



## BANKRUPTCIES AND THEIR CAUSES IN THE TURKISH AIRLINE INDUSTRY

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**Abstract:** *Turkish airline industry is affected by many different social, political, economic and legal factors on both national and international level. These factors deeply affect the airline companies, the most important shareholders in the aviation industry. Therefore, it is crucial to find out the companies that have gone bankrupt and determine the underlying causes for their bankruptcy. Our review of the relevant literature has found no study analyzing the bankrupt airlines in Turkey, making the necessity of the analysis and elaboration of their situation evident. Additionally, finding out why the bankrupt airlines go bankrupt, and what the undergirding social, economic, and political factors might be leads to the necessity of such research.*

*The present study, in which the bankruptcies in the Turkish airline industry and its causes are analyzed, firstly reviews the relevant literature. In the second part, in order to better situate and allow a deeper understanding of the context for the airline bankruptcies, the development of civil aviation in Turkey is analyzed in three sections. In the third part, the data about airline companies going bankrupt or going out of business listed in detail. In the fourth part, the reasons underlying airline companies' bankruptcy are analyzed. In the final part of the study the findings are discussed and suggestions are made.*

**Key words:** *Airline, Financial Difficulty, Bankruptcy*

## **1 INTRODUCTION**

The airline industry is one of the fastest-growing sectors both in Turkey and in the world. However, it is also greatly affected by the social, political and legal developments. Many airline companies are established for various reasons and they are shut down or go bankrupt for a variety of reasons as well.

In this study bankrupt airline companies in Turkey and their reasons for bankruptcy will be analyzed, which has not been studied before and thus has an original research value. In the international literature, the studies focusing on bankrupt airline companies are empirical studies based on quantitative data. However, since the financial and operational data belonging to bankrupt airline companies in Turkey are not accessible, the characteristics of bankrupt airline companies and the underlying reasons for their bankruptcy will be analyzed in the light of the available data.

## **2 LITERATURE REVIEW**

It is noteworthy that there is a quite limited number of studies on airline business bankruptcy. As one of those studies, Gong [7] analyzed the equities of the US airline companies in the bankruptcy protection program. A similar study was conducted by Jayanti and Jayanti [8]. Their empirical study found that when an airline company goes bankrupt, the competitor airline companies earn an abnormal amount of income from their securities. Davalos, Gritta and Chow [4] conducted a study analyzing the bankruptcy risks by using the financial variables of airline companies. Borenstein and Rose [2] focused on the effects of Chapter 11 (a chapter of Title 11 of the United States Bankruptcy Code, which permits reorganization for the debtor businesses under the bankruptcy laws of the United States) on airline bankruptcies and ticket pricing. In a similar study, Ciliberto and Schenone [3] empirically studied the effects of Chapter 11 for the US airline companies regarding their filing bankruptcy and competition.

A review of the literature in Turkey reveals that, to date, there has been no research on airline company bankruptcy. The only study where bankrupt airline companies were discussed was Gerede's [6] holistic study focusing on the effects of deregulation in 1983 on airline transportation industry.

## **3 METHOD**

The current study uses the qualitative method. One of the analytic research methods, document analysis method was used. The study aimed to find out the answer to the question "What are the characteristics of bankrupt airline companies in Turkey and why did these companies go out of business?". Thus, firstly a list of airline companies who went out of business was compiled by using various resources. This was followed by collecting data from both online and offline resources about the bankrupt airline companies regarding their dates of entry/exit to the market, schedule types (scheduled-charter), type of transport (passenger-cargo) and activity market (domestic-international). In the final step, the reasons for airline companies to file bankruptcy were analyzed and these reasons were categorized on the basis of expert opinions.

## **4 DEVELOPMENT OF AIRLINE TRANSPORTATION IN TURKEY**

The development of aviation activities in Turkey are studied in three periods in the relevant literature. The first of these periods is the pre-1983 period when the civil aviation activities were all state-owned and private enterprise could have no access to them. The second period began in 1983 with the legislative changes to allow private enterprise by the enactment of Turkish Civil Aviation Act (No. 2920). The final period began in 2003 with the introduction of a series of legal changes and subsidies for the private aviation enterprise.

