

**AN ANALYSIS AND EVALUATION OF BUSINESS AND FINANCIAL
PERFORMANCE OF ASEAN AIRLINE INDUSTRY IN 2020-2024: A CASE
STUDY OF PT GARUDA INDONESIA AND SINGAPORE AIRLINES LTD**

A THESIS

Presented as a Partial Fulfilment of the Requirement to Obtain the Bachelor Degree in
the Accounting Department



By:

AMRI NADIA M

Student Number: 21312225

**DEPARTMENT OF ACCOUNTING
INTERNATIONAL UNDERGRADUATE PROGRAM
FACULTY OF BUSINESS AND ECONOMICS
UNIVERSITAS ISLAM INDONESIA
YOGYAKARTA**

2025

**AN ANALYSIS AND EVALUATION OF BUSINESS AND FINANCIAL
PERFORMANCE OF ASEAN AIRLINE INDUSTRY IN 2020-2024: A CASE
STUDY OF PT GARUDA INDONESIA AND SINGAPORE AIRLINES LTD**

A THESIS

Presented as a Partial Fulfilment of the Requirement to Obtain the Bachelor Degree in
the Accounting Department



By:

AMRI NADIA M

Student Number: 21312225

**DEPARTMENT OF ACCOUNTING
INTERNATIONAL UNDERGRADUATE PROGRAM
FACULTY OF BUSINESS AND ECONOMICS
UNIVERSITAS ISLAM INDONESIA
YOGYAKARTA**

2025

DECLARATION OF AUNTENTICITY

Here in I declare the originality of the thesis; I have not presented anyone else's work to obtain my university degree, nor have I presented anyone else's words, ideas or expression without acknowledgment. All quotations are cited and listed in the bibliography of the thesis.

If in the future this statement is proven to be false, I am willing to accept any sanction complying with the determined regulation or its consequence.

Yogyakarta, 10 Juli 2025



Amri Nadia M

LEGALISATION SHEET

AN ANALYSIS AND EVALUATION OF BUSINESS AND FINANCIAL PERFORMANCE OF ASEAN AIRLINE INDUSTRY IN 2020-2024: A CASE STUDY OF PT GARUDA INDONESIA AND SINGAPORE AIRLINES LTD

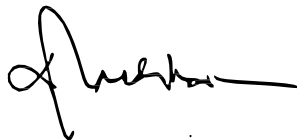
Written by:

AMRI NADIA M

Student Number: 21312225

Approved by

Content Advisor,



Drs. Arief Bachtiar, MSA., Ak., CA., SAS

Language Advisor,



Nihlah Ilhami, S.Pd.

BOARD EXAMINERS' APPROVAL

**AN ANALYSIS AND EVALUATION OF BUSINESS AND FINANCIAL PERFORMANCE OF
ASEAN AIRLINE INDUSTRY IN 2020-2024: A CASE STUDY OF PT GARUDA INDONESIA
AND SINGAPORE AIRLINES LTD**

A THESIS

Compiled by : AMRI NADIA M
Student Number : 21312225

Defended before the Board of Examiners
on August 05, 2025 and Declared Acceptable

Examiner/Content Advisor : Arief Bachtiar, Drs., MSA., Ak., SAS.

Examiner : Yuni Nustini, MAFIS., Ak., CA., Ph.D.

Yogyakarta, August 05, 2025
International Program
Faculty of Business and Economics
Dean



(Prof. Johan Arifin, S.E., M.Si., Ph.D.)

ACKNOWLEDGMENT

Bismillahirrahmanirrahim

Assalamu'alaikum Warahmatullahi Wabarakatuh

All praises belong solely to Allah SWT, Lord of all realms, by whose grace, bounty, and *ridha*, the researcher has been able to complete this thesis, titled “An Analysis and Evaluation of Business and Financial Performance of ASEAN Airline Industry In 2020-2024: A Case Study of PT Garuda Indonesia and Singapore Airlines Ltd,” as a partial fulfilment of the requirement to obtain a bachelor’s degree in the Accounting Department, Faculty of Business and Economics, Islamic University of Indonesia.

This final paper would not have been possible without the guidance, assistance, and support of several parties. Therefore, on this occasion, the researcher would like to express her deepest gratitude and thanks to:

1. Allah *Subhanallahu wa Ta'ala*, who has given her the blessings of Iman, Islam, and Ihsan and His mercy, has enabled me to pursue my studies at the university level and successfully complete this thesis.
2. Prophet Muhammad *Shallallahu Alaihi Wasallam*, who has guided us from the age of darkness to an era of enlightenment, from the age of ignorance to an age of knowledge.
3. The researcher’s beloved parents, her mother, Yeni Hariani Hamid, and her father, Bahrudin Nada Munadi. Oceans of gratitude may not be enough to repay all the efforts, prayers, kindness, affection, and trust given to her, which have allowed her to reach this point.
4. Her siblings, Bahar Fauzin Ahadinata and Wirda Mayada, thank you for motivating her to be a good elder sibling.
5. Mr. Drs. Arief Bachtiar, MSA., Ak., CA., SAS, as her content advisor, who has guided her in writing this thesis. His advice, guidance, and ideas were invaluable in deepening her understanding of this research topic, allowing her to complete it well.
6. Ms. Nihlah Ilhami, S.Pd., as her language advisor, provided suggestions and advice regarding grammar in writing this thesis. Without her, it would not have been better.
7. All lecturers in the Faculty of Business and Economics, Islamic University of Indonesia, who have shared their knowledge and experiences throughout her university studies. Thank you for all the warm discussions held in class.

8. All lecturers who taught the ACCA modules: Financial Accounting, Financial Reporting, Financial Management, Audit and Assurance. The researcher is very grateful for the knowledge and lessons provided, which deepened my understanding and became a foundation for me to pass the four modules' exams.
9. All the International Undergraduate Program Faculty of Business and Economic Office Staff, thank you for their warm welcome and assistance throughout her studies.
10. Her close friends in the International Undergraduate Program class, Anggun, Astria, Riri, and Farel. Thank you for their warm welcome and for accompanying and helping her complete this university journey.
11. Her close friends in the accounting study program, Attina, Nurul, and Erlinda. Even though they only became close in the final year of university, their time together was very memorable. The researcher was thrilled to have participated in competitions and grown with all of them.
12. Her closest friend at UII campus, Nisa. The researcher was thrilled to have been in many of the same organisations and even participated in many competitions together. Thank you for being her closest friend since her first year of university and her friend in growth.
13. Her friends and the big family of Pondok Pesantren UII batch 2021. Thank you for accompanying her throughout her university years and making her feel the presence of family through their existence. With their warmth, strength, laughter, and togetherness, her days at university felt more meaningful.
14. To everyone who supported the researcher and whom she cannot mention individually, she is very grateful for the support and trust given. May every kindness return to you.

The researcher fully realises that this thesis is far from perfect. Deficiencies and errors may exist within it, as perfection belongs only to Allah SWT. Therefore, with all humility, the researcher earnestly hopes for constructive criticism and suggestions for future improvements. Finally, this thesis may benefit both the researcher and the readers. May every page within it be an *amal jariyah* accepted by Allah SWT. *Aamiin ya Rabbal 'alamin*.

Wassalamu'alaikum Warahmatullahi Wabarakatuh

ABSTRACT

The airline industry is vital to the national economy by providing connectivity. Despite its crucial role, the airline industry constantly struggles to meet capital costs and maintain long-term profitability. This research analyses the business and financial performance of PT Garuda Indonesia and Singapore Airlines Ltd. as companies operating within the ASEAN airline industry from 2020 to 2024. The study utilises a comprehensive analytical framework that includes business strategy, financial analysis, and prospective analysis. A descriptive-qualitative method is applied to provide a thorough understanding of both companies' strategic responses and operational outcomes. The results of the analysis indicate that the ASEAN airline industry operates in a highly competitive environment. Further PESTLE analysis identifies macro-environmental factors shaping industry dynamics. A comparison of business performance through SWOT analysis also shows that both companies possess brand recognition strength and government support, but unhealthy financial conditions and governance issues burden Garuda Indonesia. Financial analysis underscores the extreme difficulties faced by Garuda Indonesia based on negative profit and extremely high debt-to-asset ratios. Conversely, Singapore Airlines shows consistent revenue recovery, strong cost management, and a solid capital structure. The Altman Z-Score bankruptcy prediction confirms both companies are in a zone of financial distress, but Garuda Indonesia has a higher risk of bankruptcy than Singapore Airlines. Both companies are also intrinsically undervalued, but Singapore Airlines' more stable financial position makes it a better investment choice than Garuda Indonesia.

