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Financial Performance Analysis of BIST Airline Companies through Ratio Analysis: Evidence from the Covid-19 Pandemic Process

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Abstract

The aim of the study is to examine the financial performance of Turkish Airlines Inc. and Pegasus Airlines Inc., which operate in the airline sector in our country and are traded on BIST. In the study, the financial performances of the companies for the years 2018-2023 were analyzed through ratio analysis. The balance sheet and income statement obtained from the Public Disclosure Platform (KAP) were used to provide the data. A total of 17 financial ratios were determined in the study to calculate liquidity, financial structure, activity and profitability ratios. As a result of the study, it was seen that Covid-19 negatively affected both companies, but the companies started to recover after the pandemic, and according to the results of the ratio analysis within the scope of the study, it was determined that Pegasus Airlines Inc.'s financial performance was higher than Turkish Airlines Inc.

1. Introduction

Globalization has greatly increased competition along with the economic integration and expansion of markets worldwide. Although this process has allowed for the reduction of borders and the expansion of markets, it has made the competitive environment quite difficult for companies. In the changing and developing intense competitive environment, it has become necessary for businesses to attach more importance to their financial performance in order to maintain their sustainability and continue their economic life. In this context, financial discipline, efficient use of resources and the protection of companies' competitive advantage and strengthening their positions in the market have become important in order to ensure their sustainability. This situation requires companies to attach more importance to their financial performance, develop more effective financial strategies in this direction and optimize their costs, which stands out as the key to success in the global competitive environment.

With our country's strategic location, increasing passenger traffic at national and international levels, and increasing investments, the airline sector is undoubtedly among the leading sectors in our country. A total of 262,925 people are employed in the airline sector, and the total turnover of the sector is approximately 668 billion TL. There are a total of 57 airports in our country; 38 of these airports are civilian, 18 are civil-military, and 1 is civilian (with military permission). 50 of these airports are operated by the State Airports Authority (SAA), and 7 are operated by other operators. As of 2022, the total number of aircraft landing and taking off at airports is 1,883,471 million, and the freight traffic, which is the amount of cargo, mail, and baggage arriving and departing from airports, is 4.16 million tons. When the passenger traffic statistics, which express the total number of passengers arriving and departing from airports, are examined, it is seen that 182.23 million passengers were served. In line with economic size and sectoral statistics, the airline sector is one of the sectors that grows and develops every day in our country (Ministry of Transport and Infrastructure, https://www.uab.gov.tr)

The purpose of this study is to examine the financial performance of Turkish Airlines Inc. and Pegasus Airlines Inc., which operate in the airline sector in our country and are traded in BIST. For this purpose, the financial performances of the companies were analyzed in line with the data obtained by examining the balance sheets and income statements of the companies. When the studies in the literature are examined, it is determined that the studies examining the financial performance of airline companies are quite limited, which constitutes the basic justification of the study. The study aims to provide suggestions to the airline sector, which is capital intensive and has high economic fluctuations, company managers, investors and other stakeholders, and to contribute to academic studies to be conducted in this field.

Turkish Airlines Inc. was founded in 1933 under the name of State Air Operations. The institution, which had 5 aircraft and less than 30 employees at the time of its establishment, made its first international flight to Athens in 1947. Subsequently, with the establishment of Turkish Airlines Inc. in 1955, it became a member of the International Air Transport Association (IATA). With the new investments it has made over the years, the company currently has 33,350 employees and a fleet of 453 aircraft, and by 2023, it will reach a total of 83.4 million domestic and international passengers, providing service to 295 different destinations in 130 countries. The company, which has been traded on the stock exchange since 20.12.1990, has been offered to the public by 50.88%, and 49.2% belongs to the Turkish Wealth Fund (Turkish Airlines Inc., Annual Report).

Pegasus Airlines Inc. was established in 1990 with a fleet of 2 aircraft as a joint venture between Aer Lingus, Silkar Investment and Net Holding. It made its first international flight to Stuttgart in 2006. Today, Pegasus Airlines Inc., which has 8,204 employees and a fleet of 105 aircraft, will reach a total of 31.9 million domestic and international passengers in 2023, providing service to 136 different destinations in 52 countries. The company, which has been traded on the stock exchange since 26.04.2013, has been offered to the public by 41.53%, 56.65% of which belongs to Esas Holding and 1.82% to Sabancı family members (Pegasus Airlines Inc., Annual Report).