### **4.1 DEVELOPMENT OF AIRLINE TRANSPORTATION BEFORE 1983**

The first civil aviation activities in Turkey were initiated with the construction of two hangars and a small aerodrome in 1912 in Sefaköy, close to the current Atatürk Airport. In 1925, with the establishment of Turkish Airplane Association (Turkish Aeronautical Association), the institutional foundation of Turkish civil aviation was laid [10]

The most significant advances for the development of Turkish civil aviation were made in the years after post-World War II. In the post-war period the main focus was on the modernization of the aircraft and on the construction of new airports. Within this context, to carry out the civil aviation activities, THY A.O. (Turkish Airlines Co.) was founded in 1955 by Law No.6623. In addition, , to manage the civil airports and ensure flight security, General Directorate of State Airports Authority (DHMI) was founded with Law No. 6686, which was enacted in 1956. DHMI is important for the management of civil airports by state authority and providing air navigation services [10] [11] [5].

In the first half of the 1950s, regulatory and supervisory authorities were established to ensure compliance with international aviation laws and regulation and monitoring of the civil aviation activities in Turkey. It is also observed that during this period Turkish Airlines was in operation as the only national and commercial carrier in Turkey, and the environment did not allow private enterprise to enter the civil aviation sector [10] [11].

### **4.2 THE PERIOD OF DEVELOPMENT IN 1983-2003**

From 1980 onwards, following the global trends, liberal economic policies were launched in Turkey, and private enterprise was given incentives. Thus conservative policies of the state changed and the legal ground to let private enterprise compete in every sector was began to be laid.

In this period, significant steps were taken to liberalize the tourism, transport and communication sectors by freeing them from the state monopoly. To that end, legislative changes were made to develop the tourism industry and consequently the aviation sector. As part of such changes, Turkish Civil Aviation Act No. 2920 was adopted in 1983. Thanks to this law, important developments were realized in aviation. It is noteworthy that in this period, Turkish Airlines' fleet structure was improved through modernization and standardization, and an effort was made to raise the service standards [10] [11].

The most important novelty brought about by Turkish Civil Aviation Act No. 2920 was lifting the legal barriers blocking private enterprise. Thus, the legal hurdles preventing the establishment of private airline companies and their activities in domestic-international lines were removed, encouraging the growth of private enterprises.

Once the Turkish Civil Aviation Act went into effect, the civil aviation sector began to grow rapidly. By 1992, a total of 22 private airline companies were started, but their commercial activities were noticeably short-lived. However, although these companies operated briefly in the civil aviation market, their contribution to increasing number of passengers was remarkable, as can be clearly seen by the huge rise (453%) in the number of passengers in the decade between 1983 and 1993. Private enterprise and competition are estimated to have played a key role in this upsurge [6] [11].

Being the scene of remarkable changes and developments in the early 1990s, the aviation industry was negatively affected by the Gulf Crisis that broke out in 1990 by the US intervention in Iraq. In addition, some built-in factors that civil aviation has by its nature also contributed to such downturn. These factors include seasonal fluctuations, low profit margins, financial problems, some restrictions imposed by state and high airport fees-taxes, which all aggravated the steady growth of the sector [10] [11].

The unsteady trend in the aviation sector in the 1990s led to some legal changes. With the changes in the SHY-6A Directive, the requirements for airline businesses for securing permission and licensing were re-structured. As a result, the number of aircraft that airline companies required to have in their fleets, the guarantee letters they have to submit, and amounts of outstanding capitals began to be strictly controlled [9].

1990s were difficult for the companies operating in the civil aviation industry, which is thought to have resulted from both external factors and the legal changes that were put into effect. The decisions taken by the Directorate General of Civil Aviation (SHGM) on 12.01.1996 are indicative of this.

According to the decisions by the Directorate General of Civil Aviation (SHGM) in 1996:

- Those airlines with one or more scheduled domestic flights from the airports of İstanbul, Ankara, İzmir, Antalya, Dalaman, Adana, Trabzon must also offer a flight to an airport in Eastern and Southeastern regions,
- For a scheduled line opened for the summer season, scheduled flights must also be offered for the winter,
- Prohibiting the airlines from offering domestic scheduled flights for two successive periods if they fail to comply with the decisions above,
- Allowing private air carriers to operate,
  - On the domestic lines for which THY Co. does not offer any flights,
  - On days when THY Co. does not offer flights,
  - On days when THY Co. offers flights but cannot meet the demand.