TABLE OF CONTENTS

DECLARATION OF AUNTHENTICITY	iii
LEGALISATION SHEET	iv
BOARD EXAMINERS' APPROVAL.....	v
ACKNOWLEDGMENT	vi
ABSTRACT	viii
TABLE OF CONTENTS	ix
LIST OF TABLES.....	xii
LIST OF FIGURES.....	xiii
LIST OF APPENDICES	xiv
CHAPTER I INTRODUCTION	1
1.1. Study Background	1
1.2. Problem Formulation	4
1.3. Study Objectives	4
1.4. Research Benefits.....	4
1.5. Research Method	5
1.6. Source of Data	6
1.7. Data Analysis	6
1.8. Writing Format.....	7
CHAPTER II LITERATURE REVIEW	9
2.1. Industry Analysis	9
2.1.1. Porter's Five Force Analysis	10
2.1.2. PESTLE Analysis	12
2.2. Business Performance Analysis	14
2.2.1. SWOT Analysis	14
2.2.2. Key Performance Indicators	14

2.3. Financial Performance Analysis.....	16
2.3.1. Financial Analysis	17
2.3.2. Prospective Analysis.....	19
CHAPTER III GENERAL DESCRIPTION OF INDUSTRY AND COMPANY .	21
3.1. ASEAN Airline Industry Overview.....	21
3.2. Garuda Indonesia Company Profile	24
3.3. Singapore Airlines Company Profile	28
CHAPTER IV DATA ANALYSIS AND DISCUSSION.....	30
4.1. ASEAN Airline Industry Analysis.....	30
4.1.1. Porter’s Five Force Analysis	30
4.1.2. Political, Economic, Social, Technological, Environmental, and Legal (PESTLE) Analysis	33
4.2. PT Garuda Indonesia and Singapore Airlines Business Performance Analysis	38
4.2.1. Strengths, Weaknesses, Opportunities, and Threats Analysis.....	38
4.2.2. Relevant Airline Industry Key Performance Indicator Analysis	42
4.3. PT Garuda Indonesia and Singapore Airlines Financial Performance Analysis	45
4.3.1. Trend Analysis.....	45
4.3.2. Common-Size Analysis	53
4.3.3. Ratios Analysis	58
4.3.4. Prospective Analysis.....	75
CHAPTER V CONCLUSION.....	92
5.1. Summary.....	92
5.2. Limitation of Research	94
5.3. Implications of Research	95
5.4. Recommendation for Future Research.....	96

REFERENCES	98
APPENDICES.....	108

LIST OF TABLES

Table 1. Top 10 ASEAN airports by seat capacity and annual variance (2024-2025)...	23
Table 2. Garuda Indonesia Share Ownership	25
Table 3. Load factor Garuda Indonesia 2020-2024	43
Table 4. Load factor Singapore Airlines 2020-2024	43
Table 5. The trend of Garuda Indonesia's statement of profit/loss 2020-2024	46
Table 6. The trend of Singapore Airlines' statement of profit/loss 2020-2024	46
Table 7. The trend of Garuda Indonesia's statement of financial position 2020-2024 ..	48
Table 8. The trend of Singapore Airlines' statement of financial position 2020-2024 ..	48
Table 9. Garuda Indonesia's profit or loss statement using the common-size analysis technique for 2020-2024	53
Table 10. Singapore Airlines' profit or loss statement using the common-size analysis technique for 2020-2024	54
Table 11. Garuda Indonesia's financial position statement using the common-size analysis technique for 2020-2024	56
Table 12. Singapore Airlines' financial position statement using the common-size analysis technique for 2020-2024	56
Table 13. Garuda Indonesia's Z-score variables	75
Table 14. Singapore Airlines' Z-score variables	77
Table 15. Garuda Indonesia's Z-score results	78
Table 16. Singapore Airlines' Z-score results	80
Table 17. Proportion of Garuda Indonesia's debt and equity	82
Table 18. Garuda Indonesia's Weighted Average Cost of Capital	84
Table 19. Garuda Indonesia's free cash flow to firm 2025-2029	84
Table 20. Garuda Indonesia's discounted FCFF value	85
Table 21. Proportion of Singapore Airlines' debt and equity	87
Table 22. Singapore Airlines Weighted Average Cost of Capital (in SGD million)	88
Table 23. Singapore Airlines' free cash flow to the firm 2025-2029 (in SGD million) .	89
Table 24. Singapore Airlines' discounted FCFF value (in SGD million)	89

LIST OF FIGURES

Figure 1. Research Framework.....	6
Figure 2. Garuda Indonesia Company Structure	26
Figure 3. Porter's Five Forces Graph of ASEAN Airline Industry.....	33
Figure 4. Operating Profit Margin.....	59
Figure 5. Net Profit Margin	60
Figure 6. Return on Assets	62
Figure 7. Current Ratio	63
Figure 8. Cash Ratio	65
Figure 9. Receivable Collection Period.....	66
Figure 10. Payable Payment Period.....	68
Figure 11. Total Asset Turnover.....	70
Figure 12. Debt-to-Asset Ratio.....	72
Figure 13. Interest Coverage Ratio.....	73

LIST OF APPENDICES

Appendix 1. Garuda Indonesia's Statement of Profit or Loss 2019-2024.....	108
Appendix 2. Garuda Indonesia's Projected Statement of Profit or Loss 2025-2029 ...	110
Appendix 3. Garuda Indonesia's Statement of Financial Position 2019-2024	111
Appendix 4. Garuda Indonesia's Projected Statement of Financial Position 2025-2029	114
Appendix 5. Garuda Indonesia's Projected Statement of Cash Flow 2025-2029	116
Appendix 6. Singapore Airlines' Statement of Profit or Loss 2019-2024.....	117
Appendix 7. Singapore Airlines' Projected Statement of Profit or Loss 2025-2029....	119
Appendix 8. Singapore Airlines' Statement of Financial Position 2019-2024.....	120
Appendix 9. Singapore Airlines' Projected Statement of Financial Position 2025-2029	122
Appendix 10. Singapore Airlines' Projected Statement of Cash Flow 2025-2029.....	124
Appendix 11. Garuda Indonesia and Singapore Airlines' Profitability Ratio.....	126
Appendix 12. Garuda Indonesia and Singapore Airlines' Liquidity Ratio.....	126
Appendix 13. Garuda Indonesia and Singapore Airlines' Activity Ratio.....	126
Appendix 14. Garuda Indonesia and Singapore Airlines' Solvency Ratio.....	127

CHAPTER I

INTRODUCTION

1.1. Study Background

The airline industry plays a vital role in the national economy by providing connectivity, maintaining jobs, and supporting related sectors. Despite its essential role, the airline industry is often called the weakest link in the transportation sector, which constantly struggles to meet capital costs and maintain long-term profitability (Wendel et al., 2024). This condition is influenced by airlines' sensitivity to external factors such as economic shifts, fuel prices, labour cost pressures, and regulatory changes (Tran, 2024).

In addition to those external factors, unexpected conditions such as the Covid-19 pandemic posed unprecedented challenges to the airline industry. The impact of passenger risk perception during the pandemic has significantly affected airline revenues and stock market performance. Increased risk aversion among travellers has led to a decline in demand, prompting airlines to innovate in customer engagement and service delivery (Lu et al., 2022). Digital transformation has emerged as a critical strategy for airlines, enabling them to improve customer satisfaction and operational resilience in a post-pandemic environment (Moses, 2023). Integrating environmental, social, and governance (ESG) considerations into business strategies has also gained attention. Airlines increasingly recognize the importance of sustainability for regulatory compliance and enhancing brand loyalty and financial performance (Paraschi, 2022). The emphasis on environmentally friendly practices is becoming a competitive differentiator in an industry under scrutiny for its environmental impact (Farida et al., 2022).

As a result of Covid-19 pandemic, the International Air Transport Association (IATA) reported a 60.2% decline in global passenger numbers in 2020, with the Middle East and Europe experiencing the most significant declines of 67.6% and 67.4%, respectively (International Air Transport Association [IATA], 2021). Meanwhile, the Asia-Pacific region experienced a 53.4% decrease in the number of passengers compared to 2019, or a decrease of 780.7 million passengers, much greater than the number of decreases in passengers in the Middle East and Europe, which were only 8 million and

389.9 million, respectively. Following the cooldown of Covid-19, recovery occurred in the subsequent years. IATA noted that in 2023, revenue passenger kilometres (RPKs) rose 36.9% compared to 2022. Globally, full-year 2023 traffic was 94.1% of pre-pandemic (2019) levels. December 2023 total traffic rose 25.3% compared to December 2022, reaching 97.5% of the December 2019 level. Fourth quarter traffic was at 98.2% of 2019, reflecting the strong recovery towards the end of the year (IATA, 2024).

On the ASEAN scale, Covid-19 has a significant impact, especially on the drastic decline in the number of passengers and revenue. Data shows that 2020 air traffic volume declined in Asia by up to 58.68% compared to 2019 (Thompson, 2023). This is in line with the decline in intra-ASEAN travellers by 5% in February 2020 compared to the previous year. This decline became even sharper in April 2020, to 95%, where most of the remaining travellers were people who repatriated to their home countries (Law et al., 2022). The Covid-19 pandemic has also had an impact on the national airline industry. The Central Statistics Agency confirmed through the second quarter economic growth report 2020 that the airline industry experienced a contraction of -80.23% yoy, greater than the contraction in the first quarter of -13.21% yoy (BPS, 2020). This has worsened the financial performance of airlines in Indonesia, including PT Garuda, which experienced a decline in revenue of -58.18% yoy in the first semester of 2020 with a loss of IDR 10.2 trillion (PT Garuda Indonesia Annual Report, 2020). Singapore Airlines Ltd, a competitor of PT Garuda Indonesia in the ASEAN region, also experienced a revenue decline of -80.37% yoy in the first semester of 2020 with a loss of SGD 6.69 billion (Singapore Airlines Ltd Annual Report, 2020).

PT Garuda Indonesia is a state-owned enterprise with commercial air transportation service as its business line, and it implements a full-service carrier (FSC). The company, which was founded in 1949, has become a symbol of national pride and an important player in the Indonesian airline market. Several internal and external factors have significantly influenced the company's business and financial performance over the past five years (2018-2023). During the Covid-19 pandemic, PT Garuda Indonesia recorded a decline in revenue until 2021 compared to 2019. As the Covid-19 pandemic decreased, PT Garuda Indonesia recorded revenue growth that improved from 2022 until

the first half of 2024. The company recorded revenue of 1.6 billion USD, an increase of 13% from the first half of 2023.