The study consists of six sections. The first section, which is the introduction to the study, covers the general appearance of the airline sector in our country and provides summary information about Turkish Airlines Inc. and Pegasus Airlines Inc. The second section examines the studies in the literature on the financial performance of companies in the airline sector and the studies conducted through ratio analysis. The third section includes explanations on ratio analysis and calculations on the ratios included in the analysis. The fourth section includes the methodology of the study, which addresses the purpose, method and scope of the research. The fifth section includes the findings obtained within the scope of the study and evaluations related to these findings. The final section includes the conclusion and recommendations.

2. Literature Research

Although there are many studies on airlines in the literature, it has been determined that the studies on the financial performance of airlines are quite limited. Some of these studies are given below.

Aydın (2024) examined the financial performance of the airlines that carry the most passengers using d-critic topsis and integrated critic-topsis methods. As a result of the study, it was determined that the criteria weights and the performances of the airlines differed according to the methods.

Gün and Ölçen (2024) examined the financial performance of the best service airlines selected by Skytax in their study. As a result of the study using the Topsis method, the company with the highest financial performance was Air Astana, while the company with the lowest financial performance was Qantas.

Hatipoğlu (2024) examined the effects of the Covid-19 pandemic on the European aviation sector in his study. As a result of the study using data envelopment analysis, it was determined that countries such as Austria, Hungary, Ireland, the Netherlands, Slovenia and Switzerland have high efficiency, while countries such as Albania, France, Germany, North Macedonia and Turkey have the potential to reach full efficiency provided that they adjust their scales.

Asker (2023) examined the financial performance of airline companies implementing the low-cost business model of the Covid-19 outbreak for the 2019-2021 period using the CRITIC and ARAS methods from the Multi-Criteria Decision Making (MCDM) techniques. 6 evaluation criteria were used in determining the financial ratios in the study. As a result of the study, it was determined that the companies with the highest financial performance were Air Arabia, Air Asia X, Norwegian Air, and the companies with the lowest were Easysjet and Gol Linhas.

Sümerli Sarıgül, Ünlü and Yaşar (2023) examined the financial performance of 6 airline companies operating in Europe for the years 2019-2021. The CRITIC, MAUT and MARCOS methods from the MCDM methods were used in the study. As a result of the study, it was determined that the most successful company according to the MAUT method was Air France, and according to the MARCOS method, it was Pegasus Inc. and EasyJet.

Temel (2022) examined the impact of the Covid-19 outbreak on the financial performance of airline companies traded on BIST in their study. As a result of the study, it was determined that Covid-19 negatively affected the financial structures of airline companies.

Abdi, Li and Turull (2021) examined the impact of environmental, social and corporate governance practices of 38 airline companies worldwide on financial performance for the years 2009-2019. As a result of the study, it was determined that governance initiatives and participation in social and environmental activities positively and significantly increased the financial efficiency of the companies.

Özbek and Ghouchi (2021) examined the financial performance of 5 leading airline companies in Europe for the years 2009-2018 using WASPAS and EDAS methods from MCDM techniques. In the study, 12 evaluation criteria were used to determine the financial ratios. As a result of the study, it was determined that the company with the highest financial performance was Ryanair and the company with the lowest was Lufthansa.

Keleş and Özulucan (2020) examined the financial performances of airline companies operating in BIST for 2018 with the ratio method. A total of 17 financial ratios were used in the application of the ratio method in the study. As a result of the study, although the financial ratios of both companies were quite close to each other, it was determined that Pegasus Inc. had a higher financial performance than Turkish Airlines Inc.

Kızıl and Aslan (2019) examined the financial performances of airline companies operating in BIST for the years 2013-2017 with the ratio method. A total of 17 financial ratios were used in the application of the ratio method in the study. As a result of the study, it was determined that Pegasus Inc. had a higher financial performance than Turkish Airlines Inc.

