peer Group	10,24

Source: Bloomberg

P/E	
RYA Profit	620,2
Average peer P/E	12,36
Total shares oustanding	1092,1
Price Target	7,02
Downside potential	-31,79%

Source: Author

10-3: P/CF

Price/CashFlow Price Target from Multiples	2019
Ryanair	6,61
Wizz Air	6,25
Norwegian Air Shuttle	-
Easyjet	5,91
Eurowings	1,91
Vueling	2,97
Transavia	1,3
Average (without airlines groups)	6,26
Average Total Peer Group	4,77

Source: Bloomberg

P/CF	
RYA Operating Cash Flow	1126,624
Average peer P/E	6,26
Total shares outstanding	1092,1
Price Target	6,45
Downside potential	-37,28%

Source: Author

10-4: P/S

Price/Sales Price Target from Multiples	2019
Ryanair	1,73
Wizz Air	1,09
Norwegian Air Shuttle	0,18
Easyjet	0,72
Eurowings	0,19
Vueling	0,41
Transavia	0,15
Average (without airlines groups)	1,17
Average Total Peer Group	0,96

Source: Bloomberg

P/S	
RYA Revenues	7875,145
Average peer P/E	1,17
Total share outstanding	1092,1
Price Target	8,44
Downside potential	-18,01%

Source: Author

Appendix 11: DuPont Analysis (Key Financial Ratios Support)

11-1: Table Computation

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020F	FY2021F	FY2022F	FY2023F	FY2024F
Net Income	866,7	1559,1	1315,9	1450,2	885,0	620,2	558,4	663,0	783,7	928,7
EBT	982,4	1721,9	1470,3	1611,3	948,1	689,1	620,4	736,7	870,8	1031,9
TAX BURDEN	**88,2%**	**90,5%**	**89,5%**	**90,0%**	**93,3%**	**90,0%**	**90,0%**	**90,0%**	**90,0%**	**90,0%**
EBT	982,4	1721,9	1470,3	1611,3	948,1	689,1	620,4	736,7	870,8	1031,9
EBIT	1042,9	1460,1	1534,0	1667,3	1016,8	744,5	673,6	787,8	920,3	1080,3
INTEREST BURDEN	**94,2%**	**117,9%**	**95,8%**	**96,6%**	**93,2%**	**92,6%**	**92,1%**	**93,5%**	**94,6%**	**95,5%**
EBIT	1042,9	1460,1	1534,0	1667,3	1016,8	744,5	673,6	787,8	920,3	1080,3
Total Revenue	5654,0	6535,8	6647,8	7151,0	7697,4	7875,1	8388,7	9137,8	9957,7	10855,5
EBIT MARGIN	**18,4%**	**22,3%**	**23,1%**	**23,3%**	**13,2%**	**9,5%**	**8,0%**	**8,6%**	**9,2%**	**10,0%**
Total Revenue	5654,0	6535,8	6647,8	7151,0	7697,4	7875,1	8388,7	9137,8	9957,7	10855,5
Total Assets	12185,4	11218,3	11989,7	12361,8	13250,7	13165,1	13251,6	13531,1	13978,0	14643,8
ASSET TURNOVER	**46,4%**	**58,3%**	**55,4%**	**57,8%**	**58,1%**	**59,8%**	**63,3%**	**67,5%**	**71,2%**	**74,1%**
Net Income	866,7	1559,1	1315,9	1450,2	885,0	620,2	558,4	663,0	783,7	928,7
Total Revenue	5654,0	6535,8	6647,8	7151,0	7697,4	7875,1	8388,7	9137,8	9957,7	10855,5
NET PROFIT MARGIN	**15,3%**	**23,9%**	**19,8%**	**20,3%**	**11,5%**	**7,9%**	**6,7%**	**7,3%**	**7,9%**	**8,6%**
Total Assets	12185,4	11218,3	11989,7	12361,8	13250,7	13165,1	13251,6	13531,1	13978,0	14643,8
Total Equity	4035,1	3596,8	4423,0	4468,9	5214,9	4391,1	3922,4	3536,0	3130,4	2875,1
LEVERAGE RATIO	**3,02**	**3,12**	**2,71**	**2,77**	**2,54**	**3,00**	**3,38**	**3,83**	**4,47**	**5,09**
Total Equity	4035,1	3596,8	4423,0	4468,9	5214,9	4391,1	3922,4	3536,0	3130,4	2875,1
Net Income	866,7	1559,1	1315,9	1450,2	885,0	620,2	558,4	663,0	783,7	928,7
ROE	**21,5%**	**43,3%**	**29,8%**	**32,5%**	**17,0%**	**14,1%**	**14,2%**	**18,7%**	**25,0%**	**32,3%**
Net Income	866,7	1559,1	1315,9	1450,2	885,0	620,2	558,4	663,0	783,7	928,7
Total Assets	12185,4	11218,3	11989,7	12361,8	13250,7	13165,1	13251,6	13531,1	13978,0	14643,8
ROA	**7,1%**	**13,9%**	**11,0%**	**11,7%**	**6,7%**	**4,7%**	**4,2%**	**4,9%**	**5,6%**	**6,3%**

