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HEDGE AGREEMENT IN AVIATION INDUSTRY

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ABSTRACT

Fuel costs constitute the largest cost item among operational costs in airline companies. Depending on the exchange rate changes in the world, fluctuations occur in fuel prices as a result of events beyond the control of the industry. As a result of these fluctuations, airline companies may be exposed to the risk of high fuel prices. In order to avoid this risk, airline companies can eliminate price uncertainty that may arise in the future and keep fuel costs under control by hedging.

The purpose of this research is to explain the Hedge agreement, which is used to eliminate the uncertainties in fuel prices in the aviation industry and the potential risks that may arise as a result of these uncertainties and examine the most commonly used hedging methods. It is a study created by systematically and impartially examining original studies published in the field, evaluating the validity of the studies found, and synthesizing and combining them.

Keywords: Airline Industry, Aviation, Hedge Agreement, Fuel Agreement, Fuel Prices

Jel Codes: D40, E47, F17, G10.

HAVACILIK SEKTÖRÜNDE YAKIT SÖZLEŞMESİ

ÖZ

Havayolu işletmelerinde yakıt maliyetleri, operasyonel maliyetler içerisindeki en büyük maliyet kalemini oluşturmaktadır. Dünyada meydana gelen döviz kuru değişimlerine bağlı olarak işletme kontrolü dışında kaynaklanan olaylar neticesinde yakıt fiyatlarında dalgalanmalar meydana gelmektedir. Bu dalgalanmalar sonucunda havayolu şirketleri yüksek yakıt fiyatı riskine maruz kalabilmektedir. Bu riskten korunmak amacı ile havayolu firmaları hedging yaparak gelecekte ortaya çıkabilecek fiyat belirsizliğini ortadan kaldıracak ve yakıt maliyetlerini kontrol altında tutabilir.

Bu araştırmanın amacı havacılık sektöründe yakıt fiyatlarındaki belirsizlikleri ve bu belirsizlikler sonucunda doğabilecek potansiyel riskleri ortadan kaldırmak için kullanılan Hedge sözleşmesini açıklamak ve en sık kullanılan riskten korunma yöntemlerini incelemektir. Alanda yayımlanmış orijinal çalışmaların sistemli ve yan tutmadan incelenmesi, bulunan çalışmaların geçerliğinin değerlendirilmesi ve sentezlenerek birleştirilmesi ile oluşturulmuş bir çalışmadır.

Anahtar Kelimeler: Havayolu Sektörü, Havacılık, Hedge Sözleşmesi, Yakıt Anlaşması, Yakıt Fiyatları

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INTRODUCTION

In a dynamic sector, airline companies operating in the international arena strive to maintain their existence in the face of increasing competition conditions and rivals with globalization (Kaya and Kendirli, 2018: 115). Due to the deregulation in the airline sector, there has been a greater increase in competition since the 1980s (Berghöfer and Lucey, 2013: 1). The increase in competition has made it difficult for airline companies to pass on their costs to consumers (Turner and Lim, 2015: 54).

Fuel prices are the biggest expense for airline companies and they change in direct proportion to the changes in oil prices (Rodoplu and Turgut, 2019: 424), and this change causes more difficulties for airline businesses (Berghöfer and Lucey, 2013: 1), and a decrease in operating incomes. As a result of the reductions in revenues, businesses have difficulties in maintaining their effectiveness, and companies that are in a financially weak situation may go into bankruptcy (Kaya and Kendirli, 2018: 115).

As a result of exchange rate changes, companies had to be cautious due to the negative situations they might encounter in fuel purchases (Rodoplu and Turgut, 2019: 424) While foreign currency derivatives were used to prevent exchange rate changes in the past, in the late 1980s, airlines began to hedge against the fuel risk (Berghöfer and Lucey, 2013: 1). Companies resort to a number of ways to reduce fuel use. While many airlines have refurbished their fleets and made changes to aircraft for fuel efficiency, other companies have even chosen to replace aircraft seats, catering carts and television screens with lighter ones to reduce the cost of fuel due to weight. However, these developments could not provide efficiency against the increasing jet fuel expenses of airline companies (Turner and Lim, 2015: 54).