The internal factor that hindered PT Garuda Indonesia's business and financial performance was financial instability aggravated by dependence on debt financing. The total debt of PT Garuda Indonesia in 2020 reached 12.7 billion USD, an increase of 225.6% compared to 2019, which was only 3.9 billion USD. The cause of this immoderate increase in debt is indicated by changes in the recognition of airline rental charges, which should have been presented as operational expenditure but were recorded as liabilities in the 2020 financial statements. PT Garuda Indonesia's debt problems peaked in 2021, when two companies filed for bankruptcy against PT Garuda Indonesia. However, PT Garuda Indonesia managed to avoid the risk of bankruptcy after the Central Jakarta Commercial Court Judge on October 21, 2021, rejected the lawsuit for postponement of debt payment obligations filed by PT—my Indo Airlines. PT Garuda Indonesia also managed to avoid the risk of bankruptcy after AerCap Ireland Limited, one of the lessors, withdrew its bankruptcy lawsuit against Garuda in the Supreme Court of New South Wales on July 28, 2021 (Ministry of Finance, 2022). Responding to PT Garuda's success in dealing with bankruptcy threats and the company's revenue growth, the Indonesian government, through Government Regulation number 51 of 2022, has increased state capital participation by 1 trillion rupiah in the form of mandatory convertible bonds to PT Garuda Indonesia. So that PT Garuda Indonesia can carry out debt restructuring and strategies to increase revenue.

This study will use Singapore Airlines Ltd as the comparator of PT Garuda Indonesia. Singapore Airlines was founded in 1947 under Malayan Airways, then became Malaysia-Singapore Airlines in May 1966 until 1972. Malaysia-Singapore Airlines was separated into two airlines, Malaysia Airlines and Singapore Airlines. Singapore Airlines is globally recognised for its premium service offerings and innovative strategies in the airline industry. The airline adopts a dual approach that combines premium service models with low-cost carriers. To support this strategy, Singapore Airlines Ltd established its subsidiary, Scoot, to provide low-cost carrier services, enabling the company to capture a broader market. Regarding innovation, Singapore Airlines remains committed to modernizing its fleet with the latest technologies such as the Airbus A350

and Boeing 787-9. This modern fleet enhances company operational efficiency and contributes to environmental sustainability by reducing carbon emissions (Chen, 2024).

This research will evaluate and analyse PT Garuda Indonesia's business and financial performance over five years (2020-2024), emphasizing how management addresses the strategic and operational challenges faced by PT Garuda Indonesia. Three analysis frameworks—business strategy analysis, financial analysis, and prospective analysis—are utilised in this study.

1.2. Problem Formulation

1. How is the condition of the ASEAN airline industry from 2020 to 2024?
2. How has PT Garuda Indonesia's business and financial performance evolved over the past five years in the face of strategic and operational challenges compared to Singapore Airlines?
3. To what extent has PT Garuda Indonesia management's strategy been effective in addressing strategic and operational challenges compared to Singapore Airlines?

1.3. Study Objectives

1. To review and determine the condition of the ASEAN airline industry from 2020 to 2024.
2. To analyse and evaluate the business and financial performance of PT Garuda Indonesia and Singapore Airlines over five years in the face of strategic and operational challenges.
3. To understand and emphasise PT Garuda Indonesia and Singapore Airlines management's strategy in addressing strategic and operational challenges.

1.4. Research Benefits

1. Academic Benefits

This research is expected to increase the academic community's knowledge regarding the analysis and evaluation of business and financial performance in Full-Service Carrier (FSC) airlines. It can also serve as a reference for future researchers.

2. Practical Benefits

a. For researchers

Increase knowledge and science regarding evaluating business and financial performance in the ASEAN airline industry, especially PT Garuda Indonesia.

b. For the company

Provide suggestions and recommendations for PT Garuda Indonesia to improve the company's performance financially and strategically.

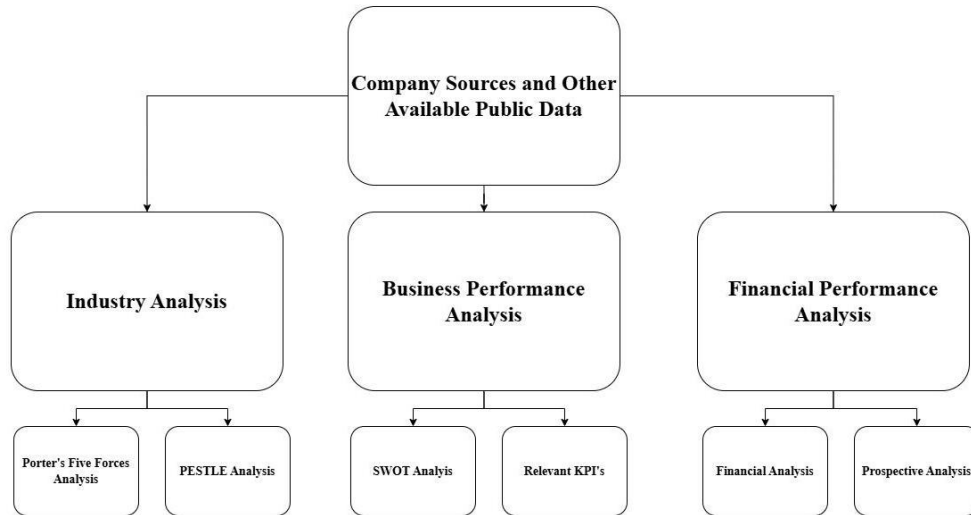
c. For investors

This research is expected to enhance information for prospective investors and be considered before investing.

1.5. Research Method

The method used in this study is the descriptive-qualitative method. The qualitative method aims to be a scientific approach that reveals phenomena by describing data and facts in detail through words, focusing on the research subject (Mulyana, 2008). Whilst the descriptive method aims to describe and explain the research results (Ramdhan, 2021). The qualitative approach was chosen to understand companies' strategic responses and operational outcomes in the ASEAN airline industry, especially considering challenges such as the COVID-19 pandemic, post-pandemic recovery, and increasing industry competition. In line with this understanding, this study describes the data that has been collected and processed in the form of a ratio and explains the information gathered to answer questions about the current condition of the research subject.

Figure 1. Research Framework



1.6. Source of Data

This study uses secondary data from companies' annual reports and financial statements obtained through the companies' official websites and academic resources such as textbooks and scientific articles. Additional news articles are also used to enhance understanding of each company's condition. The documentation method is used as a data collection method, namely by collecting secondary data, involving gathering qualitative and quantitative secondary data from relevant and reliable sources. Quantitative data documented using Excel is then processed into ratios, graphs, and tables, which are then interpreted based on the relevant and reliable qualitative data.

1.7. Data Analysis

The data analysis techniques used in this study are:

1. Industry Analysis
 - a. Porter's Five Force Analysis
 - b. Political, Economic, Social, Technological, Environmental, and Legal (PESTLE) Analysis
2. Business Performance Analysis
 - a. Strength, Weakness, Opportunity, and Threat (SWOT) Analysis
 - b. Relevant Key Performance Indicators for Company within Airline Industry:
 - Load Factor

- Revenue per Available Seat Kilometre (RASK)
 - Cost of Available Seat Kilometre (CASK)
3. Financial Performance Analysis
- a. Financial Analysis
- Trend Analysis. A horizontal analysis of the balance sheet or income statement highlights structural changes in the company concerning the same item in a base year.
 - Common-Size Analysis. A vertical analysis prepared by dividing each item on the balance sheet or income statement by the same period's total assets (for the balance sheet) or revenue (for the income statement) and expressing the results as percentages, highlights the composition of the balance sheet/income statement.
 - Ratio Analysis:
 - Profitability Ratio. It measures the return earned by the company during a period.
 - Liquidity Ratio. It measures the company's ability to meet its short-term obligations.
 - Activity Ratio. It measures how effectively the company is using working capital and long-term assets.
 - Solvency Ratio. It measures the company's ability to fulfil its long-term debt obligations.
- b. Prospective Analysis:
- Bankruptcy Prediction. It is predicted by using the calculation of the modified Altman Z-Score equation.
 - Discounted Cash Flow (DCF) Valuation. It is used to estimate the company's value using its expected future cash flows.

1.8. Writing Format

Chapter I: Introduction

This chapter contains the study background, problem formulation, study objectives, research benefits, limitations of the research area, research approach, research framework,

source of data, data analysis, and writing format, so that readers can understand the context and reasons why this research is important to do.

Chapter II: Literature Review

This chapter reviews key concepts, previous research, relevant theories underlying the analysis, and literature to support understanding of the research topic.

Chapter III: General Description of Industry and Company

This chapter describes the ASEAN airline industry and the company profiles of PT Garuda Indonesia and Singapore Airlines Ltd.

Chapter IV: Data Analysis and Discussion

This chapter presents the results of the analysis and evaluation of data obtained in the previous chapter.

Chapter V: Conclusion

This chapter includes conclusions, limitations, implications, and recommendations for future research.

CHAPTER II

LITERATURE REVIEW

This chapter provides a comprehensive and detailed explanation of the literature review, including industry, business, and financial performance analyses.

2.1. Industry Analysis

Industry analysis systematically studies the business or companies' models within an industry by identifying research-oriented issues and analysing them to create new knowledge or solve problems related to those issues (Aithal, 2017). Industry analysis is a process that presents a structural overview and characteristics of an industry. Its main objectives are to assess the industry's profit potential, identify factors that can reduce profitability, maintain competitive advantage from external pressures, strengthen competitive position by strategically influencing those forces, and anticipate future changes in the industry structure.

This approach is a combination of industrial economics and strategy. The need for this new approach arose from dissatisfaction with the traditional industrial organization theory, which was considered less relevant in the context of strategic analysis. The traditional theory assumed that firms within an industry were homogeneous except in size. However, since the 1950s, many studies have questioned this assumption. One of the important figures in this development was Joe S. Bain from Harvard, who argued that mobility barriers influence industry structure more than firm size. He stated that these barriers create market power that protects large firms from new competitors and maintains high profit levels even in imperfect competition. However, Bain still assumed that profits are distributed proportionally based on firm size through market power as a "shared asset".