Avcı and Çınaroğlu (2018) examined the financial performances of 5 leading airlines in Europe for the years 2012-2016. AHP and TOPSIS methods from MCDM techniques were used in the study. 8 evaluation criteria were used in determining the financial ratios in the study. As a result of the study, it was determined that Ryanair was the

first company in terms of financial performance, and Lufhansa was the last company.

Önal, Mat and Eroğlu (2018) analyzed the profitability of companies traded in the airline sector in BIST and companies that are members of the European Airlines Association for the years 2012-2016. A total of 17 financial ratios were used in the study for the application of the ratio method. As a result of the study, it was determined that companies in our country have higher profitability rates than companies that are members of the association.

Gümüş and Bolel (2017) examined the financial performance of airline companies operating in BIST for the years 2010-2015. A total of 20 financial ratios were used in the study for the application of the ratio method. As a result of the study, it was determined that Pegasus Airlines Inc. was more successful.

Mushure (2014) examined the financial performance of Malaysia Airlines for the years 2007-2011. As a result of the study using ratio analysis, it was determined that the company's gross profit was negative due to its high operational costs, that it had poor working capital, and that it needed to manage its capital management more effectively.

In addition to the studies above, some of the studies conducted in the literature on the use of ratio analysis in examining financial performance are given below.

Kızıl (2023) examined the financial performances of Karsan and Ford Otosan companies for the period 2017-2021 using the ratio analysis method. A total of 13 financial ratios were used in the study. As a result of the study, it was determined that the financial performances of the companies differed according to financial ratios.

Pirakatheeswari and Prajna (2022) examined the financial performance of Brahat Petrol, a company operating in the energy sector in India, for the years 2012-2022. A total of 4 financial ratios were used for the application of the ratio method in the study. As a result of the study, it was determined that the company entered a financial development process over the years.

Beller Dikmen (2021) examined the financial performances of companies operating in the electric energy sector in Turkey for the years 2015-2019. As a result of the study using ratio analysis, it was determined that the liquidity ratios of the companies were below the standards, they generally preferred long-term borrowing, and the receivables collection period tended to increase.

Ülker and Arslan (2020) examined the financial performances of market chains operating in the retail trade sector in BIST for the years 2015-2018. As a result of the study using ratio analysis, it was determined that the financial performances of the companies differed.

Bilici (2019) examined the financial performances of the tourism sector in Turkey for the years 1996-2016. As a result of the study using ratio analysis and TOPSIS method, it was determined that the sector followed a positive course in terms of liquidity and financial structure, but was in a negative situation in terms of productivity and profitability. According to the results of the TOPSIS method, it is seen that the sector showed its best performance in 2001.

Bülüç, Özkan and Ağırbaş (2017) examined the financial performances of a private hospital company traded in BIST for the years 2013-2016. As a result of the study using ratio analysis, it was determined that the financial performance of the company followed a positive course and was in a development trend.

In addition to the studies listed above, it has been observed that many studies have been conducted on the digital transformation of airline companies, especially after the Covid-19 period. Some of these studies are listed below.

Kaplan, Yener, Yılmaz and Öztürk (2024) evaluated the positive impact of Covid-19 measures implemented at Dalaman Airport on passenger satisfaction and examined the role of digital technologies in this impact. As a result of the study, it was suggested that technology investments and customer service policies were insufficient in this process and that the airport management should make new technology-focused investments by focusing on passenger satisfaction.

Zekry, Abdelwareth, , Al-Romeedy and Alrefaei (2024) examined the impact of digital transformation on the performance of airline companies after the Covid-19 outbreak. As a result of the study, it was determined that Covid-19 significantly affected employee performance and that training should be provided on using digital tools, creative thinking and developing technical solutions.

Kováčikova, Remencova, Sedlackova, and Novak (2022) examined the impact of Covid-19 on the digital transformation of airports. It was determined that most of the airports included in the study faced digital maturity problems during the Covid-19 process and the pandemic had a negative impact on airports.

Dube, Nhamo and Chikodzi (2021) examined the ways in which the aviation sector could recover globally after the negative effects of Covid-19. As a result of the study, it was determined that the pandemic had a significant impact on the aviation sector, that the sectoral recovery would be slower than expected as a result of the problems experienced by companies in cash management due to travel restrictions during the pandemic, and that companies should implement measures that protect passengers, reduce costs, increase efficiency and provide a quality customer experience based on employee health and customer safety.