Airlines take advantage of a number of agreements by resorting to risk management methods in order not to be more affected by rising fuel prices (Lim and Hong, 2013: 33). Some companies can eliminate the uncertainty in prices for the future by applying the hedging method, which is one of these risk management agreements (Kaya and Kendirli, 2018: 115).

The primary purpose of fuel risk is to reduce a business's exposure to unexpected fluctuations in the price of fuel (Lim and Hong, 2013: 33). Hedging benefits the company's value (Berghöfer and Lucey, 2013: 1).

1. Conceptual Framework

1.1. Currency

Currency is the payment method used to make payments across national borders. The conversion of a national currency to another national currency is foreign exchange transactions. Exchange rate is the exchange value between two national currencies (Rodoplu and Turgut, 2019: 424).

An increase in the exchange rate against the national currency will cause an increase in many expenses of the companies (Rodoplu and Turgut, 2019: 427). In other words, the increase in exchange rate fluctuations will create uncertainty for exchange rates in the future and this change will emerge as a risk factor (Öztürk and Acaravcı, 2006: 199).

1.2. Oil and Petroleum Prices

Petroleum is one of the most traded assets in the world (Kaya and Kendirli, 2018: 115), and is the most utilized energy source (Solak, 2012: 117). Oil has an important role in trade because it is found in many products used in daily life (Yeğin, 2010: 30).

Political-political and economic events occurring in the world affect oil prices (Rodoplu and Yavuz, 2019: 647), and oil prices greatly affect the country's economies (Solak, 2012: 117). In airline companies, oil prices are one of the main inputs of aircraft fuel (Rodoplu and Turgut, 2019: 426). Since jet fuel, gasoline and some essential products are obtained from crude oil derivatives, the use of petroleum is quite high and its trade is undeniably important. The fact that it is an energy source that is depleted over time makes oil valuable, and fluctuations occur in

its price as a result of events occurring in the producing countries (Kaya and Kendirli, 2018: 116). Avgas (aviation gas) and jet fuels are aviation fuels derived from petroleum. Avgas is the type of fuel used in propeller-powered aircraft and jet fuel is used in jet (turbine) powered aircraft (Rodoplu and Yavuz, 2019: 646). Although airline companies can respond effectively to the ever-increasing costs of jet fuel, they have difficulty in planning their expenses due to constant and irregular price changes (Turner and Lim, 2015: 55). Companies that want to survive in the competitive environment created by the threat of market entry, the existence of low-cost airlines, face a number of difficulties with variable and increasing fuel costs, despite using price differentiation strategies and customer loyalty programs to increase revenues and profits in addition to increasing resource use. It uses derivative products in order to eliminate risks. (Lim and Hong, 2014: 34).

Companies benefit from hedging management against these fluctuations in order not to experience variability in their expenses and to be protected from price increases (Rodoplu and Yavuz, 2019: 647). Hedging involves the tendency of companies to adhere to considerations of price changes in future periods. (Stultz, 1996: 10). Hedging costs are estimated to account for one percent of airline fuel costs. (Rao, 1999: 40).



Figure 1. 1-year change of dollar exchange rate (<https://dovizgrafik.com/kur/dolar>)

When worldwide oil consumption is examined, in a day ;

- in 2020, 92.2 million b/d
- in 2021, 97.26 million b/ds
- in 2022, 99,9 million b/d
- in 2023, 101.9 million b/d
- in 2024, Consumption is forecast to rise to an average of 102.8 million b/d (EIA, 2024)

1.3. Risk

Risk is the probability that an event will occur, and that event will be affected by the situation. Since the aviation industry operates on a global scale, it is affected by exchange rate changes and the risk factor comes to the fore (Rodoplu and Turgut, 2019: 426). Airline companies are faced with risks caused by negative fluctuations in foreign exchange prices and jet fuel prices (Carter et al., 2006: 56). The aviation industry is full of risks, and the price of jet fuel is one of its biggest risks (Crandall, 2008: 1). Fuel price risk applies to all airlines, not just the currency price risk applied to relatively small airlines in global markets (Carter et al., 2006: 56).

