

# AIRLINE PRICING STRATEGIES IN EUROPEAN AIRLINE MARKET

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*Summary: The paper is focused on evaluating pricing strategies based on monitoring of air ticket prices in different markets and in different time periods. Factors such as type of market, competitors, peak period, season, fuel costs, and environmental costs influencing air ticket prices are considered in the paper. Furthermore the paper discusses the differences in pricing strategies of traditional and low-cost airlines, different types of management..*

*Key words: air ticket price, tariff, fare, revenue management, traditional airlines, low-cost airlines, market, competitors, peak period, season.*

## INTRODUCTION

The aviation industry as we know it in the current form went through a long development. The process of internationalization, globalization, and many other factors greatly increased the amount of travelling people. Trade agreements, expansion of cargo transportation caused greater mobility of business travelers. The behavior of leisure passengers also changed. All these factors have had a notable impact on creating of the airline pricing strategies.

Traditional carriers can offer two different vertical quality products (economy cabin vs. business cabin, refundable ticket vs. nonrefundable ticket, VIP lounge access vs. no VIP lounge access), while low-cost carriers offer only one type of product (economy cabin, nonrefundable ticket and no VIP lounge access). Customers for this product could be divided into two types of travelers, business travelers and leisure travelers. Both of these categories have different preferences and look at the quality product. It is important to remember that these differences have significant impact on the direction of price policy and the management of product availability.

## 1. REVENUE MANAGEMENT

The main objective of RM is to sell the right inventory unit to the right type of customer, at the right time, and for the right price (Kimes 1997). RM is a tool to maximize revenue from the fixed seat capacity, which is perishable at the time of departure. It is based on the control of the release of a certain number of seats on sale across the booking classes. It focuses on optimizing the mix of passengers. In other words, RM is based on decision making whether or not to accept a booking request. The answer to this problem depends on whether

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the yield from this booking exceeds the yield that could be earned by denying the request and leaving the space in the aircraft for later sale at higher prices. RM assists in balancing between three types of costs (Holloway 2008):

- spoilage cost
- displacement cost
- diversion cost

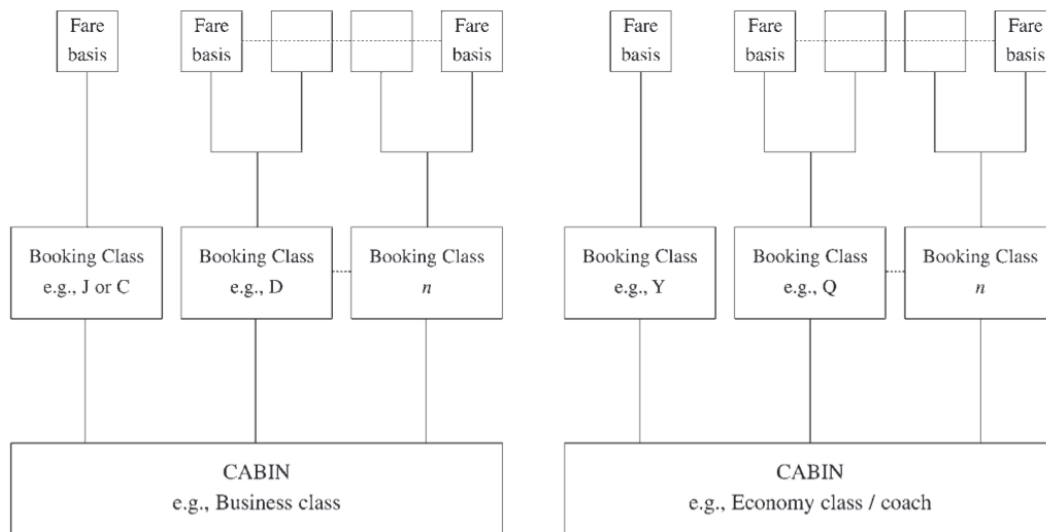
Airlines currently use one of two RM methods: Traditional method or Low cost carrier method.