The literature examining the financial performance of airline companies is generally based on multi-criteria decision-making (MCDM) methods and financial ratio analyses. Studies emphasize the effects of different analysis techniques (such as TOPSIS, CRITIC, MAUT, EDAS, MARCOS) and periods (especially the impact of Covid-19) on financial performance. In general, it has been observed that low-cost airlines (e.g. Air Arabia, Ryanair) have higher financial performance. In addition, the performance differences between the European aviation sector and the companies in BIST reveal that managerial and environmental factors, and even optimizations made at the country level, can affect financial success. In addition, the negative effects of Covid-19 on airlines make the efficiency differences in the sector more apparent, showing that financial performance is shaped not only by economic data, but also by management strategies, environmental practices and crisis management.

3. Ratio Analysis

Ratio is the mathematical expression of the relationship between two account items in the financial statements (Langemeier, 2004). Ratio analysis, also called ratio analysis, analyzes the financial health and performance of a company using numerical criteria. In ratio analysis, various financial statement items in the financial statements of companies are compared. In addition, ratio analysis can evaluate the performance of the company's management in a certain

period of time or measure the management's adequacy in effectively utilizing company resources (Handini, 2024). The ratios within the scope of ratio analysis are widely classified in four different ways, and the explanations regarding these ratios are given below (Akgüç, 2010):

Liquidity Ratios: Liquidity is defined as the speed and ease with which an asset can be converted into cash. Liquidity ratios are used to measure a company's ability to pay its short-term obligations and to determine whether its working capital is sufficient (Akdoğan & Tenker, 2010; Akgüç, 2010).

Financial Structure Ratios: They provide important clues about whether a company can fulfill its long-term obligations in cases such as losses as a result of its activities, impairment of assets or failure to realize cash flows foreseen for future years (Akgüç, 2010).

Activity Ratios: Activity ratios are used to determine whether a company is effectively utilizing its assets during its activities. The analyses conducted on activity ratios determine the order in which asset items are converted into cash in companies' asset usage (Arat et al., 2018).

Profitability Ratios: Profitability ratios are used to determine how effectively companies are managed by measuring their effectiveness and efficiency (Çabuk & Lazol, 2016).

4. Methodology

The purpose of the study is to examine the financial performance of Turkish Airlines Inc. and Pegasus Airlines Inc., which operate in the airline sector in our country and are traded on BIST. In the study, the financial performances of the companies were analyzed using the ratio analysis.

Within the scope of the study, the financial performance of Turkish Airlines Inc. and Pegasus Airlines Inc. for the years 2018-2023 was examined using the ratio analysis. In the provision of data, a total of 17 financial ratios were determined for the calculation of liquidity, financial structure, activity and profitability ratios by using the balance sheet and income statement obtained from KAP. In determining the said ratios, the studies of Keleş and Özulucan (2020), Kızıl and Aslan (2019), Önal, Mat and Eroğlu (2018) in the literature were used.

The financial ratios used in the study and the abbreviations related to these ratios are given in Table 1 below.

Table 1. Financial Ratios Used in The Study

Category	Ratio	Abbreviations
Liquidity	Current Ratio	L1
Liquidity	Acid-Test Ratio	L2
Liquidity	Cash Ratio	L3
Financial Structure	Leverage Ratio	FS1
Financial Structure	Foreign Resources to Equity Ratio	FS2
Financial Structure	Short-Term Foreign Resource Ratio	FS3
Financial Structure	Long-Term Foreign Resource Ratio	FS4
Financial Structure	Tangible Fixed Assets to Long-Term Liabilities Ratio	FS5
Activity	Inventory Turnover	A1
Activity	Inventory Turnover Period	A2
Activity	Receivables Turnover	A3
Activity	Receivables Turnover Period	A4
Activity	Asset Turnover	A5
Activity	Tangible Fixed Assets Turnover	A6
Profitability	Gross Margin	P1
Profitability	Equity Profitability Ratio	P2
Profitability	Asset Profitability Ratio	P3

Calculations regarding the financial ratios determined within the scope of the study are given in Table 2 below.

