

The Effectiveness of Price Discrimination as Pricing Strategy in Low-cost Airline: Case from Southwest Airlines

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Abstract. Price discrimination has become one of the airline industry's most popular and common pricing strategies. The airline industry mainly uses three levels of price discrimination, charging different values for different customer groups. Due to this strategy, airlines can achieve maximum company profits. There are different types of airlines, and in this paper, we focus on the example of a low-cost airline - Southwest Airlines. Discussing the effectiveness of price discrimination as a pricing strategy in a low-cost airline is the primary purpose of this paper. In this paper, we present the essential background, advantages, and recent achievements of Southwest. How the company has successfully used price discrimination is analyzed and demonstrated with a specific example. Finally, it is concluded that for low-cost airlines, price discrimination is good but not necessarily the most effective and that other pricing strategies are to be considered among them.

Keywords: Price discrimination; Airline industry; Southwest Airlines.

1. Introduction

Price discrimination can be seen in most industries. Companies charge different prices to different consumers, and cost differences cannot explain that price difference. All of us are aware that each flight has a different fare structure, and in some situations, the maximum fare can be up to five times higher than the lowest fare. Airlines have found that successful price discrimination can lead to significant gains compared to the standard textbook best single pricing case. Numerous studies have shown that the airline industry uses three-level price discrimination, and airlines have chosen to adopt this pricing approach to maximize profits. Most of the literature has focused primarily on how airlines use price discrimination, in contrast to little focus on the effectiveness of this pricing strategy.

This paper summarizes Southwest Airlines' background, strengths, recent corporate performance, and accomplishments to investigate how Southwest Airlines can successfully use price discrimination and whether this strategy is the most effective for Southwest Airlines' future growth. This question is important because a small company like Southwest Airlines is vulnerable to turnover and profits.

Although the theoretical literature offers useful insights into how airlines use pricing discrimination, it primarily concentrates on the overall airline industry. It does not focus on a particular airline within it to discuss. In reality, competing businesses frequently deal with various general situations, such as the epidemic that devastated the aviation and tourism sectors. Companies sell various products, deal with varied prices, and use various pricing techniques to maximize profits.

In examining Southwest Airlines, this paper compared airfares on the same route at different times to confirm that Southwest utilizes price discrimination pricing. The investigation raised a question regarding whether the airline's use of price discrimination was the most effective. Since Southwest, as a low-cost airline, does not have a significant difference between the highest and lowest prices plus at different points, price discrimination over time is not particularly profitable. Therefore, near the end of the article, there are other relatively more reasonable pricing proposals based on the characteristics of Southwest Airlines.

2. Literature Review

2.1 The Fundamental Definition of Price Discrimination

Price discrimination occurs when the same producer sells the same product or service at different prices [1]. Businesses have discovered that it is beneficial to categorize clients based on how sensitive to demand they are and to treat them differently based on pricing. Consumer heterogeneity may be immediately visible in some circumstances, allowing businesses to set pricing based on contractible consumer attributes. In other cases, heterogeneity is not apparent. However, it can be induced subtly by giving customers a list of available goods and their respective pricing and letting them make their own choices. The fundamental principle of price discrimination is established when the firm has market power, as Varian (1989) explained early on [2]. On the other hand, when markets are entirely competitive and businesses do not possess either short- or long-term market strength, price discrimination is impossible. However, in practice, the economy mostly lies in the middle of these two theoretical extremes, and the majority of economists concur that price discrimination only takes place in an oligopolistic environment.

Price discrimination can be categorized into three types: first-degree, second-degree, and third-degree [3]. The terms "perfect price discrimination" or "discrimination in its purest form" refer to first-degree price discrimination. In order to do this, sellers must charge customers the highest price at which they are ready to part with their money. When sellers charge different prices for specific purchasing volumes, this is known as second-degree price discrimination. Rewards or discounts offered to customers through loyalty cards serve as an example. Sellers who set different pricing for various client categories are known as third-degree price discrimination.

To some extent, the analysis of third-degree discrimination is the major focus of this research because the airline sector practices third-degree price discrimination. The third level of pricing discrimination is shown in Figure 1. Elastic consumers and those who are not are the two segments that make up the entire market. Elastic customers receive the lowest pricing from businesses.