### **1.1 Traditional method**

With a traditional approach airlines offer a wide range of fares with various sale conditions and restrictions within each RBD and each cabin. In this case, the price is fixed and the main task of RM is to maximize revenues by controlling capacity, it means to allocate capacity among all the proposed fares. Talluri and van Ryzin 2004 describe this method as “quantity-based revenue management method”. Fig.1 shows hierarchy of fares, booking classes and cabins managed by traditional RM method.

### **1.2 Low cost carrier method**

Most low-cost carriers do not segment market on the basis of willingness to pay for the air ticket with different conditions and restrictions. Conversely they offer at any time a single price for one product at each departure. This price is generally increasing with approaching departure. As offered air tickets are one-way tickets, minimum stay at the destination or Saturday night rule cannot be applied. On the other hand tickets are non-refundable and ticket changes are either completely prohibited or a subject to any administrative change fee. Capacity control in this case is not a problem, because instead of more various products for sale there is only one for sale at any one time. The problem is deciding when to close the sale of tickets in the one particular price and open sale in the next price level. This requires closer integration of pricing department and RM. RM main objective is therefore to maximize revenue through dynamic pricing, which means managing price levels currently on sale. Talluri and van Ryzin 2004 describe this method as ‘price-based revenue management method’.



Source: Holloway 2008

Fig. 1 - Hierarchy of cabins, booking classes and fares

## 2. FACTORS INFLUENCING AIR TICKET PRICE

Airline pricing strategies mainly depends on the decisions of the company itself and on the RM, which they apply when managing revenues. But there are three major external factors that have a significant impact on the development of air ticket prices: market structure, demand and operational factors. The market structure is meant as the whole external environment, which the carrier operates its flights in, and the way the airline industry is organized in the country. The environment is influenced by various governmental regulations, environmental economics, market competition, international relations etc. It is generally acknowledged that demand affects the ticket price. If the demand is greater than supply ticket prices are increasing. In the contrary, if the demand for air travel is less than what airlines offer, the market can expect more discount tickets. Operational factors are a broad category merging wide range of factors such as fuel, online booking, aircraft handling, schedule etc.

### 2.1 Type of market

In the aviation industry, the markets are usually segmented on markets with time-sensitive passengers and markets with price-sensitive passengers. Time-sensitive passengers are mostly business travelers who need to travel at exact days and exact times. These travelers typically ignore air ticket price in order to satisfy their request to travel at specific time. Also, certain leisure passengers may belong into this group, especially those who need to travel and return according to a fixed schedule. Price-sensitive passengers choose flights according to ticket price. Those passengers travel in less demanded days and sometimes their travel time is significantly longer if the final price is lower.

Another way to divide market is on the markets of business travelers and leisure travelers. Business travelers require higher frequencies, because their time is highly valuable in comparison with leisure travelers and they pay higher tax when they are forced to wait longer than their preferred time departures. Therefore schedule focused on business travelers

is more expensive compared to the flight schedules created for leisure passengers. On the other hand, higher revenues from tickets, which are sold at noticeably higher fares, compensate higher costs.

While some markets are purely focused on business travelers (London City), others are oriented for leisure passengers (Venice), in most markets airlines transport mix of both passenger's types. In this case, the airline has divided passengers to different groups based on certain characteristics. At this stage, each group of passengers pays a different price for tickets.

## **2.2 Competition**

As the market consists of customers, vendors and product, market structure depends on the number and power of sellers and buyers. An important factor is the number of airlines offering their services on a particular O&D. It depends on the regulation of the environment, location and nature of the market. Based on these factors, airline creates pricing strategy for the product offered. Market can be in three stages: market with ideal competition, monopoly and oligopoly.

## **2.3 Seasonality, peak period**

Seasonal pricing is a tool for charging higher prices at times of bigger demand when capacity constraints cause high marginal costs. In the aviation industry, changes in capacity utilization in different days or different flights generate differences in the seat cost on flights. During the peak period, most of the aircraft are in the air and expected shadow costs of capacity will be higher (Borenstein and Rose 1994).