Entering the 1970s, various empirical studies and evidence challenged the traditional view that profit levels were uniform and derived solely from market power. A new approach to industry structure emerged, suggesting that internal and external industry structures influence variations in profitability among firms. In 1972, Michael Hunt from Harvard, with his research on the home appliance industry, introduced the concept of

strategic groups. Strategic groups are defined as clusters of firms that adopt similar strategies, and their presence affects the distribution of industry profits by creating barriers to entry or stimulating more intense competition (Fleisher et al., 2002).

2.1.1. Porter's Five Force Analysis

Michael E. Porter introduced mobility barriers, strategic groups, and multiple new variables in 1980 to refine strategic theory and explain industry structure and profitability. He generated an effective analytical framework to examine industry dynamics by integrating industrial economics principles into business strategy research. Through his book *Competitive Strategy: Techniques for Analysing Industries and Competitors*, he developed a comprehensive model for industry analysis through combining three key dimensions of analysis, including industry structure, competitor behaviour, and industry evolution (Fleisher et al., 2002).

This analytical framework highlights five key factors that influence the intensity of competition and affect the company's strategic and operational decisions in a market. These five factors include the threat of new entrants, the bargaining power of suppliers, the bargaining power of customers, the threat of substitute products or services, and the intensity of rivalry among existing companies. Awareness of the five forces can help a company understand the structure of its industry and stake out a position that is more profitable and less vulnerable to attack (Porter, 2008).

A. Threats of New Entrants

Entry barriers refer to the advantages held by existing companies over new entrants. The threat of entry into an industry depends on the high entry barriers and how existing players are likely to respond to new entrants. If entry barriers are low and new entrants expect little resistance from established competitors, then the threat of entry is high, and industry profitability tends to decline. However, if entry barriers are high, it will be difficult for new entrants to compete with existing companies. Profitability is not directly affected by new entrants themselves, but rather by the degree of threat posed by potential entry. The barriers to entry in question are the advantages of incumbents over new entrants (Porter, 2008).

B. Bargaining Power of Suppliers

Suppliers can exert significant power if they have unique products or services, affecting companies' profitability and operational flexibility within the industry (Isabelle et al., 2020). Powerful suppliers can capture a larger value share by raising prices, limiting quality or service, or shifting costs to industry players. They can depress the industry's profitability if it cannot pass on these cost increases into the price of its products. The degree of supplier power can vary depending on several factors, including the concentration of suppliers in the market, the availability of substitute inputs, and the relative importance of their contribution to the final product. When suppliers are concentrated and provide critical materials or services with few substitutes, they can effectively dictate terms and raise prices, resulting in higher costs for businesses that rely on them. This influence can disrupt a company's competitive position and potentially reduce profit margins (Paramadita et al., 2022).

C. Bargaining Power of Customers

Powerful customers can capture more value by pushing down prices, demanding better quality or more services, which can increase costs, and generally playing industry participants against one another to the detriment of profitability. Customers hold power if they have bargaining power relative to industry players, especially if they are price sensitive; they can pressure companies to lower prices, thereby affecting overall profit margins in the market. One of the factors contributing to customers' bargaining power is the availability of substitute products. When customers have many alternatives, their power increases significantly. In addition, the ability of customers to purchase in large volumes often allows them to obtain better prices and terms, thereby enhancing their bargaining power. Customers' awareness and market competition can also strengthen their bargaining power. As customers gain more information about market alternatives, they can more effectively advocate for favourable terms and push companies to innovate or justify their pricing to remain attractive (Paramadita et al., 2022).

D. Threat of Substitute Products or Services

This component measures customers' likelihood of switching to alternative products or services that meet the same needs. When the threat of substitutes is high, industry profitability will decline. Substitute products or services limit an industry's profit potential by setting a price ceiling. If a company cannot differentiate itself from

substitutes through product performance, marketing, or other means, it will suffer in terms of profitability and growth potential. Substitute products can take various forms and significantly affect customer choice. The existence of substitute products forces companies to establish unique value propositions and strong brand loyalty to reduce the potential loss of customers to alternative products. The level of threat posed by substitute products is influenced by several factors, including availability, price, quality, and how easily the product can replace the existing product. Furthermore, the ability of consumers to switch to substitute products without incurring significant switching costs further strengthens this threat (Isabelle et al., 2020).

E. Rivalry Among Existing Companies

Rivalry among existing competitors takes many familiar forms, including price discounts, new product launches, advertising campaigns, and service improvements. This competitive rivalry occurs when many companies compete for the same market share and resources, leading to price competition, promotional activities, and increased innovation efforts. High levels of competition can significantly reduce profit margins and create a challenging environment for all players involved. One factor determining the intensity of competition within an industry is the number of competitors in the market. An industry with many similar players often experiences intense competition, as companies must consistently strive to differentiate themselves to maintain or grow their market share. In addition, the degree of product differentiation also significantly influences the competition. Companies may rely on brand image and customer loyalty in markets with highly differentiated products to maintain a competitive advantage. However, in undifferentiated markets, such as commodities or basic consumer goods, companies often use price competition, intensifying rivalry (Paramadita et al., 2022).

2.1.2. PESTLE Analysis

PESTLE analysis is a strategic framework used to evaluate the macro-environmental factors influencing an organization within an industry. PESTLE is an acronym for Political, Economic, Social, Technological, Legal, and Environmental, each representing a category of influences that can shape business decisions and strategic

direction. This analysis is particularly useful in strategic planning and risk management because it can systematically identify external factors affecting a company. The factors that form the PESTLE analysis framework are explained as follows:

1. Political factors. Political factors in the PESTLE analysis include government policies, regulations, and political stability, which can significantly impact a business's environment.
2. Economic factors. Economic factors relate to the overall economic environment, including growth rates, inflation, interest rates, and consumer purchasing power. A detailed understanding of these factors allows companies to anticipate market trends and adjust their strategies accordingly.
3. Social factors. Social factors include societal trends, demographics, lifestyle changes, and cultural norms. The PESTLE framework helps companies adapt to social changes affecting consumer behaviour or operational capabilities.
4. Technological factors. Technological advancements can present both opportunities and challenges for businesses. Technology can impact production processes, product development, and market reach. The PESTLE framework helps identify technology trends that organizations should consider to maintain competitiveness.
5. Legal factors. Legal factors refer to the regulatory framework that a company must comply with, including laws related to employment, competition, health, and safety. Compliance with these laws is essential for maintaining the reputation and integrity of the company.
6. Environmental factors. Environmental factors relate to the ecological and environmental aspects that affect a company, including climate change, resource depletion, and sustainability efforts. As organizations face increasing pressure to operate sustainably, the PESTLE framework allows for a comprehensive environmental impact assessment. Additionally, a PESTLE analysis can uncover the challenges and opportunities associated with environmental compliance in disaster management, offering insights that help organizations mitigate risks associated with environmental change (Ugale, 2015).

2.2. Business Performance Analysis

Business performance analysis systematically assesses how well a company achieves its objectives using various metrics and frameworks. This analysis involves various aspects of a business operation and effectiveness, providing a roadmap for future improvements and strategic adjustments (Bull, 2007).

2.2.1. SWOT Analysis

SWOT analysis is an acronym for strengths, weaknesses, opportunities, and threats. This approach is often used to summarize the results of external and internal environmental analysis. However, when this approach is adopted, the results are usually weak, inconclusive, and not strong enough to provide tangible benefits. Therefore, a SWOT analysis summarizes the key strengths, weaknesses, opportunities, and threats to conduct an overall audit of the strategic position of a business and its environment. The language used in a SWOT analysis should be concise, specific, realistic, and supported by evidence (Paul et al., 2014).

Elements within its internal environment identify the strengths and weaknesses of an organization in a SWOT analysis, while opportunities and threats are determined by examining external elements. This analysis provides valuable information that matches the company's resources and capabilities with the competitive environment in which it operates. Strengths and opportunities contribute to achieving organizational goals. Both are considered beneficial to the organization. Conversely, weaknesses and threats hinder the achievement of organizational goals and are therefore seen as unfavourable. Therefore, the basis for selecting a successful strategy lies in analysing the strengths and weaknesses that arise from the internal environment and the opportunities and threats that originate from the external environment (Kumar et al., 2023).

2.2.2. Key Performance Indicators

Key Performance Indicators (KPIs) are important management instruments used to measure and control the overall performance of an organization. Organizations use financial and non-financial indicators to estimate and strengthen their level of success in achieving pre-set long-term goals. In modern industries, which are complex and full of

various types of equipment and production processes, performance measurement through KPIs is essential for ensuring the operation runs efficiently and profitably. KPIs can be applied to various aspects such as energy use, raw materials, operations, maintenance, and occupational safety (Velimirović et al., 2010).

The application of KPIs is often integrated with other performance management methods such as the Balanced Scorecard, Performance Prism, and Integrated Performance Measurement System (IPMS). This integration aims to create a holistic approach to measuring organizational performance. However, challenges arise when the KPI aggregation process is carried out unsystematically, resulting in high complexity. Therefore, it is important to design a structured KPI measurement system that aligns with the organization's strategy and objectives (Setiawan et al., 2020).

Overall, KPIs function as measurement tools, control mechanisms, and drivers of continuous improvement. In modern industries and organizations, KPIs provide quantitative data that can be used to identify waste, optimize processes, and improve efficiency and competitiveness within the organization. Thus, developing and implementing appropriate KPIs becomes crucial in driving an organization's long-term success (Purwoko et al., 2023).