Since oil prices are traded in US dollars, non-US businesses face high exchange rate risk because they use other currencies. Companies that do business on an international scale do not try to protect themselves from risk because they are not aware of the risk they will face or because they are ignorant of the methods of protection. Some businesses, on the other hand, are aware of the risk they take and benefit from existing hedging methods at different levels (Rodoplu and Turgut, 2019: 426). Hedging aims to reduce the likelihood that a company's cash flows will face a fundamental risk (Treanor et al. 2014: 6).

1.3.1. Risk Management

Risk management is a way of keeping instabilities and their negative effects at a more appropriate degree. Risk management is the process of planning and implementing actions that minimize the likelihood and impact of risks before they cause problems and dangers. For airline companies, oil prices are one of the main inputs of aviation fuel and are an important risk factor. Due to recent changes in oil prices, companies must manage this risk frequently (Rodoplu and Turgut, 2019: 429-426). Companies use hedging methods in order not to be affected by the risks that occur due to increasing indecision or to fix the impact at a minimum level (Rodoplu and Yavuz, 2019: 649).

In order to be protected from exchange rate risk, companies benefit from different financial means depending on the type of risk. As a result of the continuous increase in the change in the exchange rate, new financial and hedging ways have emerged. The objectives of foreign exchange risk management are; The survival of the company is to increase profitability, reduce taxes, reduce changes in returns and increase the market value of the company (Rodoplu and Turgut, 2019: 429).

1.3.2. Reasons for Hedging

Changes in interest rates and exchange rates that have changed in recent years increase the liquidity and credit risk, resulting in an increase in expenses. Due to these increase in expenses, it was necessary to take measures to prevent the risk. The biggest problem in this regard is that airline operators cannot control fuel expenses unlike other operating expenses. The fact that the largest expense of the enterprise is beyond its control constitutes a significant risk for the enterprise. Businesses should regularly implement hedging methods to prevent or minimize these risks (Rodoplu and Turgut, 2019: 426-429).

Because of jet fuel risks, airlines have resorted to fuel hedging methods to stop facing incremental changes in this fuel expense. The problem with the fuel is not the expense, but the fluctuations in the expense (Turner and Lim, 2015: 55). Companies that are financially weak may come to the point of bankruptcy (Daigler, 1984: 33). So hedging, is a tactic used to keep the risks that may occur in the future at the lowest level. Thus, possible increases or decreases in future periods will be predicted and cash inflows and outflows will be controlled (Korkmaz, 1999: 7). Hedging risk by eliminating uncertainties is the main goal in hedging practice (Kaya and Kendirli, 2018: 119).

1.3.3. Hedging

Hedging, which means transferring risk and hedging (Rodoplu and Turgut, 2019: 429), can be defined as "making an agreement" in order to prevent major losses that may occur in the future and to determine the profit to be obtained, can also be expressed "a way used to eliminate the fluctuations in the current and future cash inflows and outflows of a company" (Kaya and Kendirli, 2018: 117). In the Oxford dictionary, hedging is expressed as "precaution against possible losses", in other words; It is a way of keeping the risk that may occur due to changes in the exchange rate by minimizing it with a minimum effect on the operating profit (Rodoplu and Turgut, 2019: 429).

Airline companies apply the method that the industry describes as hedging to protect their fuel expenses. Hedging is a method of fixing fuel price expenses to be taken in the future and prevents companies from being exposed to unexpected extra expenses (Rodoplu and Yavuz,

2019: 648), reduces the financial risk of the business by minimizing or eliminating possible losses (Rodoplu and Turgut, 2019: 429), and expense changes that may occur as a result of exchange rate changes in the future, and provides a safer cost structure (Rodoplu and Yavuz, 2019: 649).