Due to capacity constraints during periods with increased demand, if airline wants to increase revenue it must shift some demand from high demanded flights to flights with low demand. For instance, implementation of advance purchase rule can be a strategy for maximizing revenue for airline, which has to face capacity constraints in periods with high demand. Carrier should predict carefully the peak seasons and offer discounted tickets for flights out of this period. Passengers with low time costs who originally wanted to fly in the peak season, will move to low demanded flights.

## **2.4 Fuel costs**

Increasing fuel price creates significant pressure on airlines. In the past fuel was approximately 10-15% of total operational costs. Today it is the largest cost part representing 35% of the total costs (Holloway 2008). Despite of all steps reducing fuel costs, airlines are still struggling with increased costs. Therefore, if carriers have higher fuel costs, they try to shift costs to customers in the form of fuel surcharges. Airline representatives claim that increasing fuel price will cause more expensive air travelling, but prices cannot rise to a level that will not be accepted by the market or over a level of competitors. Nowadays, it is common that carriers increase fuel surcharges. Passengers pay these mandatory fees at the time of booking.

## **2.5 Income**

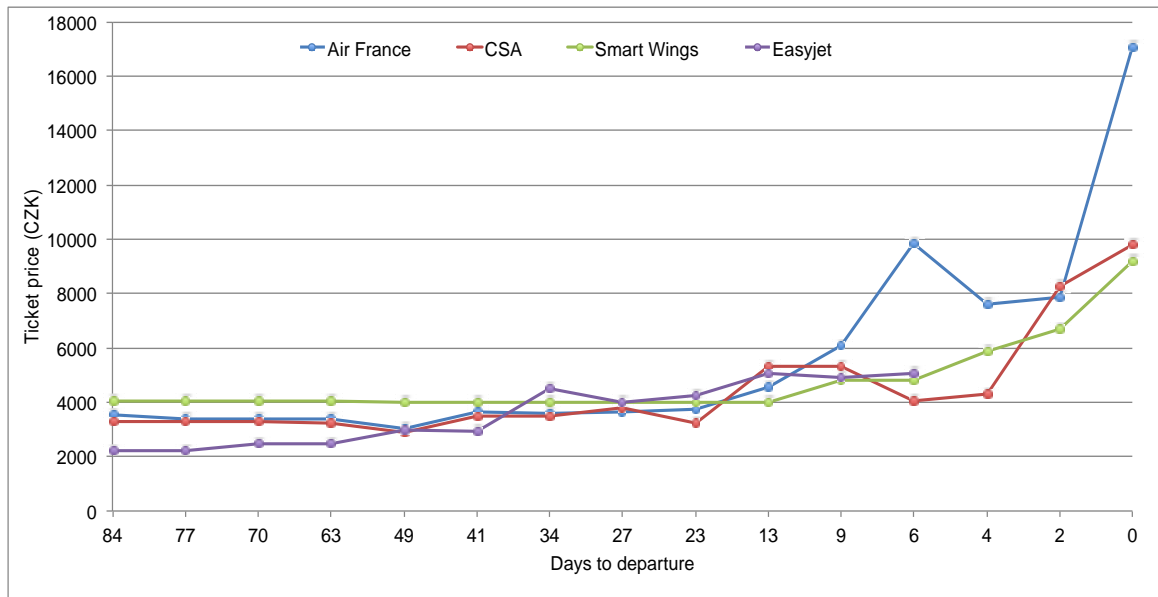
Customers income is one of the major factors influencing demand for air travel. As soon as economic activity and trade increase, demand for business air travel grows. With greater economic activity, income of the population rises. Consequently, people start to have higher expenses for less important goods and services such as holidays. Similarly, with increasing prosperity, people are less price-sensitive and more predisposed to product quality. This leads airlines to sell tickets in higher prices in an effort to offer the best service. Conversely during a recession customers are more sensitive and are more interested in price than the comfort and brand image. These facts force airlines to stimulate demand for air transport with various promotions with discounted tickets. Often bad financial situation of customers results in shifting of passengers from traditional airlines to low-cost airlines