The following indicators refer to the book written by Moghadasnian, which is commonly used to measure the performance of an airline company:

- a. Load Factor. It measures airline capacity utilisation. It reflects the percentage of available seating capacity that passengers occupy. High load factor indicates high profitability and efficiency in capacity management, contributing to carbon reduction per passenger (Moghadasnian, 2022). Load factor is calculated as follows:

$$\text{Load factor} = \frac{\text{Revenue per Passenger Kilometer}}{\text{Available Seat Kilometers}} \times 100\%$$

- Revenue Passenger Kilometre (RPKs) = Number of passengers carried x distance flown (in km)
- Available Seat Kilometre (ASKs) = Number of available seats x distance flown (in km)

- b. Cost per Available Seat Kilometre (CASK). It is a standard metric that allows comparison of cost efficiency across airlines by measuring the cost to an airline of flying one seat kilometre, whether occupied or not. A lower CASK generally means an airline operates more efficiently (Moghadasnian, 2022). CASK is calculated as follows:

$$\text{CASK} = \frac{\text{Operating Expenses}}{\text{Available Seat Kilometers}}$$

- c. Revenue per Available Seat Kilometre (RASK). It measures the revenue generated per available seat kilometre. The resulting figure shows the airline's revenue for every seat kilometre available for sale. RASK, when compared to CASK, provides insight into an airline's profitability. If RASK value exceeds CASK, the airline is profitable (Moghadasnian, 2022). RASK is calculated as follows:

$$\text{RASK} = \frac{\text{Total Revenue}}{\text{Available Seat Kilometers}}$$

2.3. Financial Performance Analysis

Financial performance analysis evaluates a company's operational and financial characteristics based on financial statements. This analysis aims to assess the efficiency and effectiveness of management in managing company resources. In business and economics, financial performance is central in describing a company's achievements over a specific period (Hidayati et al., 2022).

Several researchers have identified key components of financial performance, such as income statements, balance sheets, and cash flow statements. Wahyu (2017) states that financial performance can be measured through capital adequacy, liquidity levels, and profits earned. Fahmi (2018) emphasizes that financial performance must be analysed based on applicable financial regulations, while Askarela (2020) highlights the importance of liquidity and profitability indicators in measuring company performance.

The primary purpose of financial performance analysis is to assess a company's profitability, liquidity, solvency, and business stability. The steps in performance analysis include reviewing financial statements, calculating financial ratios, comparing performance with other companies through both cross-sectional and time series approaches, interpreting data, and providing solutions to problems found. Company

financial statements are the primary source of analysis when conducting financial performance analysis. Therefore, accuracy and transparency in preparing financial statements are crucial to ensure that financial performance analysis can be conducted validly and reliably (Febrianty et al., 2022).

2.3.1. Financial Analysis

Financial analysis is a systematic process that aims to evaluate the financial performance of an organization through a thorough examination of the data presented in the financial statements. This method emphasizes the analysis of key financial elements such as revenues, expenses, assets, and liabilities to assess the extent to which the company manages its finances and achieves its financial goals. Financial analysis has a central role in providing an overview of the company's profitability, liquidity, and solvency, which are important indicators for decision-making by management, investors, and other stakeholders (Kaufmann et al., 2001).

In the context of investment, financial analysis is used to interpret and assess the company's financial position in its economic scope. Debt investors pay more attention to the company's ability to pay interest and repay the principal, while equity investors are more concerned with the company's profitability and stock value. Therefore, the primary focus of financial analysis is to evaluate the company's ability to generate profits that exceed its cost of capital, develop operations profitably, and generate sufficient cash flow to meet obligations and capture business opportunities (Kaufmann et al., 2001).

The financial analysis process begins with the data in the company's financial statements, including audited financial statements, additional disclosures required by regulatory authorities, and accompanying management comments. This information forms the basis of an evaluation, which analysts then enrich through industry research and macroeconomic conditions to provide a more comprehensive context for the company's financial position. This holistic approach ensures that the analysis results describe internal conditions and consider relevant external factors (Friedlob et al., 2003).

The value of financial analysis lies not only in the numerical findings but also in the analyst's ability to interpret the data accurately. A reasonable interpretation will turn

numbers into actionable insights in the form of relevant decisions or recommendations. Therefore, financial analysis requires quantitative precision and contextual understanding to provide a strong basis for strategic decision making in a dynamic business environment (CFA Institute, 2024). The financial analysis techniques used in this study are:

- a. Trend analysis. It shows the change in the amount of the corresponding financial statement items over a specific period, which is a valuable tool for assessing trend situations within financial statements (Lakada et al., 2017). The trend analysis formula is:

(Amount Change= Amount of the item in comparison year – Amount of the item in base year)

$$\text{Percentage Change} = \frac{\text{Amount change}}{\text{Amount of the item in base year}} \times 100\%$$

- b. Common-size Analysis. It is calculated by dividing each item on the balance sheet or income statement by the same period's total assets (for the balance sheet) or revenue (for the income statement) and expressing the results as percentages (Lakada et al., 2017). The common-size analysis formula is:

$$\text{Percentage of base} = \frac{\text{Amount of individual item}}{\text{Amount of base}} \times 100\%$$

- c. Ratio analysis. Ratios are a useful way to express relationships between accounts in financial statements. Ratios express one quantity in relation to another. The calculated ratios are not the answer to these relationships but rather indicators of some aspect of a company's performance, showing what happened, not why it happened. Not all ratios are relevant to a particular analysis. Therefore, the ability to select relevant ratios to answer research questions is an analytical skill. Furthermore, ratio analysis doesn't stop at calculations because interpreting the results is also crucial (CFA Institute, 2024). The ratios used in this analysis are:

- Profitability ratio:

- a. Operating Profit Margin = $\frac{\text{Profit before interest and taxation}}{\text{Net Sales}} \times 100\%$

- b. Net Profit Margin = $\frac{\text{Net profit for the year}}{\text{Net Sales}} \times 100\%$

- c. Return on Asset = $\frac{\text{Net profit for the year}}{\text{Average total asset}} \times 100\%$

- Liquidity ratio:

- a. Current Ratio = $\frac{\text{Current assets}}{\text{Current liabilities}} : 1$

- b. Cash Ratio = $\frac{\text{Cash and cash equivalent}}{\text{Current liabilities}} : 1$
- Activity ratio:
 - a. Receivable Collection Period = $\frac{\text{Average receivables}}{\text{Revenue}} \times 365 \text{ days}$
 - b. Payable Payment Period = $\frac{\text{Average payables}}{\text{Cost of sales}} \times 365 \text{ days}$
 - c. Total Asset Turnover = $\frac{\text{Revenue}}{\text{Average total assets}}$
- Solvency ratio:
 - a. Debt to Asset Ratio = $\frac{\text{Total debts}}{\text{Total assets}}$
 - b. Interest Coverage Ratio = $\frac{\text{Profit before interest and tax}}{\text{Interest payments}}$

2.3.2. Prospective Analysis

Prospective analysis is an evaluative approach focusing on projecting future financial performance based on historical data, trends, and relevant analytical techniques. According to Pelekh et al. (2020), this analysis is important for management and stakeholders because it supports the strategic decision-making process related to the company's continuity and growth. The main components of prospective analysis include financial statement forecasting and company valuation. These two aspects utilise strategic, accounting, and financial analysis results to form a comprehensive projection of the company's prospects.

Prospective analysis has broad practical applications, including securities analysis, credit evaluation, mergers and acquisitions, and corporate communication strategy development. The forecasting process in prospective analysis is not a stand-alone process but rather a synthesis of insights derived from previous stages of analysis. The success of this analysis is highly dependent on the analyst's understanding of economic theory, industry context, and technical ability to estimate income statements, balance sheets, and cash flows comprehensively and realistically (Palepu et al., 2020).

- a. Bankruptcy prediction using the Altman Z-Score model. The model predicts bankruptcy when $Z < 1.81$. The range between 1.81 and 2.67 is labelled the "grey area" (Palepu et al., 2020). The formulas are as follows:

$$Z = 1.2 (X1) + 1.4 (X2) + 3.3 (X3) + 0.6 (X4) + 1.0 (X5)$$

Where:

$X1 = \text{net working capital} / \text{total assets}$ (measure of liquidity)

$X2 = \text{retained earnings} / \text{total assets}$ (measure of cumulative profitability)

$X3 = \text{EBIT} / \text{total assets}$ (measure of return on assets)

$X4 = \text{book value of equity} / \text{book value of total liabilities}$ (measure of market leverage)

$X5 = \text{sales} / \text{total assets}$ (measure of sales-generating potential of assets)

- b. Discounted Cash Flow (DCF) Valuation. It is used to estimate the company's value using its expected future cash flows. Through DCF valuation, an analyst assesses the intrinsic value of an asset based on its fundamentals. Intrinsic value is the value that a company should have if analysed objectively, with accurate cash flow estimates and the appropriate discount rate (Damodaran, 2012). The value to shareholders is estimated as follows:

Equity value = Present value of expected free cash flows to equity

Valuation under the discounted cash flow method involves the following steps (Palepu et al., 2020):

- Step 1: Forecast free cash flows available to equity holders over a finite forecast horizon (usually 5 to 10 years).
- Step 2: Forecast free cash flows beyond the terminal year based on some simplifying assumptions.
- Step 3: Discount free cash flows to equity holders at the cost of equity. The discounted amount represents the estimated value of free cash flows available to equity.