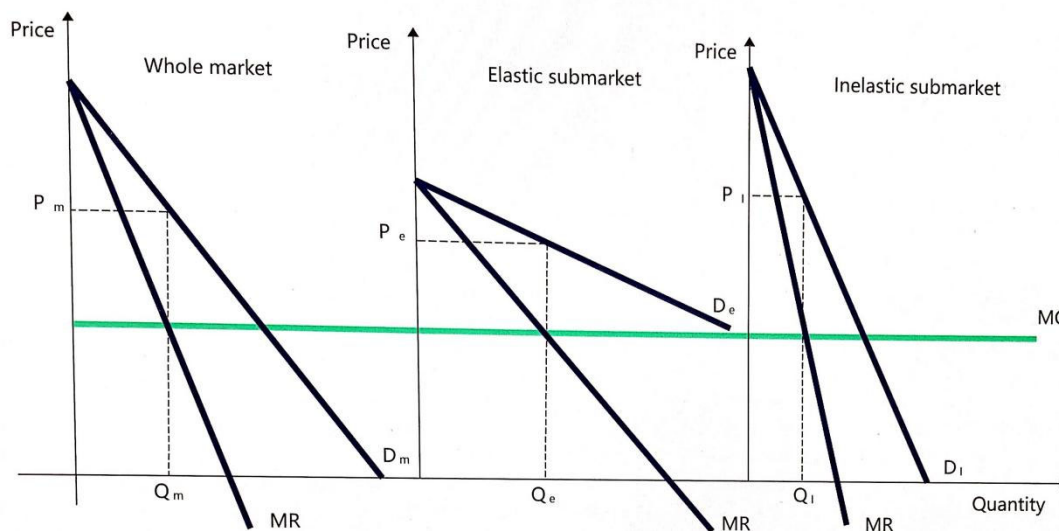


Fig. 1 The third degree of price discrimination

2.2 Price Discrimination in Airline Industry

Price discrimination and dynamic pricing are the two categories of pricing methods used in the airline industry [4]. Dynamic pricing is a marketing strategy that adjusts product pricing based on the state of the market. Price discrimination with in airline business refers to charging passengers varied fares, a practice that is widespread among airlines around the world.

Price discrimination is allowed in the air transportation market. In the airline industry, price discrimination typically takes the following four types: the first is the time of purchasing the ticket, with advance tickets typically being less expensive; second, differential treatment by peak or low

season - prices are higher during peak travel periods, such as weekends or holidays; third, lower prices during off-peak hours, when relatively few people wish to travel; fourth, additional fees, such as tickets with checked luggage or more legroom, are more costly.

To successfully price discriminate, companies need to identify groups of consumers with different elasticities of demand [5]. To do this, they impose various restraints on lower fares, making them undesirable to customers who value accessibility or time more highly and have a lower price elasticity of demand.

3. Case analysis

3.1 Introduction to the Southwest Airlines

3.1.1 Background information

Southwest Airlines is a well-known American airline that was established in 1967 and flew to multiple cities around the 50 states and other regions in the United States. The business is renowned around the nation for its exceptional level of customer service and competitive pricing. This airline, which has its headquarters in Dallas, Texas, in the southwest of the country, serves more American travelers than any other airline due to its vast fleet of planes and its rapid passenger service. This airline employs over 47,000 people worldwide, has the largest fleet of aircraft of any economy or low-cost airline service, and invests the necessary sums in each employee's education to support the corporation's expansion and internal well-being. The mission of Southwest Airlines is to deliver the best possible customer service while demonstrating passion, friendliness, self-confidence, and team spirit [6].

3.1.2 Strength

Offering exceptional customer service at all times is one strategy Southwest Airlines uses to manage its reputation [6]. Regardless of purchase price or seating status, every customer receives first-class service. Southwest Airlines also strives to satisfy its passengers by ensuring that every flight arrives at its destination on time. Aircraft are well maintained to prevent mechanical failures from causing customer service provision delays.

In addition, Southwest Airlines appears to be on the correct path in sustaining the level of quality it has provided during its growth. In extending its operations and service offerings, the business has not compromised the quality of its services. Southwest offers highly affordable flight tickets to customers throughout these periods of growth and expansion or economic downturn. By doing this, the business has ensured that it keeps a sizable and devoted customer base, which has been crucial to maintaining and enhancing its profitability.