Since increases in ticket prices will cause passenger loss in the competitive aviation sector, airline companies cannot shift the increase in fuel prices towards passenger ticket prices (Rodoplu and Yavuz, 2019: 648). With hedging, companies make it possible to predict the fluctuations that may occur in the exchange rate, to eliminate the changes in prices and to secure the cash flow (Kaya and Kendirli, 2018: 118).

Although making a hedging agreement is a method used to minimize risks for companies and to protect themselves from fluctuations in fuel prices, unforeseen decreases can cause companies to lose. However, hedging agreements to be made with the right predictions not only increase the earnings of the airline companies, but also offer the company a chance to stand out against the competitors (Kaya and Kendirli, 2018: 123). In other words, with hedging agreements made by managers who can predict the future well, companies are protected from changes in expenses and earnings can be increased, but hedging agreements that are not made correctly can cause companies to experience losses (Rodoplu and Yavuz, 2019: 649).

Companies can hedging through trading assets such as interest rates, stocks, different currencies and bonds, as well as hedging through assets such as oil, petroleum products, natural gas, electricity, precious metals, agricultural and animal products, and this exchange can be carried out in two ways;

Hedging tactic with short exposure; It is an investor's giving his product, which he expects will decrease in price, with a futures contract, aiming to protect it from risk. Hedging tactic with a long position in the futures market; It is applied as a result of the goal of protecting the property against an anticipated increase. With a long position, the investor gains in case of an increase in the price of his product, and in case of a decrease in the price of the product, he experiences a loss. With the increase in the product price, the futures price also increases and the futures position gains (Kaya and Kendirli, 2018: 117).

Other reasons airlines use hedging:

- Businesses get the capacity to control their spending.
- It shields the company against unpredictability in fuel prices during war, infectious disease outbreaks, and terrorist attacks.
- It enables the desired amount of fuel to be purchased by controlling the budget.
- It aids in lessening market swings in gasoline prices.
- It enables the organization to prepare for future pricing, net incomes, and net earnings and to accomplish its objectives.
- It makes it possible to get rid of circumstances that might arise and are out of the company's control.
- Airlines are able to forecast future earnings and cash inflows, giving investors the chance to make the proper investments when they want to. (Rodoplu and Yavuz, 2019: 649).

2. Hedging Practices in Airline Companies

Since the aviation industry is competitive and cost-intensive, businesses have difficulties in increasing their earnings. In order to increase their earnings, businesses benefit from various cost strategies. Some of those can be listed as;

- a) Renting a plane or buying an outdated model while buying a new one,
- b) Maximizing flying schedules to cut down on grounding expenses
- c) Converting variable costs to fixed costs
- d) Rearranging seats to accommodate more passengers
- e) Setting the price of fuel (Öncü et al., 2010; 49-52).

2.1. Hedging Stages in Airline Business

The stages of hedging are as follows:

- The business choose whether or not to take risks.
- The risk element and justification for taking the risk are decided by the company. (For example, the possibility of price fixing as a safeguard when fuel prices rise.)
- The risk's magnitude is established. How much gasoline is needed, and how much of it should be used to assume the risk?
- The decision to use hedging or not is made by the business that assumes the risk.
- If the company decides to use hedging, it selects the position (long position or short position) it will use.
- Experienced companies' applications (like Southwest and Lufthansa) are reviewed.
- Businesses that experience losses investigate the causes of those losses (Switzessair).
- A policy for mitigating risks is established. Whether it will be applied to all risks or just a subset of them is decided.
- The size of the hedge is decided. To what extent will the amount of fuel to be used be protected?
- A measurement is made of the detected size's cost to the business.
- The budgeted amount for hedging is established. It becomes clear how risky budget variability is.
- Which unit will manage the hedging is decided (Finance, Management).
- An inventory of previous expenses is made. The kind of hedging that will be done is decided.
- The best buying strategies for upcoming times as well as any potential time and money constraints are identified.
- The company's key personnel are assigned to determine the details of the risk transfer (Rodoplu and Turgut,2019: 431).