CHAPTER III

GENERAL DESCRIPTION OF INDUSTRY AND COMPANY

This chapter provides a thorough overview of the airline industry in ASEAN and a general description of Garuda Indonesia and Singapore Airlines as companies operating within this industry. The discussion begins with an outline of the industry's key characteristics, trends, and developments, followed by an introduction to the companies' backgrounds, business activities, organisational structures, and roles within the industry. A comprehensive understanding of the industry context and the specifics of the companies is crucial for analysing future performance and prospects.

3.1. ASEAN Airline Industry Overview

The Association of Southeast Asian Nations (ASEAN) is a geopolitical and economic organization uniting Southeast Asian countries. The airline industry is vital for economic development, trade facilitation, and tourism in the ASEAN region. Given the geographically dispersed member states and rapidly growing populations, air connectivity is crucial for the region's integration and prosperity. During the Covid-19 pandemic, the Southeast Asian airline sector experienced a severe decline due to domestic and international mobility restrictions. Southeast Asia suffered an 80% loss in passenger traffic during the pandemic (Asian Development Bank, 2023). After the decline of the Covid-19 pandemic, the sector shows a recovery trajectory with domestic air traffic in the region surpassing pre-pandemic levels in early 2024, driven by government support and strong consumer demand. Globally, the Asia-Pacific region, including ASEAN, is poised to lead future recovery and growth, with passenger numbers projected to surge by 7,9% in 2025 (IATA, 2025).

Post-Covid-19 pandemic, the overall capacity in the Southeast Asian airline market shows a healthy growth of 4,5% compared to June 2024, reaching a total of 38,6 million seats. A prominent trend is the faster growth rate of international capacity compared to domestic capacity, increasing by 5,3% and 3,8% respectively. In terms of airline segments, low-cost carriers continue to dominate the capacity landscape, holding a larger seat share of 19,29 million in 2024 compared to full-service carriers with 17,62 million seats (Official Aviation Global [OAG], 2025).

Based on Official Aviation Global data for June 2025, Indonesia is the largest market in Southeast Asia, contributing 10,4 million seats, despite a 4,1% reduction in capacity compared to June 2024. This decline is primarily due to several factors such as aircraft shortages, maintenance issues, challenges in importing spare parts, financial pressures on airlines, and government-mandated fare reductions affecting airline operations. Thailand ranks as the second-largest market in Southeast Asia with 6,6 million seats, showing a strong year-on-year capacity increase of 5,8%. Vietnam and Malaysia are currently the fastest-growing markets in seat additions, contributing 662.000 and 630.300 seats respectively compared to 2024 (OAG, 2025).

ASEAN's ambitious Single Aviation Market vision has been a significant catalyst for infrastructure investment and aviation development plans across Southeast Asia. This framework aims to foster greater regional cooperation and integration through promoting market access liberalization and harmonizing aviation standards. ASEAN Single Aviation Market (ASAM) seeks to create a more unified and efficient air transport system for member states. While this framework provides guiding principles, actual integration and liberalization are still hindered by national-level inconsistencies and bureaucratic barriers. This implies that achieving a truly seamless single market will require sustained multilateral dialogue on regulatory systems to unify diverse sub-aviation markets, leading to complex and ongoing challenges (MarkWide Research, 2025).

The Covid-19 pandemic also significantly accelerated the digital transformation trend at Southeast Asian airports. The rapid adoption of innovative technologies has become an industry standard, driving the transition towards smart airports. Digitalization has transformed passenger journeys from time-consuming processes to seamless and hassle-free experiences. Smart technologies integrated throughout airports enhance operational efficiency for various stakeholders, including passengers, airport staff, and airline groups, significantly improving ease and convenience. Airports that embrace digital transformation and implement smart solutions can gain a competitive advantage in the region. Increased operational efficiency through automation can also lead to cost savings and improved profitability for airport operators.

Table 1. Top 10 ASEAN airports by seat capacity and annual variance (2024-2025)

Rank	Airport Code	Country	Airport Name	June 2024 (Seats)	June 2025 (Seats)	Annual Variance (%)
1	SIN	Singapura	Singapore Changi Apt	3.398.390	3.539.223	4.1%
2	KUL	Malaysia	Kuala Lumpur International Airport	2.874.453	3.132.879	9.0%
3	CGK	Indonesia	Jakarta Soekarno-Hatta Apt	3.232.615	3.035.643	-6.1%
4	BKK	Thailand	Bangkok Suvarnabhumi International Apt	2.984.850	2.990.388	0.2%
5	MNL	Filipina	Manila Ninoy Aquino International Apt	2.522.581	2.667.091	5.7%
6	SGN	Viet Nam	Ho Chi Minh City	2.028.278	2.250.732	11.0%
7	HAN	Viet Nam	Hanoi	1.684.885	1.852.544	10.0%
8	DMK	Thailand	Bangkok Don Mueang International Airport	1.310.132	1.432.315	9.3%
9	DPS	Indonesia	Denpasar-Bali	1.242.119	1.314.091	5.8%
10	UPG	Indonesia	Makassar	996.921	1.014.367	1.7%

Based on the table above, Singapore's Changi Airport (SIN) maintains its leading position, showing an increased capacity of 4,1% from 2024 to 2025. Kuala Lumpur International Airport (KUL) also shows strong growth of 9%. Conversely, despite being a central hub, Jakarta's Soekarno-Hatta Airport (CGK) shows a capacity decrease of 6,1%. Other significant airports like Ho Chi Minh City (SGN) and Hanoi (HAN) in Vietnam show high growth rates of 11% and 10% respectively (OAG, 2025).

Core ASEAN countries such as Singapore, Thailand, and Vietnam are proactively accelerating their efforts to upgrade and expand airport infrastructure to enhance tourism competitiveness and meet the demand. Changi Airport has begun constructing its fifth terminal, a monumental project anticipated to be operational by mid-2030. This expansion

will significantly increase the airport's annual capacity from 90 million to 140 million passengers. Vietnam is also undertaking ambitious airport development projects. Tan Son Nhat International Airport in Ho Chi Minh City opened its VND 11 trillion (equivalent to USD 430 million) domestic Terminal 3 development project, designed to serve up to 20 million passengers annually. Additionally, Bangkok's Suvarnabhumi Airport in Thailand has made significant progress by opening its third runway in September 2024. Thai authorities have also announced plans for further expansion to the east by 2027 to increase overall capacity (Phong, 2025).

Southeast Asian governments are investing heavily in aviation infrastructure development, including constructing new airports, expanding existing facilities, and modernising air traffic control systems. These substantial investments are crucial for improving capacity, connectivity, and operational efficiency. While significant infrastructure investment across ASEAN is a critical step to address capacity limitations, the case in Indonesia, as the most significant market experiencing capacity reduction due to operational issues like aircraft shortages, maintenance backlogs, and financial pressures on airlines, highlights a critical nuance. This indicates that physical infrastructure development, while necessary, is not a standalone solution. The benefits of new airports and expanded capacity can be undermined if airlines' operational health and fleet availability are not aligned. This implies the need for a more integrated approach in addressing both physical infrastructure and airlines' operational or financial well-being to ensure that new capacity can be effectively utilized.

3.2. Garuda Indonesia Company Profile

PT Garuda Indonesia (Persero) Tbk. stands as Indonesia's national airline, historically continuing the legacy of KLM IIB (*Koninklijke Luchtvaart Maatschappij-Interinsulair Bedrijf*) airlines. KLM-IIB was a subsidiary of KLM that had taken over the K.N.I.L.M. (*Koninklijke Nederlandsch Indische Luchtvaart Maatschappij*) private airline, which had existed since 1928 in the Netherlands East Indies. On December 21, 1949, following the Dutch Indonesian Round Table Conference, negotiations were held between the Indonesian government and KLM about creating a national Indonesian airline. President Soekarno decided upon 'Garuda Indonesian Airways' (GIA) as the new

airline's name. In preparation for the eventual transfer over to Indonesian airline staff, KLM temporarily assigned its staff to transfer skills to the new Indonesian airline staff. Thus, the first Director-General of GIA was a Dutchman, Dr. E. Konijnenburg. A day after the recognition of the Republic of Indonesia's sovereignty by the Netherlands on December 28, 1949, two Dakota (DC-3) aircraft left Kemayoran airport in Jakarta for Yogyakarta to meet President Soekarno and bring him to Jakarta, the newly reinstated capital of the Republic of Indonesia. GIA became known as Garuda Indonesia (Garuda Indonesia, 2025).