3.1.3 Achievement

Southwest is the only low-cost airline to win the Triple Crown (the airline with the highest on-time flight performance, the fewest lost baggage, and the most occasional customer complaints) for five consecutive years. The company concentrates on its customers and offers low fares, which it has to sustain costs. Southwest Airlines (SWA) uses a point-to-point structure to maintain a low-cost system, flying only one aircraft to minimize costs and to secondary airports. Concerning the pricing of air passenger services offered by SWA has always competed with other airlines and has been able to compete effectively in the air service delivery market. SWA is subject to the same government tariffs and taxes, economic factors such as the cost of capital, exchange rates, and other miscellaneous economic factors that affect other airlines. SWA was ranked as the second-best American airline of 2022 by The Points Guy, with its best performance in bag or change fees, award availability, and customer satisfaction. Due to its Rapid Rewards program, it was also the best performer in terms of award availability. Southwest Airlines reported \$21.152 billion in revenue for the year that ended June 30, 2022, an increase of 114.39% from the previous year.

3.2 Implementing price discrimination

3.2.1 Southwest Airlines use price discrimination to maximize profit

Southwest Airlines uses price discrimination to price airline tickets in its markets. Price discrimination relies on changes in customers' willingness to pay and is generally designed to capture consumer surplus in the market [7]. This surplus arises because, in a market with a single clearing price, specific buyers representing a small price-elastic fraction will be willing to pay a higher price than the single market price. A portion of this surplus is given away from the consumer to the producer as a result of price discrimination.

Southwest Airlines has determined that there are various market consumer groups, each with a distinctive demand curve. Southwest Airlines knows that every trip carries a mix of passengers, some on business and some on vacation. Southwest uses the inverse elasticity pricing rule (IEPR), which equates marginal revenue with marginal cost, to establish fares for each category of traveler to maximize profitability. Southwest will maximize earnings by charging 2.63 times more for a business trip ticket than a vacation ticket. The marginal cost will determine the precise cost of the tickets [8]. The company's emphasis on cost reduction and cost control is one factor that contributes to its profitability and market share. Southwest Airlines operates the largest single-source Boeing aircraft fleet in the world, distinguishing it from its rivals [9]. Because Southwest does not offer direct flights to significant international destinations, which would necessitate longer flight distances and additional fuel storage, the Boeing 737 has proven to be the ideal aircraft to operate.

Southwest operates a single Boeing 737, whereas other airlines may operate as many as ten different models and types of aircraft. This results in cost-saving measures, such as the requirement to train mechanics for just one type of aircraft and the inventory of supply parts being restricted to the needs of one aircraft type. In addition, because flight and ground crews are already accustomed to the aircraft, switching crews or aircraft at a moment's notice does not pose issues. In contrast to its rivals, Southwest has a point-to-point method of service that employs a hub-and-spoke strategy. As a result, the airline can provide more flights in a particular area of the United States for less money [10]. Flying from point A to point B, loading passengers, and then flying back from point B to point A is how the business operates. Because the aircraft crews above the ground are accustomed to operating Boeing 737s, ground times in this manner are minimal, and flight periods are roughly equal (weather permitting). Additionally, this reduces fuel consumption and improves departure time effectiveness. Southwest Airlines has shown that a point-to-point system is more cost-effective than competitors' hub-and-spoke service models and can increase aircraft and terminal facility utilization [10]. The principal goal of the profitable strategy is to provide clients with a high-quality service at a cheaper cost than the competitors. Since its start, Southwest Airlines has used a cost leadership approach. Senior management of the company initially wanted to take market share; hence flights had to be inexpensive. This tactic has lasted until the present day, and many passengers believe Southwest Airlines to be the most affordable airline (Forbes).

3.2.2 Specific cases of price discrimination

Using a week in October 2022 as an example, a randomly selected one-way trip from Los Angeles, California (LAX) to Philadelphia, Pennsylvania (PHL) on Monday, October 3rd (weekday) will cost between \$300-\$430. However, on Saturday, October 8th (weekend), the same trip would cost \$253-\$383. Weekday fares on this particular route are more expensive because it is widely assumed that customers who purchase weekday tickets travel for business purposes. Their demand is inelastic because they have to work in Pennsylvania [11]. They are more inclined to pay a greater price since they have no other option.