Source: RYAAR and Author

11-2: DuPont Analysis

LEGEND	
FY2015	FY2020F
FY2016	FY20201F
FY2017	FY2022F
FY2018	FY2023F
FY2019	FY2024F

ASSET TURNOVER	
46,4%	59,8%
58,3%	63,3%
55,4%	67,5%
57,8%	71,2%
58,1%	74,1%

TAX BURDEN	
88,2%	90,0%
90,5%	90,0%
89,5%	90,0%
90,0%	90,0%
93,3%	90,0%

ROA	
7,1%	4,7%
13,9%	4,2%
11,0%	4,9%
11,7%	5,6%
6,7%	6,3%

ROE	
21,5%	14,1%
43,3%	14,2%
29,8%	18,7%
32,5%	25,0%
17,0%	32,3%

NET PROFIT MARGI.	
15,3%	7,9%
23,9%	6,7%
19,8%	7,3%
20,3%	7,9%
11,5%	8,6%

INTEREST BURDEN	
94,2%	92,6%
117,9%	92,1%
95,8%	93,5%
96,6%	94,6%
93,2%	95,5%

LEVERAGE RATIO	
3,02	3,00
3,12	3,38
2,71	3,83
2,77	4,47
2,54	5,09

EBIT MARGIN	
18,4%	9,5%
22,3%	8,0%
23,1%	8,6%
23,3%	9,2%
13,2%	10,0%

Source: RYAAR and Author

Appendix 12: Sensitivity Analysis

12-1: Investment Recommendation Table

Investment Recommendation	Low Risk	Medium Risk	High Risk
Buy	>10%	>15%	>20%
Hold	0% < PT < 10%	5% < PT < 15%	10% < PT < 20%
Reduce	(10%) < PT < 0%	(5%) < PT < 5%	0% < PT < 10%
Sell	<(10%)	<(5%)	< 0%

Investment Recommendation	Low Risk	Medium Risk	High Risk
Buy	> €11,32	> €11,83	> €12,35
Hold	€10,29 < PT < €11,32	€10,80 < PT < €11,83	€11,32 < PT < €12,35
Reduce	€9,26 < PT < €10,29	€9,78 < PT < €10,80	€10,29 < PT < €11,32
Sell	< €9,26	< €9,78	< €10,29

12-2: Individual Sensitivity Analysis

Individual sensitivity analysis									
Terminal Growth Rate	0,50%	0,98%	1,30%	1,70%	1,80%	2%	2,30%	2,50%	3,00%
DCF Target Price	€ 9,21	€ 9,77	€ 10,20	€ 10,79		€ 11,28	€ 11,83	€ 12,22	€ 13,35
Recommendation									
WACC	6%	7,50%	7,57%	7,70%	7,99%	8,06%	8,50%	8,65%	8,70%
DCF Target Price	€ 16,77	€ 11,99	€ 11,83	€ 11,54		€ 10,79	€ 10,03	€ 9,78	€ 9,70
Recommendation									
Beta levered	1,3	1,35	1,355	1,4	1,43	1,447	1,55	1,553	1,6
DCF Target Price	€ 12,51	€ 11,88	€ 11,82	€ 11,30		€ 10,79	€ 9,80	€ 9,77	€ 9,37
Recommendation									
Market Risk Premium	6,00%	6,74%	6,75%	7%	7,14%	7,21%	7,6%	7,74%	7,8%
DCF Target Price	€ 13,88	€ 11,85	€ 11,83	€ 11,25		€ 10,80	€ 10,03	€ 9,77	€ 9,67
Recommendation									

12-3: Sensitivity Analysis

		Changes in Terminal Growth Rate								
	10,95	0,75%	1%	1,40%	1,60%	1,80%	2%	2,10%	2,30%	2,50%
Changes in Long-term WACC	6%	13,59	14,23	15,39	16,05	16,77	17,57	18,00	18,92	19,95
	6,50%	12,29	12,81	13,74	14,26	14,83	15,45	15,78	16,49	17,27
	7%	11,20	11,62	12,39	12,81	13,27	13,77	14,03	14,59	15,20
	7,50%	10,27	10,63	11,27	11,62	11,99	12,40	12,61	13,06	13,54
	7,99%	9,49	9,80	10,34	10,63	10,95	11,28	11,46	11,83	12,22
	8,50%	8,80	9,06	9,51	9,76	10,03	10,30	10,45	10,76	11,08
	9%	8,20	8,42	8,82	9,03	9,25	9,49	9,61	9,87	10,15
	9,20%	7,98	8,19	8,56	8,76	8,98	9,20	9,31	9,56	9,81
	9,50%	7,67	7,87	8,21	8,39	8,59	8,79	8,90	9,12	9,35