Table 2. Calculations Regarding Financial Ratios Used in The Study

Ratio	Calculation Method
Current Ratio	Current Assets / Short-Term Foreign Resources
Acid-Test Ratio	(Current Assets - Stocks) / Short-Term Foreign Resources
Cash Ratio	(Current Assets + Securities) / Short-Term Foreign Resources
Leverage Ratio	Total Foreign Resources / Total Liabilities
Foreign Resources to Equity Ratio	Total Resources / Equity
Short-Term Foreign Resource Ratio	Total Short-Term Foreign Resources / Total Liabilities
Long-Term Foreign Resource Ratio	Long-Term Foreign Resources / Total Liabilities
Tangible Fixed Assets to Long-Term Liabilities Ratio	Tangible Fixed Assets / Total Long-Term Foreign Resources
Inventory Turnover (Times)	Cost of Sales / Average Stocks
Inventory Turnover Period (Days)	360 / Stock Turnover
Receivables Turnover (Times)	Net Sales / Average Trade Receivables
Receivables Turnover Period (Days)	360 / Receivables Turnover
Asset Turnover (Times)	Net Sales / Total Assets
Tangible Fixed Assets Turnover (Times)	Net Sales / Tangible Fixed Assets
Gross Margin	Gross Sales Profit / Net Sales
Equity Profitability Ratio	Net Profit for the Period / Total Equity

Asset Profitability Ratio	Net Profit for the Period / Total Assets

5. Findings

Within the scope of the study, the financial performances of Turkish Airlines Inc. and Pegasus Airlines Inc., which operate in the airline sector in our country and are traded in BIST, were examined using the ratio analysis method. Before the ratio analysis, the summary financial information obtained from the financial statements of both companies for the years 2020-2023 was examined within the scope of the study. In this context, the summary financial information of Turkish Airlines Inc. for the years 2020-2023 is given in Table 3 below.

Table 3. Financial Information of Turkish Airlines Inc.

Balance Sheet Items	2020	2021	2022	2023
Current Assets	30.659	65.797	135.095	253.043
Fixed Assets	156.743	287.911	443.476	797.048
Total Assets	**187.402**	**353.708**	**578.571**	**1.050.091**
Short-Term Foreign Resources	47.379	90.443	154.040	267.956
Long-Term Foreign Resources	100.512	172.615	243.104	325.023
Equity	39.511	90.650	181.427	457.112
Total Resources	**187.402**	**353.708**	**578.571**	**1.050.091**

Source: Turkish Airlines Inc. Financial Statements

When the summary financial information of Turkish Airlines Inc. is examined for the specified years, it is seen that the company's assets and resources are in an increasing trend over the years, it has an asset structure that is dominated by fixed assets in terms of asset distribution, and has a financial structure that is dominated by long-term borrowing in terms of resource distribution.

Within the scope of the study, the ratio analysis results of Turkish Airlines Inc. for the years 2018-2023 are given in Table 4 below.

Table 4. Turkish Airlines Inc. Ratio Analysis Results

	2018	2019	2020	2021	2022	2023
L1	0.87	0.8	0.65	0.73	0.88	0.94
L2	0.83	0.75	0.6	0.69	0.84	0.9
L3	0.32	0.35	0.28	0.39	0.49	0.08
FS1	0.71	0.72	0.79	0.74	0.69	0.56
FS2	2.49	2.6	3.74	2.9	2.19	1.3
FS3	0.25	0.24	0.25	0.26	0.27	0.26
FS4	0.46	0.48	0.54	0.49	0.42	0.31
FS5	1.45	0.31	0.3	0.34	0.36	0.55
A1	57.04	45.57	22.11	26.32	48.68	41.6
A2	6.31	7.9	16.28	13.68	7.4	8.65
A3	9.93	7.97	4.15	5.46	10.74	11.68
A4	72.49	90.33	173.48	131.96	67.04	61.66
A5	0.71	0.59	0.28	0.36	0.67	0.62
A6	0.86	3.47	1.53	1.67	3.57	2.82
P1	0.22	0.17	0.06	0.23	0.24	0.24
P2	0.13	0.11	-0.14	0.09	0.26	0.36
P3	0.04	0.03	-0.03	0.02	0.08	0.16