3. Risk Methods

Hedging allows airlines to buy fuel at a more reasonable price when jet fuel is sold at higher prices. There are 5 types of the most frequently used risk methods by airline companies:

- Simple Swap (Swap Contracts)
- Differentiated Swap and Core Risk
- Buy Option
- Zero Cost Price Limitation and Premium Price Limitation
- Futures Contracts (Rodoplu and Turgut, 2019: 432).

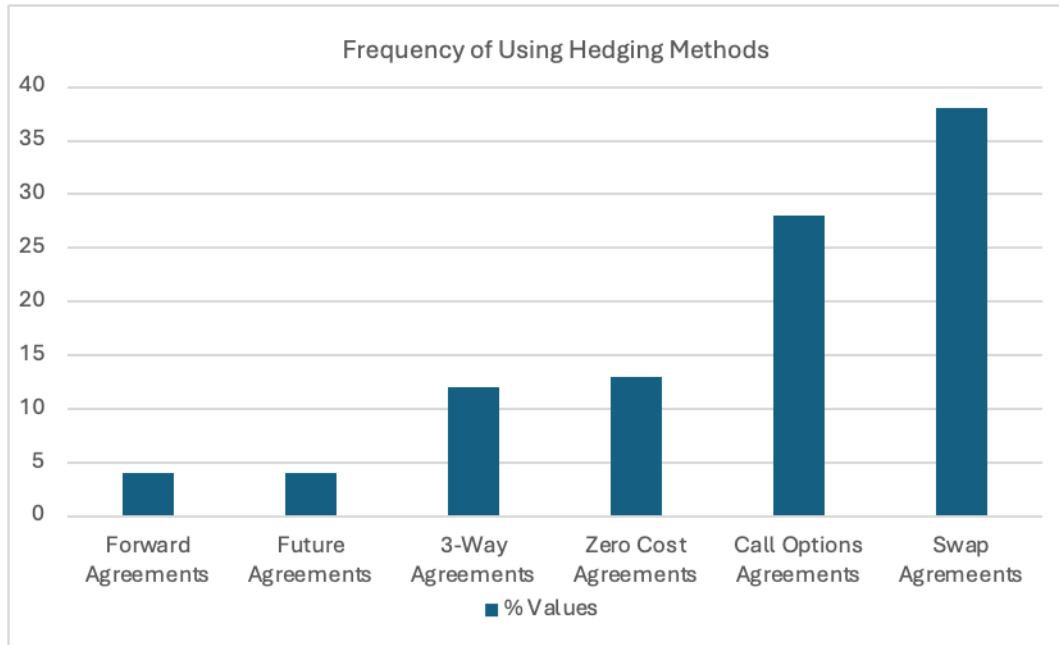


Figure 2. The Most Used Hedging Methods for Fuel Purchases by Airlines (Battal and Mühim, 2016)

3.1. Simple Swap

Swap contracts are financial transactions in which the predetermined payment plans of two or more parties, which have competitive advantages in markets with different credit assets, are exchanged in a way that will benefit the parties (Rodoplu and Yavuz, 2019: 650).

The aim is to exchange a fixed price and a variable price between the two parties within the specified period (Crandall, 2008: 15-16). One of the parties pays the determined price to the other party at certain times, while the other party receives payment at a fixed price, which is not fixed according to the market situation, at this determined time. These payments can be made in cash (Rodoplu and Turgut, 2019: 432), mostly monthly and sometimes in annual periods covering three months or six months (Rodoplu and Yavuz, 2019: 650). Since one party wins and the other party loses in barter agreements, the ultimate goal of the parties is to make agreements in which they are in the winning position, and it is important that the parties have different perspectives in terms of price changes that may occur in goods (Crandall, 2008: 15). In swaps, the instrument covers cash inflows and outflows based on a notional amount of principal, such as a loan or bond, although the instrument can be anything (Zhang, 2019: 30). Since airlines want to reduce the fluctuations in jet fuel prices (Crandall, 2008: 15), they try to avoid the fuel price risk by paying more fixed prices in such agreements (Rodoplu and Turgut, 2019: 432), and can make swap agreements for jet fuel (Crandall, 2008: 15).