## **3. THE DATA**

Monitoring of air ticket prices was focused on pointing out fundamental differences in airline pricing strategies depending on various factors. Monitoring took place from August 2012 till April 2013. The survey was focused on the Czech market and especially on Czech Airlines and other carriers operating their flight on this market. Specifically, there were selected routes such as Prague – Paris, Prague – Amsterdam, Prague – Brussels and Prague – Rome, which are served by CSA, Air France, KLM, Brussels Airlines, Easyjet and Smartwings. The routes were observed in the following time periods: summer season, autumn season and weaker winter. For the survey there were selected three-day trip Friday-Monday suitable for leisure passengers and also one-day and two-day trip on weekdays, which are used mainly by business passengers. Ticket prices were collected from airline websites.

## **4. THE RESULTS**

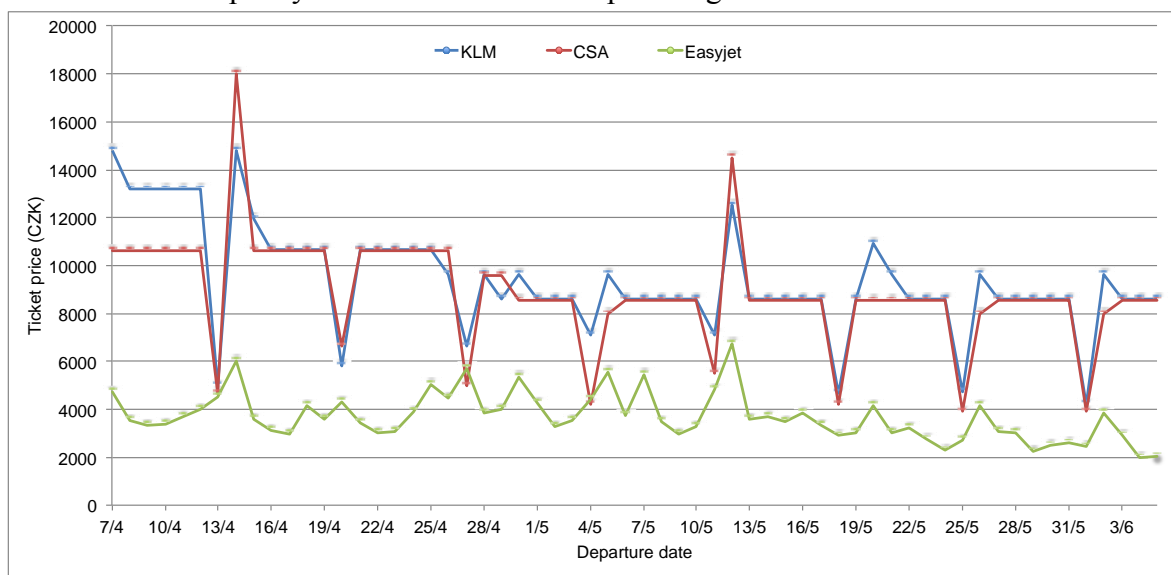
Fig 2 shows the evolution of ticket prices on route PRG-CDG departing 26/10/2012 and returning 29/10/2012. 4 airlines were compared and as some companies offered more flights in a day, the lowest price was chosen. We can see the basic principle differences in pricing strategies of low-cost airlines and traditional carriers. In case of low-cost airlines Easyjet and Smartwings, which use dynamic price strategy, it is possible to see a gradual price increase with the approaching departure. While ticket price with Easyjet has grown gradually from about 2000 CZK to above 5000 CZK, Smartwings kept the same price up to 14 days to departure with increase to price around 9000 CZK. Paradoxically at the beginning Smartwings offered air tickets for higher prices than traditional carriers CSA and Air France.



