# Ryanair's flight price development on selected routes 

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#### Abstract

This paper looks into development of prices during certain reference period on two specific routes. It should show to a reader a practical example of how the revue management of Ryanair airline works and what is the best strategy when buying the air ticket when planning to use Ryanair's services. Results of data analysis also shows that the price development is not systematic but rather route specific and it takes into consideration many internal as well as external factors.


Keywords: Ryanair, Price, Airline ticket, Fare, Air transport.
JEL Classification: L93

## 1 Introduction

Ryanair is well known for promoting very low fares. Few years ago, it was even possible to observe advertising campaigns for flight at prices of one eurocent. These extreme bids have already passed, but it still realistic to buy flight tickets to various destinations at special promotions with prices starting from $2 €(1)$. It is logical that not all tickets will be offered at these price levels, and of course, these special offers are limited in time or quantity.

These stunts are part of Ryanair marketing and free advertisement as its quickly spread among potential passengers through social media and other outlets. And it seems to fulfil its purpose as the airline has in 2016 carried the most passengers amongst all European air carriers including EasyJet, British Airways, Air France - KLM or Lufthansa (excluding its subsidiaries), with loading factor reaching $90 \%$.

Of course, we need to take in consideration that those prices are for base fare only and if a traveler would like to fly with a checked baggage, pick a specific seat or to board an airplane ahead of his

[^0]or her fellow passengers, he or she needs to dig deeper into the pocket for extra payment. Ryanair however gives these options to passengers well before the final payment and it is up to each passenger to choose between higher price and more comfort or the cheap and really low-cost travelling. Now the question is, when is the right time to buy the ticket. Is it better to wait until the last moment, or perhaps to buy well in advance? This paper should, based on long term collection of data and subsequent analysis, offer at least a basic answer to this question.

## 2 Creating a price

Ryanair has a very strict policy as to selling and reselling its tickets. For a long time, it didn't even allow third party websites authorised access into company's system for price comparison purposes. It has now. However, the passenger can reserve and buy ticket only directly at Ryanair's website. Among other reasons, it's because of this way Ryanair doesn't have to use multiple global distribution systems and has price of each ticket under its control and therefore doesn't have to manage whole departments that would take care of publication and control of the tariff structure. Another reason that simplifies revenue management of the company is its core business strategy which is point-to-point flights.

Revenue management, or profitability management, is based at legacy carriers on the assumption of product diversity. The basic way of how to divide the product, which is the air transport service, is the differentiation of first, business and economy class, which offer different levels of comfort for which the customer is willing to pay different prices. Different products, however, are also created by the restrictions attached to individual tariffs. This is, for example, a "Saturday night stay", limitations in re-booking, advance booking of the ticket before departure, restrictions in case of refunding the ticket, etc. The lower price for the service, the more are these rules and restrictions applied.

On the other hand, a low-cost airline model doesn't count with such differentiation and therefore can avoid itself of big complexity and calculations built on EMSR (Expected Marginal Seat Revenue). In general, low-cost airlines, including Ryanair, offer one product at one rate at the time. Price usually increases as the date of departure getting closer. However, as it will be shown in the following parts of the article, it does not apply exclusively. Without the presence of various restrictions and segment customer differentiation, as explained in previous paragraph, all demand at a given moment is satisfied by one particular offer. So, the forecasting and price optimization is no longer determined independently for different segments of the market, but it is fully based on current price information and its elasticity. Ryanair's revenue management task is therefore to determine the best time for increasing, or in some cases reducing the current ticket price and to achieve the maximum possible income for available seat in the aircraft at the time it is booked.

Low-cost airlines use dynamic pricing method when assigning certain price to available seat. There are specific attributes and factors that need to be considered while setting a desirable ticket fare. Remaining time to the departure, historical statistics, information on prices offered by competition on same or similar routes, season, as well as anticipated development based on current situation. In practice, these changes to the price are made by an automated system, although managers can execute manual correction to support or dampen sales. It is not beneficial to sell all tickets for a given flight in big advance. Ryanair offer same product for all its customers. Those can be divided into two categories. First is price-sensitive but time independent and therefore is willing to buy the
ticket well in advance but for a small price. The other is exact opposite, which means it buys at the last moment and is willing to pay much higher price than first group. Hence it is advisable to leave some seats available ideally until the date of the departure. Of course, overbooking plays its role here also. It means that the airline usually sells more tickets that there are seats in the airplane, basically because the statistic says that on average around 5 percent of passengers do not show up for the flight.

## 3 Price development statistics

Data for the statistics were compiled from two Ryanair's routes in 24 hours intervals for 123 and 112 days respectively, up to the date of departure. At each route from Monday to Sunday. The observation results have been afterwards calculated in daily and weekly averages. At the same time, changes in weekly averages of these prices were observed. The last output of this observation is then the total average of prices in individual days throughout the reference period. Those two routes of the total of 1800 that Ryanair operates each day cannot bring a comprehensive view, however they can at least outline a picture and show practical example to the reader who is interested in problematic of Ryanair's fare pricing. Prices were compiled as base fare price only, which means without any other fees for additional services (priority boarding, check-in luggage, etc.) The collection of data began in November and ended in March and April respectively. First chosen route was one between London Stansted (STN) and Dublin (DUB) and back. Route that is connecting two major Ryanair's bases, with 16 daily flights (8 in each direction). Second route connects Bratislava (BTS) and Stansted with up to 4 flights each day.