These decisions may have negatively affected the airline businesses' operations in the civil aviation sector, and may have caused them to experience bankruptcy and financial difficulty.

Negatively affected by the recession in 1998 in the Asian countries, air transport had serious difficulties due to the Iraqi War, SARS, economic crises and the rise in oil prices in the 2000s, besides the economic crisis in 2001 in Turkey and the 9/11 terrorist attack occurring the same year. This period saw considerable decline in the number of passengers and air traffic [10].

## **4.2 THE PERIOD AFTER 2003**

With the Turkish Civil Aviation Act No. 2920 in 1983, the barriers blocking private enterprise's market entry into the airline industry were removed to a great extent. However, the legal changes in the 1990s had negative effects on airline companies. Moreover, the negative developments at the global scale also paved the way for the airline companies' bankruptcy or going under. Yet, with the legal changes and the subsidies provided for airline companies from 2003 onward, the progress of civil aviation in Turkey has gained momentum. As such, one of the most important steps that have been taken to date is the annulment in 2003 of the 1996 Law, which had a harmful effect on the airline industry.

The legislative changes of 2003 not only deregulated the market but also supported it by introducing some subsidies for the airline businesses. Thus, the improvements made by the General Directorate of State Airports Authority (DHMI), the sole responsible authority for the administration and navigation services in the airports in Turkey, have had quite effective results. DHMI introduced discounts in the service fees that it charges the airline companies, reduced the tax rates it collected from the airline firms, and completely removed some other taxes that it used to collect from domestic fares, which helped businesses to reduce their costs. Consequently, ticket prices have dropped and the demand for air travel has increased. This is clearly indicated by the figures: the number of passengers reached from 9.1 million in 2003 to 85 million in 2014, with a 900% rise. Similarly, the total number of aircraft climbed from 162 in 2003 to 422 in 2014, while seat capacity rose from 27.599 to 75.700 in the same period [1] [6] [11] [12].

The post-2003 policies and implemented changes have obviously made a significant contribution to the advancement of airline industry. These policies seem also to contribute airline companies' strengthening. However, the 2008 global recession and the fluctuations in oil prices have also had clearly negative effects on the airlines as well. It should also be noted that companies have gone bankrupt or gone out of business due to their administrative or strategic decisions.

## **5 BANKRUPT AIRLINES IN TURKEY, REASONS FOR THEIR BANKRUPTCY AND STEPS TO BE TAKEN**

In Turkey, private airline companies began to be established after the liberalization move in 1983. In the period from 1983 to 2000, the number of launched private airline companies was 34. However, 28 of these companies had to go out of business before 2000. In the period after 2000, 13 new airline companies were started, but have had to end their operations and shut down as well. Since 1983, the year the deregulation legislation was put into effect, a total of 47 companies have had to go out of business. Currently, there are a total of 13 companies active in the airline industry. Some of the airline companies completely terminating their operations had to file bankruptcy, while some others resolved their financial difficulties by merging with another airline company.

In the pre-2000 period, the underdevelopment of aviation in Turkey, or in other words, its being a relatively new and developing sector, in addition to the positive discrimination made for Turkish Airlines as the flagship airline all negatively affected the activities of private companies. The privileges granted to this state-owned company operating under state monopoly led private companies to rapidly go out of business or file bankruptcy. Obviously, the assumption that this positive discrimination is the only reason for these companies for having gone bankrupt does not reflect the truth. Still, the key role played by the above-mentioned reasons is undeniable.