Garuda Indonesia operates as a limited liability company established under a notary deed. The company was initially wholly state-owned until its initial public offering (IPO) in 2011, where approximately 28% of its shares were sold to the public. The company's ownership structure as of December 2024 shows that the Government of the Republic of Indonesia is the majority shareholder, owning 64,54% of the shares. This majority ownership underscores its role as a State-Owned Enterprise (BUMN) and national airline, implying its national strategic importance and potential government support during difficult times (Garuda Indonesia, 2025). In addition to the government, Garuda Indonesia's shareholders are presented in the following table:

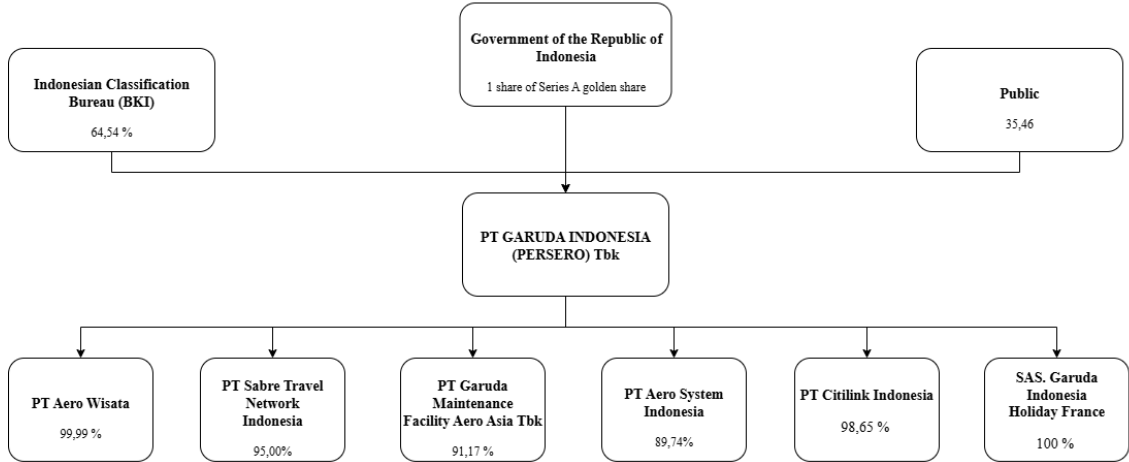
Table 2. Garuda Indonesia Share Ownership

Share Ownership		
Domestic	Share	%
Government of the Republic of Indonesia	59.038.124.403	64,54%
Trans Airways	7.316.798.262	8,00%
Local Institutional	1.708.513.738	1,87%
Local Retail	8.886.970.613	9,71%
Total Domestic	76.950.407.016	84,12%
International	Share	%
Foreign Institutional	14.047.994.196	15,36%
Foreign Retail	482.382.625	0,52%
Total International	14.530.376.821	15,88%
Total Share	91.480.783.837	100,00%
Free Float	24.456.341.077	26,73%

The Garuda Indonesia Group operates as a primary brand, including Citilink as a low-cost airline. This extensive group structure reflects a deliberate strategy to diversify

revenue streams beyond core passenger airlines and control key aspects of the airline's value chain. This integration allows for cost efficiencies, market segmentation, and resilience against fluctuations in a single segment, which contributes to the group's overall stability and growth potential. Meanwhile, Garuda Indonesia also owns strategic business units such as cargo and subsidiaries like GMF Aero Asia (maintenance), Aero Wisata (hospitality), and Aero Systems Indonesia (IT), which enable internal synergies. By integrating various aspects of the airline value chain, Garuda Indonesia can achieve operational efficiencies, better manage costs, and offer more comprehensive services. This structure also provides greater resilience against market turmoil in a single segment, as revenue can be diversified across various business lines (Garuda Indonesia, 2025).

Figure 2. Garuda Indonesia Company Structure



Garuda Indonesia's core business activities and services consist of passenger services, cargo operations, and other ancillary services. Passenger services are the backbone of Garuda Indonesia's operations. The airline operates scheduled flights to various destinations in Asia, Europe, and Australia. These scheduled flights are a major contributor to operating revenue, accounting for approximately 83% of total revenue in Q1 2025. Additionally, unscheduled flight services such as charter flights have shown significant growth. This segment grew 93% year-on-year in Q1 2025, driven by strong demand for Umrah services. This charter segment contributed 5% of total revenue in Q1 2025 and accounted for USD 273,5 million in parent company revenue in FY 2024. Garuda Indonesia also offers various classes of service, including First Class, Business Class, and Economy Class. Ground services include easy flight booking, online check-in,

premium services, baggage handling, assistance for medical conditions, airport maps, and SkyPriority. In-flight services include cabin features, special meals, entertainment, and in-flight connectivity. The entire customer experience is emphasized through the "Garuda Indonesia Experience," highlighting warm Indonesian hospitality and diverse cultural richness (Garuda Indonesia, 2025).

Garuda Indonesia also offers comprehensive cargo services, complementing its core passenger offerings. The cargo segment has shown powerful performance, significantly increasing cargo volume by 34,27% in FY 2024. This positive trend continued in Q1 2025, where cargo volume increased by 5%. In FY 2024, the total cargo transported reached 229.518 thousand tons. Domestic cargo transported increased by 26,31% to 81.347 thousand tons, while international cargo transported increased by 50,30% to 61.775 thousand tons compared to FY 2023. The group's contribution to cargo performance is also significant, with Garuda Indonesia as the leading brand transporting 143.123 thousand tons (+35,65% YoY) and Citilink transporting 86.395 thousand tons (+32,03% YoY) in FY 2024 (Garuda Indonesia, 2025).

Garuda Indonesia operates an extensive network, connecting over 60 destinations worldwide. This network includes extensive domestic and international routes. Domestic destinations served by Garuda Indonesia as of June 2025 include major cities and tourist destinations across Indonesia, such as Ambon, Balikpapan, Banda Aceh, Bandar Lampung, Banjarmasin, Batam, Bengkulu, Denpasar (Bali), Gorontalo, Jakarta (CGK, HLP), Jambi City, Jayapura, Kendari, Kupang, Labuan Bajo, Makassar, Malang, Manado, Medan, Merauke, Padang, Palangkaraya, Palembang, Palu, Pangkal Pinang, Pekanbaru, Pontianak, Praya (Lombok), Semarang, Sorong, Surabaya, Surakarta (Solo), Tanjung Pinang, Ternate, Timika, and Yogyakarta. For international destinations, Garuda Indonesia serves routes to Melbourne, Sydney, Bangkok, Kuala Lumpur, Singapore, Guangzhou, Shanghai, Hong Kong, Tokyo (Narita, Haneda), Seoul, Jeddah, Madinah, Doha, and Amsterdam (Garuda Indonesia, 2025).

The Garuda Indonesia Group currently operates a total of 210 aircraft with an average age of less than five years, consisting of 142 aircraft operated by Garuda Indonesia and 68 aircraft operated by Citilink as a Low-Cost Carrier. Garuda Indonesia has also received various awards, such as the 5-Star On-Time Performance Rating 2020

from OAG Flight View, an independent On-Time Performance rating agency based in the UK. In addition, Garuda Indonesia has received awards as "Best Airline in Indonesia" from 2017 to 2020 and "Major Airlines - Airline of Choice for Asian Tourists" from 2018 to 2020 from the TripAdvisor 2020 Traveler's Choice Airlines Awards (Garuda Indonesia, 2025).

3.3. Singapore Airlines Company Profile

The historical roots of Singapore Airlines can be traced back to Malayan Airways. Malayan Airways was formed on October 21, 1937, by British Imperial Airways, Straits Steamship Company, and Ocean Steamship Company, demonstrating a long heritage in regional aviation. Following the formation of the Federation of Malaysia on September 16, 1963, Malayan Airways was renamed Malaysian Airways. After Singapore's separation from the Federation on August 9, 1965, the airline was again renamed Malaysia-Singapore Airlines (MSA) in May 1966. In the same month, the Singaporean and Malaysian governments injected capital into the airline, giving them 42,79% ownership each. MSA's significant and amicable separation occurred on January 25, 1971, leading to the formation of Singapore Airlines (SIA) and Malaysian Airlines System. SIA was officially established as Mercury Singapore Airlines on January 28, 1972, before being renamed Singapore Airlines on June 30, 1972. This renaming also marked the official establishment of Singapore Airlines as an independent national airline (National Library Board Singapore, 2025).

At its formation, SIA inherited substantial assets from MSA. These included the entire fleet of seven Boeing aircraft, the airline's headquarters building on Robinson Road, aircraft hangars, maintenance facilities at Paya Lebar Airport, and the computerized reservation system. SIA also took over MSA's international route network, which covered 22 cities in 18 countries. The deliberate division of assets during the MSA separation, where Singapore received international routes, modern Boeing aircraft, the headquarters, and maintenance facilities, was a fundamental strategic decision. This immediately positioned SIA as an international long-haul airline rather than just a regional one. It was a key differentiator and contributed to its global brand recognition and premium focus from the outset (National Library Board Singapore, 2025).

Singapore Airlines and its subsidiary Scoot operate an extensive global route network, flying to over 120 destinations worldwide (Singapore Airlines, 2025). This network covers major geographical regions including Southeast Asia, North Asia, West Asia, Africa, Southwest Pacific, Europe, and the Americas. The Singapore Airlines Group is strategically headquartered in the Changi International Airport area, Singapore's leading aviation hub. Temasek Holdings, the investment arm of the Singapore Government, and Napier Investments Pte. Ltd. hold a majority ownership of the group with a total significant stake of 53,45%. This majority ownership by Temasek Holdings provides SIA with significant strategic advantages, offering stability and the capacity for long-term investments, even during periods of industry volatility. Singapore Airlines is publicly listed on the Singapore Exchange (SGX) with the stock symbol SGX: C6L (CAPA, n.d).

Singapore Airlines is renowned for its diverse cabin classes, which are meticulously designed to meet various passenger preferences and needs, consistently emphasizing comfort, luxury, and premium service. Suites and first-class cabins are positioned as the pinnacle of luxury travel and are designed as highly personalized private sanctuaries in the sky. Features include gourmet dining curated by world-renowned chefs and an exquisite selection of wines and champagnes. Business Class is designed to provide a highly comfortable and relaxing experience, especially for business travellers. A key feature in most of the fleet is a fully flat bed, ensuring undisturbed sleep. Other classes from Singapore Airlines are Premium Economy and Economy Class. These classes are designed to maximize passenger comfort at a more affordable ticket price (Singapore Airlines, 2025).

Singapore Airlines is also consistently recognised as one of the world's best airlines. This is demonstrated by several awards received by Singapore Airlines, such as its second position as the best airline in the world at the Skytrax World Airline Awards 2025. In addition, Singapore Airlines has also received recognition as the world's best cabin crew, world's best first class, and best airline in Asia. SIA's low-cost subsidiary, Scoot, also achieved significant recognition, such as being named the World's Best Long Haul Low-Cost Airline 2025 and ranking second in the list of World's Best Low-Cost Airlines 2025 (Yohannan, 2025).