3.2. Differentiated Swap

Differentiated (differential) barter, unlike simple barter, is based on real price differences of two different products that change over time, not on fixed and variable price differences for a single product (Rodoplu and Turgut, 2019: 433), and by companies this swap base (base) risk is used to manage other hedging activities (Rodoplu and Yavuz, 2019: 650). When the airline chooses

the heating oil using a simple swap (Rodoplu and Turgut, 2019: 433), and additional contract can be applied to avoid the floor risk caused by the heating oil swap, thus avoiding the risk of jet fuel increasing more than the heating oil price (Rodoplu and Yavuz, 2019: 651). In such mutual protection methods, the base risk is a concern to be considered (Rodoplu and Turgut, 2019: 433).

3.3. Call Options

Option contracts are contracts that give the right to buy or sell a certain amount of goods at a predetermined price in the future. The buyer has the right to buy or not to buy the agreed asset at a certain price (Rodoplu and Tugut, 2019: 433), but he is not obliged to buy the option (Rodoplu and Yavuz, 2019: 651).

The most important advantage of the agreement (Rodoplu and Tugut, 2019: 433), is that the party who buys the option has the right to exercise the agreement or not, unilaterally (Rodoplu and Yavuz, 2019: 651), and is obliged to pay the option seller the right of withdrawal as the withdrawal price (Rodoplu and Tugut, 2019: 433). The airline's ability to limit the high prices of jet fuel, which is expected to increase in the future (Crandall, 2008: 18), and the last basic vehicle option agreements that can be used as a precaution against fuel expenses (Westbrooks, 2005: 22).

There are two types of options: call and put options. It offers the call option holder to buy at a price referred to as the strike price, while the put option gives the holder the opportunity to sell an item at a specified strike price (Zhang, 2019: 29).

3.4. Price Limits with Zero Costs and Price Limit with Premium

With this method, which is a combination of call and put options, the product in the put option is sold at a price lower than the market value and a call option is bought at a price above the market value (Rodoplu and Turgut, 2019: 433). The party buying the call option tries to protect the product from price increases that may occur above a certain price during the option expiration (Rodoplu and Yavuz, 2019: 651), and with this method, a price elasticity between the lowest and the highest is created for the product during the option expiration date (Rodoplu and Turgut, 2019: 433).

Zero cost; While the premium obtained with the sale of the put option exactly coincides with the selling cost of a call option, the premium; It occurs in case of cash inflow and outflow obtained by selling the option premium purchased from the put option and is used more frequently than zero cost (Crandall, 2008: 18).

3.5. Futures Contracts

A futures term is a term used for a contract in which two or more parties exchange an agreed time and price for a product (Westbrooks, 2005: 22). Futures agreements are legal agreements to buy and sell a product at a future date at a predetermined price (Zhang, 2019: 28). Futures are mostly traded through exchanges that set standard deals, making them a convenient deal for hedging and trading (Morrell and Swan, 2006: 6). While the buyer has an obligation to buy the product, the seller has an obligation to sell the product (Rodoplu and Yavuz, 2019: 651).

Companies and investors use futures contracts as a hedge against foreign exchange risk and to fix the price on a future product purchase (Zhang, 2019: 28). These contracts are a different investment method that airlines can use to protect their fuel costs, and mostly the institutions that contract with the airlines are investment banks (Westbrooks, 2005: 22). The ability to be traded over a long period of time, such as eight years, and thus a long-term hedging strategy, is one of the contributions of futures contracts (Crandall, 2008: 26).