When the company's liquidity ratios are evaluated, it is seen that the current ratio is below the expected level, tends to decrease until 2020, and enters an increasing trend as of 2021. This situation shows that although the company's short-term financial health has improved, it is below the expected level, and it needs to improve its short-term borrowing policies and implement more effective policies. It was determined that although the acid-test ratio was at the expected level in 2018, it then decreased until 2020, started to increase from 2021, and came to the expected range from 2023. This situation shows that the company's liquidity has entered a recovery process, but despite the improvement in its short-term financial health, it is below the expected level, and it needs to improve its short-term borrowing policies and implement more effective policies. Although the cash ratio is close to the expected level, it tends to decrease until 2020, shows an increasing trend between 2020-2022, and enters a decreasing trend again in 2023, falling well below the expected level. This situation shows that there is a serious decrease in the company's cash position and that it needs to review, improve and develop its cash and short-term borrowing policies.

When evaluating the company's financial structure ratios, although the leverage ratio was above the expected level, it has started to decrease since 2021 and reached the expected level in 2023. This indicates a reduction in the company's debt level and an improvement in the financial structure. However, it also suggests the need for a review of borrowing policies to ensure the leverage ratio remains within the expected range. While the ratio of foreign resources to equity was significantly above the expected level, it began decreasing until 2021. Despite a temporary increase in 2021, it has decreased again in the following years, reaching the expected level in 2023. This trend reflects a reduced debt burden and increased equity. The short-term foreign resource ratio has remained stable and within the expected level over the years. This demonstrates the effectiveness of the company's short-term borrowing policies and its balanced approach to short-term financing. On the other hand, the long-term foreign resource ratio has fluctuated and remains above the expected level. This suggests that improvements are needed in the company's long-term borrowing policies. Although the ratio of tangible fixed assets to long-term debts was well above the expected level in 2018, it has significantly decreased from 2019 onwards, falling well below the expected level. This indicates a reduction in tangible fixed assets relative to the increasing long-term debt burden, highlighting the need for better policies regarding the acquisition and management of tangible fixed assets.

When evaluating the company's activity ratios, the inventory turnover rate declined until 2020. Although it showed an increasing trend until 2022, it decreased again in 2023, reaching a reasonable level. This situation shows that the company is effectively implementing its inventory policies. It is seen that the inventory turnover period has an increasing trend until 2020, a decreasing trend until 2022, and an increasing trend again in 2023, and has reached a reasonable level. This situation shows that the company is effectively implementing its inventory policies. Although the receivables turnover rate has shown a decreasing trend until 2020, it has shown an increasing trend after 2020. Although the receivables turnover period had an increasing trend until

2020, it is observed that it has started to decrease in 2021 and onwards. This situation shows that the company is implementing its inventory policies effectively. It is observed that the asset turnover rate and tangible fixed asset turnover rates follow a fluctuating course. This situation shows that the company should improve its tangible fixed asset acquisition policies and implement more effective policies.

When evaluating the company's profitability ratios, the gross profit margin rates showed a decreasing trend until 2020, but have increased since 2021, reaching the expected level range. This situation shows that the company's profit margin rates are positive and at the expected level, and the company's profitability policies are effective. It is seen that the equity profitability ratios similarly tended to decrease until 2020, and increased and reached the expected level range as of 2021. This situation shows that the company's equity profitability ratios are positive and at the expected level, and the company's profitability policies are effective. Only with the effect of Covid-19 that occurred in 2020, the profitability rates were negatively affected in that year, but they increased in the following years. The active profitability rates also decreased until 2020, but have since increased, reaching the expected level range by 2021. This situation shows that the active profitability rates of the company are positive and at the expected level, and the company's profitability policies are effective. Only with the effect of Covid-19 that occurred in 2020, the profitability rates were negatively affected in that year, but they increased in the following years. If a general evaluation is to be made regarding the profitability rates, it is seen that the company's profitability rates are within the expected level range, and only in 2020, probably due to the effect of Covid-19, the equity and active profitability rates were negative, but in the following years, they tended to increase and rose to the expected level range.