Source: Authors

Fig. 2 - Ticket price PRG-CDG, departure 26/10/2012, return 29/10/2012

Traditional carriers CSA and Air France use pricing strategies based on capacity allocation, where the company allocates a number of seats in booking classes for a fixed price. Availability of booking classes is managed by the bid price, which is based on the expected demand. Therefore, if the booking velocity does not develop as the system expects, bid price falls. Then it can occur that offered fares are lower closer to the departure. This can be seen in the case of CSA 23 and 6 days before departure. Fares may also be affected by various conditions and rules of reservations, particularly flexible tickets. This could be the reason of huge increase of prices on Air France flights and then significant drop in a few days. Certain number of tickets could be reserved for the flight, which were subsequently not confirmed and capacity of the aircraft was re-opened again.



Source: Authors

Fig. 3 - Ticket price PRG-AMS, 1-day stay

Fig. 3 shows ticket prices on the route PRG-AMS for the next 60 days from 07/04/2013. It is a two-day trip with return the next day. There are compared 3 airlines, two traditional carriers CSA and KLM and one low-cost carrier Easyjet. We can see the effect of some booking restrictions, which is implemented mostly by traditional carriers. Significant difference in creating of pricing strategy between low-cost and traditional carriers is the limitation of the minimum stay in the destination. While, low-cost carriers do not use any restriction, traditional carriers are trying to separate segment of business travelers from leisure travelers by this restriction. Passengers have the opportunity to purchase tickets only at higher booking classes, which higher price is assigned to. In this case, KLM and CSA start a two-day trip in prices about 8500 CZK with gradual price increase closer to the departure into level 10000-13000 CZK. In the contrary Easyjet offers flights on this route without any restriction in the price range from 2000 CZK to 5000 CZK.

Another significant limitation of traditional carriers is Saturday night rule, which can sometimes interfere with the rule of minimum stay. This restriction is designed especially for leisure travelers traveling for short trips during weekend days, and thus they do not have to pay higher fares as business travelers for short stays. It also allows airlines to offer discounted tickets only on weekends combinations, thus avoiding the possibility of buying the tickets by passengers in working days. In Fig. 3 we can see the influence of Saturday night rule on ticket prices, which in the case of combinations Saturday-Sunday are much lower.

Tab. 1 below shows for comparison the average ticket price of three carriers in two different seasonal periods. In the first case flights were monitored in the range of 84 days up to 3 days prior departure with departure on 26/10/2012, hence the season with higher demand, which is more demanded for so-called euro-weekends. In the latter case, ticket prices are collected in the same time frame departing 8/2/2013, therefore, in winter, when airlines struggle with low demand for travelling. In both cases it is the same product, thus departure on Friday and return on Monday.