There are two types of futures transactions: Forward and Future (Rodoplu and Yavuz, 2019: 651). Forward means to oblige a product to be sold between two parties at a fixed price in the

future, this fixed period is called maturity. These forward contracts traded on the principal exchange are (Zhang, 2019: 28), "over-the-counter" contracts between two parties that one party purchases from the other party at a fixed future date and at a fixed price (Morrell and Swan, 2006: 6). Because the parties to these contracts are mostly individuals, bankers can put airline companies at risk of not complying with the agreement (Westbrooks, 2005: 22). Like forward contracts, futures contracts are a legal agreement that provides for the delivery of the determined product at a determined future time and at a determined price (Rodoplu and Turgut, 2019: 433). In its nature, the price of the purchase and sale to be made in a future time period is determined at an early date and an agreement is reached (Rodoplu and Yavuz, 2019: 651).

A company that buys this contract does not have to wait until the expiry date to close the deal (Rodoplu and Turgut, 2019: 433), and since it can close the contract with a reverse transaction at any time (Rodoplu and Yavuz, 2019: 651), these contracts are highly liquid protection methods (Rodoplu and, Turgut, 2019: 434).

RESULTS

This study examines what precautions airline companies take against fluctuations in fuel costs and their resulting effects on the companies' financial situation. After globalization and deregulation in the world, competition has increased in airline companies. In order to maintain their existence and cope with their competitors, companies have to keep their costs, which increase with competition, at a minimum. An airline's biggest cost item is fuel costs. Fuel prices may increase or decrease depending on the exchange rate. These fluctuations in fuel prices leave companies in a difficult situation and cause reductions in their low profitability. These fluctuations, which occur outside the control of the airlines, are an important risk factor for the company. For this reason, companies resort to a number of methods in order to protect themselves from the risks that may arise from these fluctuations and to fix the fuel costs at a certain level in order to minimize them. While some airlines, such as Delta Airlines, choose to purchase oil refineries, some airlines can avoid exposure to fluctuations in fuel prices by making hedging contracts. These contracts should be implemented with maturities not exceeding one year and by making an accurate forecast. Otherwise, it may harm the airline companies and even cause them to go bankrupt. Hedge contracts, if used with the right foresight, are an important hedging method and prevent the airline from extra fuel costs by eliminating the price uncertainty against future fuel price increases, making it possible to purchase fuel at the price determined during the agreed term.

Airline companies should use future hedging strategies more effectively and consciously to become more resilient to changes in fuel costs. As a result, changes in fuel costs are a major source of risk for airline companies, and managing this risk correctly is of great importance to maintain the financial stability of companies. Hedging strategies, when used with correct predictions, enable airline companies to avoid unwanted extra costs by preventing them from encountering uncertain fuel prices in the future. Future studies should also conduct a more detailed study on the effectiveness of different hedging strategies of airline companies and evaluate the effects of these strategies on long-term financial performance.

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EXTENDED ABSTRACT**GENİŞLETİLMİŞ ÖZET****HAVACILIK SEKTÖRÜNDE YAKIT ANLAŞMASI**

Giriş ve Çalışmanın Amacı (Introduction and Research Purpose): Havayolu şirketlerinin en büyük operasyonel giderlerinden biri olan havaaracı yakıt fiyatlarında döviz kuruna bağlı olarak dalgalanmalar meydana gelmektedir. Dünyada meydana gelen siyasi-politik ve ekonomik olaylar petrol fiyatlarını, petrol fiyatları ise ülke ekonomilerini önemli ölçüde etkilemektedir. Küresel ölçekte hizmet veren havayolları kur değişikliklerine karşı oldukça savunmasızdır ve bu dalgalanmalar şirketler için bir risk unsuru oluşturmaktadır. Risk yönetimi ile belirsizlikler ve bu belirsizliklerin meydana getireceği olası olumsuz durumların optimum bir derecede tutulabilmesi mümkün olabilmektedir. Döviz kuru risk yönetimi ile şirketler, varlıklarını sürdürmek, karlılıklarını arttırmak, şirketin pazar değerini arttırmak, rakiplerine karşı rekabet avantajı elde etmek ve yakıt fiyatlarındaki belirsizliği ortadan kaldırmak amacı ile bir takım korunma yöntemlerine başvurabilmektedir. Şirketler açısından önem teşkil eden sorun, yakıt maliyeti yerine, maliyette meydana gelen değişikliklerdir. Riski transfer etme veya riskten korunma anlamına gelen Hedging temel olarak, bu belirsizlikleri ortadan kaldırarak risklere karşı önem almayı hedeflemektedir. Havayolu şirketleri de hedging yöntemi ile yakıt giderlerini sabitlemek ve ortaya çıkması muhtemel ekstra giderlerle karşı karşıya kalmamak amacı ile döviz kurunda meydana gelen dalgalanmaların neden olacağı olası zararları ve maliyetleri minimum düzeye indirmeyi ya da ortadan kaldırmayı hedeflemekte ve daha güvenli bir maliyet yapısına sahip olmayı mümkün kılmaktadır. Şirketler için basit takaslama, farklılaştırılmış takaslama, satış opsiyonları, sıfır maliyetli ve primli fiyat sınırları ve vadeli işlem sözleşmeleri en sık kullanılan riskten korunma yöntemlerindedir.