<b>Airline Company</b>	<b>Market entry</b>	<b>Market exit</b>	<b>Operation type</b>	<b>Type of transport</b>	<b>Market</b>	<b>Life time</b>	<b>Bankruptcy Reason</b>
<b>Bursa Airlines</b>	1984	1987	Scheduled/Unscheduled	Passenger	National	3	Competition-Lack of demand
<b>İstanbul Airlines</b>	1986	2001	Scheduled/Unscheduled	Passenger/Cargo	National/International	15	Oil price surge, Dollar/Mark Parity Fail to satisfy the authority conditions
<b>Marmara Airlines</b>	1986	1987	Unscheduled	Passenger	International	2	Financial distress
<b>Sönmez Airlines</b>	1987	1998	Scheduled/Unscheduled	Passenger	National	11	Financial distress
<b>Boğaziçi Airlines</b>	1987	1989	Scheduled/Unscheduled	Passenger/Cargo	National/International	2	Financial distress-Aircraft Accidents
<b>Talia Airlines</b>	1987	1988	Unscheduled	Passenger	International	1	Financial distress-Aircraft Accidents
<b>NESU Airlines</b>	1987	1989	Scheduled/Unscheduled	Passenger/Cargo	National/International	2	High costs
<b>Toros Airlines</b>	1988	1989	Unscheduled	Passenger	International	1	Financial distress-Aircraft Accidents
<b>Avrupa Tur Airlines</b>	1988	1994	Unscheduled	Passenger/Cargo	National/International	6	Unknown
<b>Bodrum İmsık Airlines</b>	1988	1991	Scheduled/Unscheduled	Passenger	National	3	Financial distress
<b>Air Anatolia Airlines</b>	1989	1989	Unknown	Unknown	Unknown	1	Unknown
<b>Birgen Airlines</b>	1989	1996	Unscheduled	Passenger	International	7	Aircraft Accidents
<b>Noble Airlines</b>	1989	1991	Unscheduled	Passenger/Cargo	National/International	2	Financial distress
<b>Türk Hava Airlines Inc.</b>	1989	1993	Scheduled/Unscheduled	Passenger/Cargo	National/International	4	Financial distress
<b>Sultan Airlines</b>	1989	1993	Unscheduled	Passenger/Cargo	International	4	Financial distress
<b>Akdeniz Airlines</b>	1989	1996	Unknown	Unknown	Unknown	7	Unknown
<b>Green Air Airlines</b>	1990	1995	Unscheduled	Passenger/Cargo	National/International	5	Unknown
<b>Top Air Airlines</b>	1990	2002	Unknown	Unknown	Unknown	12	Unknown
<b>VIP Air</b>	1991	1992	Unscheduled	Passenger/Cargo	International	1	Unknown
<b>Bosporus Airlines</b>	1992	1994	Unscheduled	Passenger/Cargo	International	2	Financial distress
<b>Albatros Airlines</b>	1992	1996	Unscheduled	Passenger/Cargo	International	4	Financial distress
<b>Alfa Air</b>	1992	2002	Unscheduled	Passenger/Cargo	International	10	Financial distress
<b>Holiday Airlines</b>	1994	1996	Unscheduled	Passenger	International	2	Lack of demand
<b>Mas Air Airlines</b>	1995	1995	Scheduled	Passenger	International	1	Unknown

<b>Active Air (Greenair ) Airlines</b>	1995	1996	Scheduled	Passenger	International	1	Financial distress
<b>Sunways-Intersun Aviation</b>	1995	1997	Scheduled	Passenger	International	2	Financial distress
<b>Global Airlines Cargo</b>	1995	1997	Unknown	Unknown	Unknown	2	Unknown
<b>GTI Airlines</b>	1996	1999	Unknown	Unknown	Unknown	3	Financial distress
<b>Dardanel Airlines</b>	1996	1999	Scheduled	Passenger	National Regional	3	Financial distress
<b>Rose Air Airlines</b>	1997	1999	Scheduled	Passenger	National Regional	2	Unknown
<b>Air Rose Airlines</b>	1999	2000	Unknown	Unknown	Unknown	1	Unknown
<b>Park Express Airlines</b>	1999	2000	Unknown	Unknown	Unknown	1	Legislative amendments
<b>Inter Airlines</b>	1999	2001	Unscheduled	Passenger/Cargo	International	2	Financial distress
<b>Anadolu Express (Anex) Airlines</b>	1999	2008	Unscheduled	Passenger/Cargo	National/International	9	Unknown
<b>EuroSun Airlines</b>	2000	2001	Unscheduled	Passenger/Cargo	International	1	Unknown
<b>Bosphorus European Airways</b>	2002	2004	Scheduled	Passenger/Cargo	International	2	Financial distress
<b>Fly Air Airlines</b>	2002	2004	Unscheduled	Passenger/Cargo	International	2	Unknown
<b>Orbit Express Airlines</b>	2002	2008	Scheduled/Unscheduled	Passenger/Cargo	National/International	6	Unknown
<b>Baron Air Cargo</b>	2003	2004	Unscheduled/Leasing	Cargo	International	1	Unknown
<b>Dünyaya Bakış Air Transport</b>	2004	2004	Unscheduled/Wet Lease	Passenger/Cargo	International	1	Merged with Kuzu Cargo Aircraft Accident
<b>Golden Airlines</b>	2005	2008	Unscheduled/Wet lease	Passenger	National/International	3	s / Financial distress Fail to satisfy the authority conditions
<b>Tarhan Tower Airlines</b>	2006	2007	Unscheduled	Passenger/Cargo	National/International	1	Fail to satisfy the authority conditions
<b>Turkuaz Airlines</b>	2006	2010	Unscheduled	Passenger/Cargo	National/International	4	Fail to satisfy the authority conditions
<b>Best Air Airlines</b>	2006	2010	Unscheduled	Passenger	National/International	4	Unknown
<b>Sky Airlines</b>	2000	2013	Unscheduled/Wet lease	Passenger	International	13	Financial distress
<b>SAGA Airlines</b>	2000	2013	Unscheduled	Passenger	National/International	13	Financial distress/ Management Errors