Summary financial information of Pegasus Airlines Inc. for the years 2020-2023 is given in Table 5 below.

Table 5. Financial Information of Pegasus Airlines Inc.

Balance Sheet Items	2020	2021	2022	2023
Current Assets	5.519	12.687	20.717	48.001
Fixed Assets	23.551	40.276	75.086	153.954
Total Assets	**29.070**	**52.963**	**95.803**	**201.955**
Short-Term Foreign Resources	6.505	12.679	20.759	37.183
Long-Term Foreign Resources	17.178	33.415	56.998	110.103
Equity	5.387	6.869	18.046	54.669
Total Resources	**29.070**	**52.963**	**95.803**	**201.955**

Source: Pegasus Airlines Inc. Financial Statements

When examining the summary financial information of Pegasus Airlines Inc. for the specified years, the company's assets and resources show an increasing trend. The asset structure is primarily dominated by fixed assets, while the financial structure is largely driven by long-term borrowing.

Within the scope of the study, the ratio analysis results of Pegasus Airlines Inc. for the years 2018-2023 are given in Table 6 below.

Table 6. Pegasus Airlines Inc. Ratio Analysis Results

	2018	2019	2020	2021	2022	2023
L1	1.24	1.28	0.85	1	1	1.29
L2	1.22	1.26	0.83	0.99	0.97	1.26
L3	0.77	0.88	0.55	0.55	0.51	0.43
FS1	0.73	0.75	0.81	0.87	0.81	0.73
FS2	2.68	2.94	4.4	6.78	4.31	2.69
FS3	0.26	0.23	0.22	0.24	0.22	0.18
FS4	0.47	0.52	0.59	0.63	0.59	0.55
FS5	1.29	0.15	0.08	0.06	0.06	0.09
A1	157.63	124.61	72.63	90.6	96.9	68.12
A2	2.28	2.89	4.96	3.97	3.72	5.28
A3	74.36	73.36	24.03	24.35	63.54	20.21
A4	9.68	9.81	29.96	29.57	11.33	35.63
A5	0.76	0.64	0.19	0.26	0.95	0.29
A6	1	6.58	3.35	5.75	20.07	4.12
P1	0.15	0.24	-0.26	0.01	0.16	0.39
P2	0.14	0.25	-0.36	-0.29	0.39	0.38
P3	0.04	0.06	-0.07	-0.04	0.07	0.1

When evaluating the company's liquidity ratios. the current ratio declined until 2020. but began increasing in 2021 and has since approached the expected level. This situation shows that the company should review its policies regarding the acquisition of current assets and short-term borrowing and execute them more effectively. Although the acid-test ratio values showed a significant decrease in 2020. they are seen to have an increasing trend in the following years and are above the expected level. This situation shows that the company should review its policies regarding the

acquisition of current assets. stocks and short-term borrowing and execute them more effectively. It is evaluated that the cash ratio values follow a fluctuating course but are above the expected level. This situation shows that the company's cash policies are effective.

When the company's financial structure ratios are evaluated. it is seen that the leverage ratio values were in an increasing trend until 2021. started to decrease in 2022 and later. and although the leverage ratio generally follows a balanced course. it is above the expected level. This situation shows that the company's debt level is on the decline. but it needs to review its borrowing policies and implement more effective policies to reach the expected level range. The ratio of foreign resources to equity increased until 2021. then began to decrease in 2022 and beyond. remaining above the expected level.

When the company's activity ratios are evaluated. it is seen that the inventory turnover rate and inventory turnover period are at the expected level. although they follow a fluctuating course. This situation shows that the company is effectively implementing its inventory policies. Although the receivables turnover rate and receivables turnover period follow a fluctuating course. they remain within the expected level. This situation shows that the company is effectively implementing its receivables policies. Asset turnover and tangible fixed asset turnover ratios have a fluctuating trend. This situation indicates that the company needs to improve its asset acquisition policies and implement more effective policies.