Basit takaslama yöntemi; sabit olan ve farklılık gösteren ödeme planlarının değiştirilmesi fonksiyonları için tercih edilirken, farklılaştırılmış takaslar, çeşitli ürünler arasındaki farklı fiyatların göz önünde bulundurulmasıdır. İleri bir dönemde saptanmış bir fiyat üzerinden satın alma fırsatları alım opsiyonları ile mümkün hale gelir. Sıfır maliyetli ve primli fiyat sınırları yöntemi ile şirketler fiyat değişikliklerinden korunabilirken, Vadeli işlem sözleşmeleri ile ileri dönemlerde ürünlerin belirlenen bir fiyat üzerinden alım/satım işlemlerine olanak vermektedir.

Kavramsal/kuramsal çerçeve (Literature Review): Bu çalışma ve daha önce yapılmış çalışmalar ile Havacılık sektörünün en önemli giderlerinden biri olan yakıt fiyatlarının döviz kuru karşısındaki belirsizliği ile şirketlerin başvurduğu riskten korunma yöntemleri ve hedging sözleşmesinin önemi vurgulanmıştır. Bu kapsamda çalışma kapsamında literatürde bu konu özelinde yapılan çalışmalar belirlenerek havacılık endüstrisi için en sık kullanılan riskten korunma yöntemleri ile havacılık firmalarının yakıt maliyetlerinin sabitlenmesi için uygulayabilecekleri yöntemler özetlenmiştir.

Yöntem ve Bulgular (Methodology and Findings): Bu çalışma havacılık sektörünü yakından ilgilendiren yakıt sözleşmesi (hedge agreement) için literatürün incelenmesi sonucu oluşturulan nitel ve nicel çalışmaların tümünü irdeleyen bir çalışma niteliği taşımakta olup yöntem olarak nitel araştırma desenlerinden kavramsal çerçevede incelenmesini içermektedir.

Sonuç ve Öneriler (Conclusions and Recommendation): Hedging sonrası yakıt fiyatlarında düşüşler meydana gelse de, geleceği doğru bir şekilde öngörebilen yöneticilerin yaptığı hedging ile şirketler maliyet dalgalanmalarından korunur, bilet fiyatlarına yansıtılarak yolcu kaybetmek yerine şirket karlılığını artırır ve rekabet avantajı elde edebilir. Ancak iyi öngülemeyen hedging sonucu ise şirketler büyük kayıplar ile karşı karşıya kalabilir. Bu nedenle doğru bir öngörü ile başarıyı maksimize etmek mümkün görülmektedir. Havacılık şirketlerinin bilet fiyatlarına yansıtmak durumunda kaldıkları bu ekonomik dalgalanmalardan kaynaklı yolcu kayıpları dolayısıyla bu sektöre mensup şirketlerin marka değerinin düşmesi ve maliyet kaybetmelerinin önüne geçmek için kullanılan yöntemlerin önemine dikkat çekilerek şirketlerin bu doğrultuda mağduriyetlerinin önlenmesi için havacılık firmalarını ilgilendiren sözleşmenin önemi vurgulanmıştır.

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