**Table 1. The airline companies ending their operations in Turkey<sup>1</sup>**

<sup>1</sup> The table was composed by the author scanning academic and online resources related to bankrupt airlines.

Table 1 presents the information about 46 airlines and cargo companies regarding their market entry and exit dates, schedule type, transport type, the duration of market activity and reasons for bankruptcy. The data cover the period after 1983, the year Civil Aviation Act No.2920 went into effect, allowing private enterprise to begin their activities in the aviation market.

46 aviation companies went bankrupt for various reasons in the thirty-year period from 1983 to 2013. In other words, throughout this thirty-year period, every year 1,53 companies on average filed bankruptcy. Considering the difficulty of launching a company in the aviation sector due to its capital-intensive structure, the related legislation and various mandatory requirements, this rate of 1,53 can be said to be quite high.

When the data in the Table are analyzed, it is clear that those companies who were in business for less than 10 years were in operation for an average of 3,7 years. In other words, when only the companies with under 10 years of operation are taken into account, it is found that their business life lasted for an average of 3,7 years. This rate is considered very low and the aviation companies went bankrupt very quickly after they began business. The average business life for all the companies is 6,17 on average.

As can be seen in the table showing the list of the airlines that went bankrupt since 1983, companies had to go out of business for many various reasons. The most important of these reasons is companies' having financial difficulty and thus having a hard time carrying out their operations. This may have resulted from multiple reasons. Inability to meet the increasing costs (e.g. fuel-maintenance-personnel), ticket mispricing, selecting the wrong market for operation, marking up the ticket prices to meet increasing costs and its pressure on the demand, and management's not having adequate aviation market know-how may have led these aviation companies to have difficulty and end up filing bankruptcy.

The increasing competition following the removal of market-entry hurdles in aviation, coupled with the negative developments both in Turkey and in the world that caused shrinking demand seems to have played an important role in the bankruptcy of these aviation companies.

Companies' relations with the regulatory and supervisory aviation authorities and their attitudes toward the aviation companies have also played a role in the bankruptcies. The legislative changes in the regulations, mandatory requirements from the companies and the problems they experienced in obtaining license or having licenses revoked appear to be the root causes for aviation company bankruptcy.

Aviation companies have a capital-intensive structure. Considering the undeniable fact that tangible assets constitute a considerable part of any balance sheet, aircraft (airplanes) are crucial for companies as their tangible assets. Therefore, aircraft accidents cause companies to experience financial difficulty by causing them to lose their tangible assets (a major part of their balance sheets) and by forcing them to pay damages, in addition to the drop in demand resulting from the loss of prestige. Thus, when the data given in the table are analyzed, the most important reason for bankruptcy for some aviation companies is seen to be the aircraft accidents that they experienced. The companies encountered financial difficulties after their aircraft had accidents and they had to go out of business.