On the other hand, because more people travel on weekends for leisure, weekend tickets are typically less expensive. If the cost is too high, they will pick a more reasonably priced alternative. Because of their elastic demand, airlines may charge them less. It is also important to keep in mind that Southwest Airlines, like other airlines, charges different prices depending on the time of day:

flights in the very early morning and late at night are less expensive than those in the relatively convenient afternoon because there is less demand for those times of the day.

3.3 Recommendations

As we can see from the examples mentioned above, even if Southwest had adopted a pricing strategy of price discrimination, it did not reach an unacceptable level for its passengers (the difference between the highest prices was only \$47). The small difference in the number of remaining tickets shown on the booking page of the official website indicates that Southwest was relatively successful in using a reasonable pricing strategy of price discrimination within a specific range [12].

At some point in its early years, Southwest was not only denounced as an airline for not operating according to common industry practices but was also considered by economists and airline industry experts not to have a robust business model. However, in order to meet the demands for affordable, dependable air travel, its unique business model experienced tremendous success. It is widely recognized as a template that other airlines have attempted to follow when developing their strategic plans. Because of its low cost, the company is now a role model for the industry, and other companies are trying to replicate its innovative strategy. The "Southwest Effect" is the name given to the Southwest Airlines strategy.

If one wants to continue growing market share in the airline industry, in addition to maintaining its main competitive advantages-low-cost, strategy and innovative business model-there are options to keep up with the times, such as Southwest Airlines can partner with other companies to bundle and for the vacation and leisure customer population, enable them to vacation at a lower price. For example, Disney World has partnered with airlines, rental companies, and resorts to give customers the best deal and experience while also improving the company's profitability.

4. Conclusion

The behavior of charging different rates to various customers for indistinguishable goods or services is referred to as price discrimination. These different prices cannot be justified solely based on differences in the products' costs. Many studies have shown that price discrimination is practiced in the airline industry. This thesis aims to discuss whether price discrimination is effective for low-cost airlines.

We can see the excellent business performance of Southwest Airlines through the data of Southwest Airlines and its recent achievements. The minimal number of tickets remaining after two weeks for tickets released on the official website also confirms that Southwest Airlines has successfully used price discrimination as a pricing strategy. However, we need to note that the competition in the general environment gives it no clear advantage. Other external factors, such as the epidemic, are also an obstacle for Southwest Airlines to go further. Therefore, finding more innovative strategies and models would be more effective than price discrimination while maintaining the original advantages-providing low-cost and reliable air travel.

However, the lack of a detailed analysis of other proposed pricing strategies is a limitation of this paper. In addition, the lack of careful analysis of the competitive environment was also a shortcoming, as the airline industry was recovering after being affected by the epidemic. Even in 2022, Southwest Airlines ranks second in the ranking of the best U.S. airlines, behind Delta, the turnover, which is not very conspicuous, is still noteworthy.

References

- [1] Varian H R. Differential pricing and efficiency. First monday, 1996.
- [2] Varian H R. Price discrimination. Handbook of industrial organization, 1989, 1: 597-654.
- [3] Philips L. The economics of price discrimination. Cambridge University Press, 1983.

- [4] McAfee R P, Te Velde V. Dynamic pricing in the airline industry. Handbook on economics and information systems, 2006, 1: 527-67.
- [5] Cowan S. Third-degree price discrimination and consumer surplus. The Journal of Industrial Economics, 2012, 60(2): 333-345.
- [6] Gittel J H, Fields A. The southwest airlines way. McGraw-Hill Audio, 2004.
- [7] Hinz O, Hann I I H, Spann M. Price discrimination in e-commerce? An examination of dynamic pricing in name-your-own price markets. Mis quarterly, 2011: 81-98.
- [8] Oum T H, Waters W G, Yong J S. A survey of recent estimates of price elasticities of demand for transport. Washington, DC: World Bank, 1990.
- [9] Gudmundsson S V. Limits to the low-cost niche? Sustainable strategies for low-cost long-haul airlines. 2019.
- [10] Cook G N, Goodwin J. Airline networks: A comparison of hub-and-spoke and point-to-point systems. Journal of Aviation/Aerospace Education & Research, 2008, 17(2): 1.
- [11] Puller S L, Taylor L M. Price discrimination by day-of-week purchase: Evidence from the US airline industry. Journal of Economic Behavior & Organization, 2012, 84(3): 801-812.
- [12] Muduli A, Kaura V. Southwest Airlines Success: A Case Study Analysis. BVIMR Management Edge, 2011, 4(2).