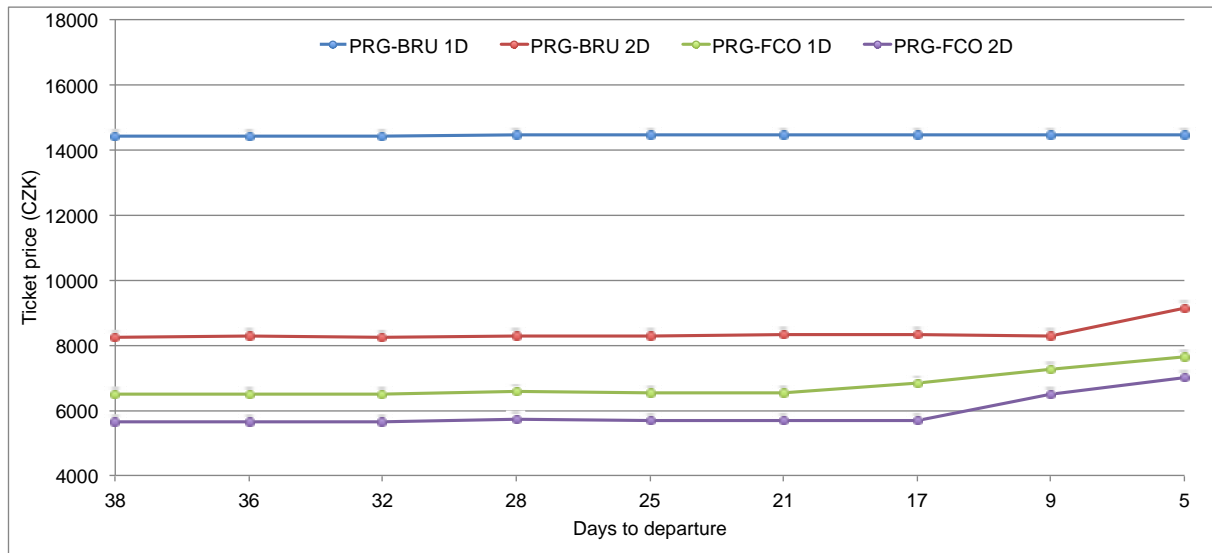
Tab. 1 - Average ticket price PRG-CD

<b>Carrier</b>	<b>Dep. 26.10.2012</b>	<b>Dep. 8.2.2013</b>
<b>CSA</b>	4007CZK	3430CZK
<b>Air France</b>	4647CZK	3475CZK
<b>Easyjet</b>	3593CZK	2441CZK

Source: Authors

Fig. 4 shows price ticket comparison of CSA on two different types of markets. One of the markets is PRG-BRU, which consists of a higher percentage of business travelers. The second market is PRG-FCO, which is specific particularly by high proportion of leisure passengers. This survey was made in the period from 4/11/2012 to 7/12/2012 with departure on 12/12/2012 for one-day and two-day stay at the destination. Blue curve shows the evolution of ticket price on the route PRG-BRU for one-day stay at the destination, red curve for two-day stay, the green curve shows the evolution of ticket price on the route PRG-FCO for a one-day stay at the destination and the purple curve for a two-day stay.





Source: Authors

Fig. 4 - Ticket price PRG-BRU, PRG-FCO, departure 12/12/2012, 1-day and 2-day stay

On the route PRG-BRU the ticket price was much higher in comparison with PRG-FCO in both cases. Ticket price on the route PRG-BRU for one-day stay with the approaching departure did not change at all, has been offered in price around 14400 CZK. Even ticket price for two-day stay with an average 8400 CZK is more expensive than ticket price on the route PRG-FCO for a one-day stay at the price level slightly above 8000 CZK. It is due to the fact that on the PRG-BRU there are a higher percentage of business travelers who are willing to pay more for the ticket than leisure passengers, who comprise most of the passengers on the route PRG-FCO. Ticket price on the route PRG-FCO for one-day stay was offered in price around 6500 CZK with a gradual increase up to 7600 CZK. The paradox is that the direct distance PRG-BRU (724 km) is less than the distance PRG-FCO (922 km). Thus, the operational costs on PRG-BRU are lower than those of the PRG-FCO and revenues on this route are higher.

## CONCLUSION

For any emerging company the primary important decision is to set RM type, which they want to use for managing capacity of seats and ticket prices. The emerging low-cost airline would benefit from a dynamic price strategy and traditional airline from capacity allocation strategy.

The next step for the company is to decide what markets the airline wants to enter. The current aviation market is not perfect, and therefore there will always be some barriers, which the airline must be aware of. These barriers can completely discourage the carrier from entry on the market or affect their pricing strategy. There are many factors that affect pricing strategies, and thus the actual ticket price. Type of market is a very important factor that must be taken into consideration by new company. On the market with larger segment of business travelers the company should offer a better product with higher prices.



Seasonality and peak period are other factors that must be taken into account. The carrier cannot apply the same pricing strategy in summer and winter. For example, in winter when the demand for travel within Europe is low, the carrier should expect lower revenue and offer more discount tickets in order to increase the load factor. Peak periods are short-term events when ticket prices change significantly. Each carrier with rational pricing strategies expects during peak periods increased demand for air travel, which responds to higher prices. Therefore, the new entrant carrier should set in advance reasonable prices in peak periods to avoid selling out the capacity with lower yields. With increased prices carrier should shift price-sensitive passengers to low demanded flights and raise revenue from tickets sold to time-sensitive passengers.

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