### **3 REASONS FOR BANKRUPTCY AND STEPS TO BE TAKEN**

There have been significant developments over the last decade in the civil aviation infrastructure in Turkey. Some of these developments are: opening dormant airports to business operations, renewing the existing airports, increasing capacity through additional facilities, and constructing new airports. Furthermore, there has been a remarkable rise in the



number of aircraft fleet, cargo and passengers since 2003. However, even in this period, 8 airline companies have had to go out of business. Except for a few, all of these companies were licensed after 2003. In short, within the 30 years since 1984, when private companies were allowed to be set up, a total of 46 airline companies have been established and later declared bankruptcy. The reasons and suggested measures for this negative situation, which has emerged in the face of the important recent advances in aviation, can be summarized as follows:

- The positive discrimination in favor of THY, with its majority shares owned by the state and has private company status:
  - ✓ The slot and permit privileges given at airports: An independent commission needs to be set up according to objective criteria.
  - ✓ The privilege of being assigned as the only carrier in the international dual civil aviation agreements: What needs to be done is revoking the assignment of THY as the only carrier in the international dual civil aviation agreements. In the additional slot agreements other private companies must also have the right to fly.
- Inadequacies in the civil aviation legislation: What needs to be done is a revision of the legislation by the Directorate General of Civil Aviation to prevent airline company bankruptcy through independent financial audit and allowing airline companies to have ownership of their aircraft. As a guidance, SPK (Capital Markets Board) regulations can be taken as example.
- Financial management and planning errors made by companies: Companies need to plan their financial management activities according to the sectoral characteristics of the aviation industry and by factoring in the civil aviation regulations.
- Authority problems: Ensuring the transformation into a transparent, competitive and fair governance for Turkish civil aviation, and re-organizing it accordingly.

## CONCLUSIONS AND SUGGESTIONS

With the rising number of bankruptcies in the pre-2000 period, changing the SHY6A regulation was put on the agenda. This change was deemed necessary due to the problems caused by some airline companies which had gone out of business after remaining in operation for only one or two years without paying their debts to Eurocontrol, DHMI, ground service companies and fuel companies. To prevent such victimization, SHY6A was implemented which required airlines to hold ownership of aircraft, but some airlines opposed it. As a result of the negotiations, a reconciliation was reached by revising the regulation to require a letter of guarantee per aircraft or having ownership of aircraft. However, this solution could not prevent the bankruptcies in the period before 2000. **After the year 2000, despite the change in SHY6A regarding aircraft ownership, due to its failure to support sustainability in the sector, bankruptcies continued in the post-2000 period as well.**

In the years before 2000, the best solution might have been strengthening the structure of SHGM with general-to-specific regulations including independent financial audit conditions. Nevertheless, it is only natural that the aviation sector will have bankruptcies as in every other sector. What is important here is to keep the damage given by these bankruptcies to parties to a minimum. If an airline's bankruptcy is not causing victimizations, it can be

accepted as part of the nature of business. But if bankruptcies are producing victims, then they can be interpreted as an indication of supervisory failure.

The post-2000 regulation change requiring aircraft ownership may be prohibitive for new company entries to the oligopolistic sector where there are only a few powerful companies. This may result in less competition and secret agreements, creating higher ticket prices for the passengers.

For an airline, having ownership of aircraft brings extra financial burden for new airline companies due to the high purchasing costs. On average, about 10-50 million dollars is necessary to buy a used aircraft. Thus, two airplanes would require an investment of 20-100 million. If 25% of the purchasing cost for these airplanes were to be covered by the owner's equity capital, it would still require finding a loan of 15-75 million dollars. When this debt is put in the financial reports, all the fiscal ratios will be negative. Furthermore, since the creditors will be the first to levy attachment on the aircraft if the airline files bankruptcy, it will not be possible to find cash to pay what is owed to the real victims, namely, the passengers, airports etc. The situation would be even worse for the scheduled flights. Therefore, airline's holding aircraft under its ownership will not prevent bankruptcies by strengthening its financial position. It may even weaken the financial structure.

During the company establishment process, beginning with submitting a bank letter of guarantee per airplane, a model including giving support for such company establishment with independent financial supervisory reports and credit rating reports before and after every season will be better from the management perspective. This model may also help ensure the successful sustainability of the 13 licensed airline businesses currently in operation.

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