The evaluation of the company's profitability ratios shows a decreasing trend in gross profit margin rates until 2020. followed by an increasing trend since 2021. This indicates that the company's profit margins are positive and within the expected range. demonstrating the effectiveness of its profitability policies. While profitability rates were negatively impacted by Covid-19 in 2020. they rebounded in the subsequent years. Similarly. equity profitability rates declined until 2020 but began increasing from 2021 onwards. suggesting that these rates are positive and meet expectations. The same trend is observed in asset profitability rates. which decreased until 2020 and then increased starting in 2021. Despite the negative impact of Covid-19 on profitability in 2020 and 2021. these rates have improved in the following years. Overall. the company's profitability rates remain within the expected range. with negative equity and asset profitability rates only occurring in 2020 and 2021 due to the effects of Covid-19. However. in the years after. they showed an upward trend. reaching the expected levels.

6. Conclusion

This study aims to examine the financial performances of Turkish Airlines Inc. and Pegasus Airlines Inc.. which operate in the airline sector in our country and are traded on BIST. for the years 2018-2023. For this purpose. the data obtained from the companies' balance sheets and income statements were subjected to ratio analysis. The comparisons regarding the financial performances of Turkish Airlines Inc. and Pegasus Airlines are given below in line with the data obtained in the study.

Within the scope of the study. it is necessary to strengthen cash reserves. develop strategies to improve cash flow and establish an effective cash management system in order to increase the financial performance of Turkish Airlines Inc. In addition. debt restructuring or new financing options with more favorable conditions should be evaluated to reduce fluctuations in foreign resource use. It is important to reduce inventory holding costs and implement an effective inventory management system by improving inventory management. It is recommended to benefit from demand forecasting technologies. especially artificial intelligence and machine learning. Receivables management should also be improved. collection periods should be shortened by controlling receivables turnover. Applications that will increase operational efficiency and reduce major operational expenses such as fuel consumption and maintenance will increase profitability. Assets that do not provide high returns should be disposed of or directed to more profitable areas. In addition. the service portfolio should be expanded and customer experience should be enhanced with digital transformation and innovation-oriented applications.

In order to improve Pegasus Airlines Inc.'s financial performance. it is important to first strengthen liquidity management. increase cash reserves and ensure a balanced cash flow. In order to reduce the use of foreign resources. debts should be restructured under more favorable conditions and strategies should be developed to reduce debt levels. Inventory management and receivables collection processes should be reviewed. an effective inventory management system should be established. and inventory holding costs should be reduced by strengthening cooperation with suppliers. Methods that will provide savings in fuel consumption and maintenance costs should be implemented and the current service portfolio should be expanded. It would be beneficial to make investments focused on digital technology and innovation to increase competitiveness and improve customer experience.

As a result of the study. some sectoral recommendations to be presented to increase the financial performance of airline companies are as follows;

- Increasing efficiency in fuel and maintenance expenses. which are the most important cost elements for companies. and expanding the use of digitalization and automation.
- Companies determining revenue-increasing strategies with demand forecasting and pricing techniques.
- Companies implementing revenue-increasing partnerships and collaboration agreements.
- Optimizing aircraft fleets and flight routes to increase operational efficiency.
- Creating crisis management plans to minimize the impact of exchange rates. economic fluctuations and epidemics. etc. for risk management.
- Increasing the use of environmentally friendly aircraft. sustainable fuels and energy efficiency applications to reduce carbon footprints in the context of green flight policies. and increasing the number of environmentally sensitive customers.
- Increasing the use of artificial intelligence and data analytics applications by companies are among the sectoral recommendations to be presented.

According to the results obtained in the study. it is seen that Covid-19 has negatively affected both companies financially. The data obtained in the study. it was determined that Pegasus Airlines Inc.'s financial performance was higher than Turkish Airlines Inc. It was seen that the obtained results were consistent with the studies of Keleş and Özulucan (2020). Kızıl and Aslan (2019). Gümüş and Bolel (2017) in the literature and similar results were obtained. The method used in determining the financial performance in the study. the fact that the study covered a certain period and the inclusion of only companies traded in BIST in the study are

among the limitations of the study. In future studies on the subject. expanding the study period. including other companies in the airline sector in the study. using different financial ratios or using methods such as TOPSIS. CRITIC. MAIRCA in determining the financial performance are among the suggestions to be presented.

Ethical approval

Not applicable.

Conflicts of Interest

The author declare that there is no conflict of interest regarding the publication of this paper.

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