		Changes in Long-term Rf								
	10,95	-1,3%	-1,00%	-0,90%	-0,75%	-0,66%	-0,20%	0,00%	0,50%	1,00%
Changes in Corporate Tax Rate	9%	11,81	11,33	11,18	10,96	10,83	10,20	9,95	9,35	8,80
	10%	11,85	11,37	11,22	10,99	10,86	10,23	9,97	9,37	8,82
	11%	11,90	11,41	11,26	11,03	10,89	10,25	9,99	9,38	8,83
	12,00%	11,95	11,45	11,29	11,06	10,93	10,28	10,02	9,40	8,84
	12,50%	11,97	11,47	11,31	11,08	10,95	10,29	10,03	9,41	8,85
	13,00%	11,99	11,49	11,33	11,10	10,96	10,31	10,04	9,42	8,85
	14%	12,04	11,53	11,37	11,14	11,00	10,33	10,06	9,44	8,86
	15,00%	12,09	11,58	11,41	11,17	11,03	10,36	10,09	9,45	8,88
	16%	12,14	11,62	11,45	11,21	11,07	10,39	10,11	9,47	8,89

	Changes in Bl									
	10,95	1,05	1,15	1,25	1,35	1,43	1,5	1,57	1,65	1,75
Changes in Market Risk Premium	5,50%	23,19	20,68	18,60	16,84	15,58	14,66	13,79	12,90	11,90
	6%	20,79	18,51	16,62	15,02	13,88	13,04	12,26	11,45	10,55
	6,50%	18,77	16,69	14,96	13,50	12,46	11,70	10,98	10,24	9,42
	7%	17,06	15,14	13,55	12,21	11,25	10,55	9,90	9,22	8,47
	7,14%	16,63	14,75	13,19	11,88	10,95	10,26	9,62	8,96	8,23
	7,5%	15,59	13,81	12,34	11,10	10,22	9,57	8,97	8,35	7,65
	8%	14,31	12,66	11,29	10,14	9,32	8,73	8,17	7,59	6,95
	8,50%	13,19	11,65	10,38	9,31	8,54	7,99	7,47	6,93	6,34
	9%	12,21	10,77	9,57	8,57	7,86	7,34	6,85	6,36	5,80

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Abbreviations

€M/€m – million €
AGB – Always Getting Better Program
AOC – Air Operator Certificate
APV – Adjusted Present Value
ASK – Available Seats per Kilometre
Bl – Beta Levered
Bu – Beta Unlevered
CapEx – Capital Expenditures
CEO – Chief Executive Officer
CFA – Chartered Financial Analyst Program/Institute
CFO – Chief Financial Officer
CRPI – Country Risk Premium in Ireland
DCF – Discounted Cash Flow
DCST – Debt Capacity Short-term
DFI – Derivative Financial Instruments
EBIT – Earnings Before Interest and Taxes
EBITDA – Earnings Before Interest, Taxes, Depreciation and Amortization
ECB – European Central Bank
EMRP – Equity Market Risk Premium
EPS – Earnings per Share
EU – European Union
EV – Enterprise Value
EV/EBITDA – Enterprise Value-to-EBITDA
FCFF – Free Cash Flow to the Firm
FSC – Full Service Carriers
FY – Financial Year
g – Terminal Growth Rate
GDP – Gross Domestic Product
HAC – Hub Airlines Companies
IAG – International Airlines Group
IATA – The International Air Transport Association
IFRS – International Financial Reporting Standards
IMF – International Monetary Fund
IPST – Interest Paid Short-term
ITS – Interest Tax Shield Short-Term
Kd – Cost of Debt
Ke – Cost of Equity
LAC – Luxury Airlines Companies
LCC – Low-Cost Carriers
MSCI – Morgan Stanley Capital International Incorporation
NDF – No Data Found
NOK – Norwegian Krone
OECD – The Organization for Economic Co-operation and Development
OPEC – Organization of the Petroleum Exporting Countries
P/CF – Price-to-Cash Flow
P/E – Price-to-Earnings
P/S – Price-to-Sales
PLF – Passenger Load Factor
PPE – Property, Plant and Equipment
PV – Present Value
Rf – Risk-free Rate
ROA – Return on Assets
ROE – Return on Equity
RPK – Revenue Passenger per Kilometre
RYA – Ryanair Holdings PLC

RYAAR – Ryanair's Annual Report
SEK – Swedish Krone
SWOT – Strengths, Weaknesses, Opportunities and Threats Analysis
T – Corporate Tax Rate
TV – Terminal Value
UK – United Kingdom
US/USA – United States of America
WACC – Weighted Average Cost of Capital
Wd – Weight of Debt
We – Weight of Equity
YE – Year Ending
YoY – Year-over-Year