The development of average daily price on the given routes in both directions can be seen in graphs (Figure 1). The first noticeable deviation that we can see when comparing these two graphs is that the course of price development is quite different. While on route between STN and DUB the price had stagnated or even declined, changes in air fares on flights between BTS and STN were experiencing a very dynamic progression throughout the whole time of observation. We can see a regular rise and fall of prices, but it is interesting that the final growth, which is the point beyond which prices have not fallen, occurs in between two and three weeks before departure. It is not true for Monday and Tuesday though, where we observe average price drop even two days before the departure. This course is reflected in the fact that flights weren't sold out. Until the last moment, managers had been trying to make prices more appealing to improve the use of aircraft's capacity. This claim is supported by the fact that in some cases the lowest average price was not registered in the beginning of observation, where it could be expected, but 29 and 31 days respectively, before the departure. We can see this on the London - Dublin route as well, where this occurred even 14 days before departure, when the airline ticket could be purchased for only $9,98 €$. Another difference between those two routes is the tendency of growth and decline of the price. While on first route (STN - DUB - STN), we can see somewhat steady progress, on the BTS - STN - BTS route we observe rapid changes almost on day-to-day basis. The major cause of this is number of reservation, seat capacity and the speed with which are offered seats sold. Some flights on Monday, Thursday, Friday and Saturday were completely sold out.

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Figure 1 Development of average prices in individual days
Source: Own elaboration
This difference between price change can be also observed in Figure 2, where the average price is represented in between individual weeks prior to the departure. As far as the maximum average prices are concerned, they had been reached on both routes not until the day of departure. Although the two routes differ in a flight time ( $1: 20$ vs. $2: 20$ ) and one could logically expect this difference will be applied while setting a price as well, the maximum average prices for air ticket were quite similar. $235 €$ on STN - DUB - STN route and $243 €$ on BTS - STN - BTS. Another interesting fact is that even though the route from Bratislava to London is more than 800 km longer than the flight from Stansted to Dublin, it offered an air ticket with a lower price, $8 €$ to $9.98 €$ specifically.

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Figure 2 Development of average prices in individual weeks
Source: Own elaboration
In next graphs (Figure 3) we can see the percentage difference between the individual changes and it is probably the best way how to observe the rise and decline of average prices in individual weeks. We also clearly see the difference between individual routes. On the London - Dublin route we can see mainly price stagnation or even reduction up to 6 weeks before departure. On the second route, we see prices mostly going up for first 5 weeks. After that there is an alternate fall and rise in prices. It is interesting to observe the maximum and minimum deviations and the time of their occurrence. It is not extraordinary to see $50 \%$ fall on certain days, even just 4 weeks before the date of the departure. And in the last week it is absolutely normal to observe rapid increase of the ticket price, in certain cases by $150 \%$ or even up to $305 \%$ of the value in the previous week.


Figure 3 Percentage change in average prices between individual weeks Source: Own elaboration

The last figure (Figure 4) shows the average prices per day for the whole reference period as well as the total cumulative average. We can see that the highest average bid on both routes was on Sunday. Days of a second and third highest prices were also same on both routes, Monday and Friday, but in different order. Significant difference is however, the different ratio between the first and second most expensive day, second and third, and so on. For example, on the STN - DUB STN route, the average price on Sunday is $10.7 \%$ higher than on Friday. On BTS - STN - BTS route is a difference between the highest price and second highest $14.7 \%$. This all would suggest that it is not systematic but route specific. The cumulative averages are $29.14 €$ and $34.53 €$ which is below company average of $46.67 €(2)$.

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Figure 4 Average prices in individual days in reference period
Source: Own elaboration

## 4 Conclusion

Every passenger would like to know the answer to a simple question. When is the most appropriate opportunity to buy an air ticket. In general, when we consider group of people who has a time and doesn't have to fly at the last moment, then we can divide this group into two in perspective of when and how they decide to buy an airline ticket. The first part of this group would observe the price development for some time and after considering the situation they will decide to buy. The rest of the group are people who buy tickets even months in advance because they think this is the best way to get the cheapest fares. As we can see from charts and analysis, the latter group wold not be making a good decision in case they would want to fly with Ryanair. For Ryanair, this rule doesn't really apply, which is, to buy as soon as possible. The potential passengers should at first observe the development and, depending on the availability and price movement decide while not be afraid to wait until even few weeks the day when they want to fly. Another good move would be to register for a newsletter in which company often times notify their potential customers about flash sales or other offers with interesting prices. As we can see, prices can drop and get to its lowest point even only couple weeks before the departure. Also, a potential traveller should consider day of the week of the flight. As we can see, it is much better to fly in the middle of the
week (Tuesday, Wednesday, Thursday), where the prices are lowest. It is due to business passengers and others who travel to and from work in the end and the beginning of the week which creates higher demand and thus generates higher prices of air tickets.

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