CHAPTER IV

DATA ANALYSIS AND DISCUSSION

This chapter focuses on analysing and interpreting collected financial and business data. It further explores potential reasons behind the companies' performance, identifies their strengths and weaknesses, and connects these findings to internal management decisions and external industry conditions. This chapter presents the results of various analytical methods, including relevant key performance indicators for the airline industry, financial ratio, discounted cash flow (DCF), and bankruptcy prediction analysis. Furthermore, the discussion in this chapter will be divided into industry analysis, business performance analysis, financial performance analysis, and prospective analysis.

4.1. ASEAN Airline Industry Analysis

The airline industry, as one of the economic sectors in the ASEAN region, is a promising sector for growth amid global economic dynamics. Southeast Asia's large population makes air transport a crucial necessity for personal travel and supporting economic and trade activities within the region. Furthermore, infrastructure development and market integration policies for airlines also influence the potential growth of this industry sector. This analysis delves deeper into market dynamics, key trends, and the opportunities and challenges facing the airline industry within the ASEAN region.

4.1.1. Porter's Five Force Analysis

A. Threat of new entrants: low to moderate

The threat of new entrants in the ASEAN airline industry is low to moderate. This is due to the high barriers that prevent new players from competing with existing companies. One of the main barriers is the high capital costs required to acquire aircraft, maintain the fleet, and comply with safety and operational regulations. In addition, strong brand loyalty owned by established airlines with a strong customer base minimizes the opportunity for new entrants to compete and take market share in the ASEAN airline industry (Permana et al., 2020). However, these barriers do not close all opportunities for new entrants to enter the ASEAN airline industry. This is because ASEAN countries have an open sky agreement called the ASEAN Single

Aviation Market (ASEAN-SAM). This agreement aims to increase connectivity and liberalise the Southeast Asia airline industry. So that many airlines can expand their flight routes to various ASEAN countries without significant barriers and open up opportunities for new airlines to enter the market (Hanaoka et al., 2014).

B. Bargaining power of suppliers: high

Supplier bargaining power in the ASEAN airline industry tends to be high. Factors influencing suppliers' high bargaining power are the airline industry's dependence not only in ASEAN but also globally on major manufacturers of aircraft fleets and critical components such as engines and navigation devices. Currently, aircraft manufacturers such as Boeing and Airbus, which dominate the aircraft market, hold significant bargaining power due to limited competition in the aircraft manufacturing industry and high switching costs (Hu et al., 2017). In addition, fuel suppliers for aircraft also hold high bargaining power due to the absence of alternatives to jet fuel. Therefore, price changes in aircraft components as well as fuel directly affect the company's operational costs and profitability levels, where the highest bargaining power is held by suppliers (Tamošiūnas et al., 2022).

C. Bargaining power of customers: moderate to high

The bargaining power of the ASEAN airline industry customer is in the moderate to high category. High bargaining power is influenced by the many travel options available due to the ASEAN open sky policy, especially with the emergence of many low-cost airlines (Hanaoka et al., 2014). In addition, technological developments that support the development of digital platforms where customers can compare airfares or services available between one company and another have increased price sensitivity. Thus, it allows customers to choose airlines with lower ticket prices or better services (Widyani, 2021). To reduce the high bargaining power of customers, airlines tend to make innovations such as improving premium services and offering loyalty programs, or so-called frequent flyer programs. This program allows customers to earn points or miles that can be exchanged for flight tickets, travel class upgrades, or other rewards. This helps increase customer loyalty and reduces the likelihood of them switching to competing airlines, as this program indirectly provides switching costs for customers. When customers have accumulated many

points or miles and then switch to another airline, they may lose the points or miles they have accumulated (Boroh, 2021).

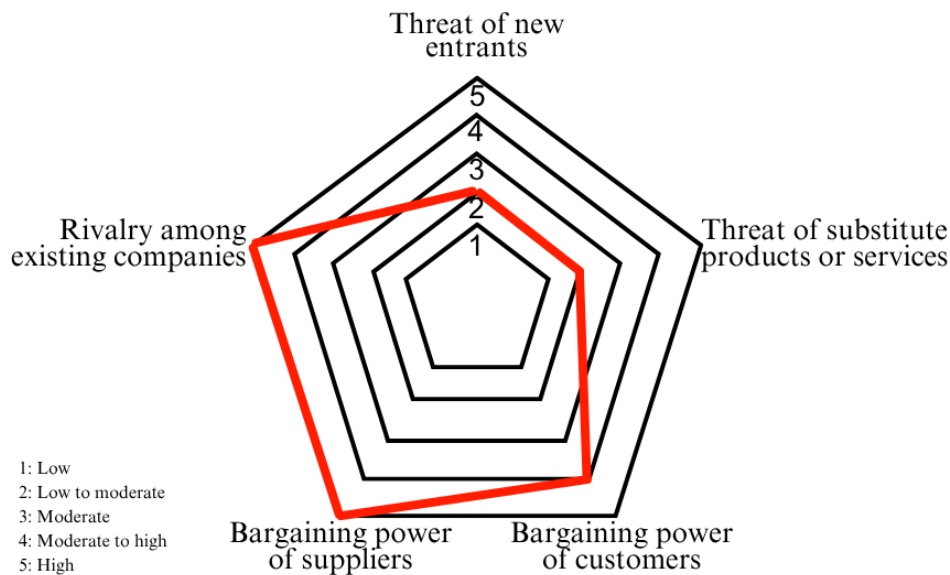
D. Threat of substitute products or services: low to moderate

The ASEAN airline industry has a relatively moderate to low threat of substitution. The main substitutes for airlines in the ASEAN region include sea and land transport modes such as buses and high-speed rail (Yaemsuksawat, 2021). Countries such as Indonesia and Thailand are actively pursuing the development of high-speed rail infrastructure to improve connectivity and provide an efficient alternative for short to medium-distance journeys. The rail option can offer a competitive advantage in terms of time and convenience, particularly on routes traditionally dominated by domestic airlines (Bakker et al., 2017). These substitute modes threaten domestic airlines' market share and pose less of a threat to international flight routes. Given the geographical layout and time-sensitive nature of air travel, especially over longer distances, air transport remains a unique and difficult to replace fully (Hu et al., 2017).

E. Rivalry among existing companies: high

Competition in the ASEAN airline industry is categorized as very tight. This is influenced by several factors such as the ASEAN Open Skies policy and the increase in low-cost carriers. The ASEAN Open Skies policy has facilitated increased operational access for airlines across member countries, thus increasing competition by allowing airlines to operate freely in the region (Permana et al., 2020). In addition, the increase in low-cost carriers offering much lower fares than full-service carriers have increased competition in the market. This competition has forced full-service carriers to adjust their business models, hence the need to introduce low-cost airline subsidiaries. The emergence of low-cost carriers has given consumers more choices. It may also put pressure on full-service carriers to improve their efficiency and service offerings to compete and maintain their market share (Fageda et al., 2011). The emergence of Low-Cost Carriers (LCCs) has created intense competition with Full-Service Carriers (FSCs). LCCs are often misunderstood as cheap-priced airlines, but their business model actually focuses on selling add-on products and services, which makes their core product price structure comparable to that of FSCs (Tran, 2024).

Figure 3. Porter's Five Forces Graph of ASEAN Airline Industry



Based on the graph above, the ASEAN airlines industry generally operates in a competitive and challenging environment. The industry faces very high rivalry among existing airlines. This is driven by numerous players and constant price wars, which put pressure on profit margins. Customer bargaining power is also very high because customers have many choices and ease in comparing prices and services among airlines, giving them significant control over purchasing decisions. Suppliers also possess considerable bargaining power, especially for critical components such as aircraft and jet fuel. Furthermore, the industry faces a moderate to high threat from substitute products or services such as ships, trains, or other land transportation, which can serve as alternatives for some passengers. Although the threat of new entrants tends to be low to moderate due to high barriers to entry, like substantial capital investment and strict regulations, the pressure from the other four forces ensures that the industry remains dynamic, demanding continuous efficiency and innovation from its players to maintain profitability.

4.1.2. Political, Economic, Social, Technological, Environmental, and Legal (PESTLE) Analysis

A. Political Factor

ASEAN, as an organisation of Southeast Asian countries, reached an agreement to formulate an open skies agreement. This agreement began to be fully implemented

through the ASEAN Single Aviation Market (ASEAN-SAM) in 2016 as part of the ASEAN economic integration agenda within the ASEAN Economic Community (AEC) framework. This policy was driven by the need for more open-air connectivity among member countries to encourage economic growth, investment, and tourism within the ASEAN region. Implementing this air liberation policy has supported the rapid growth of low-cost airlines in Southeast Asia, such as AirAsia, Lion Air, and Cebu Pacific (Heriyanto et al., 2019). In addition, adopting this policy has increased competition among airlines operating in the ASEAN region and required companies to improve service quality and operational efficiency (Wahjoe et al., 2019). The increased connectivity in Southeast Asia also attracts more tourists and facilitates cross-border economic exchange. This is also supported by other initiatives such as visa-free exemption agreements for ASEAN member country citizens, which collectively provide incentives for travel and promote regional tourism (Law et al., 2022).

Government ownership and influence over major airlines have added political dynamics to the ASEAN airline industry. Major airlines such as Garuda Indonesia, Singapore Airlines, and Malaysia Airlines are mostly owned by their respective governments, allowing the governments to influence the company's strategic decision-making (Darcy, 2019). In some cases, state-owned airlines often receive financial assistance during economic difficulties to prevent bankruptcy, especially during the Covid-19 pandemic. This provides an advantage for state-owned airlines and a competitive imbalance for private airlines (Pinar, 2023).

B. Economic Factor

The ASEAN region has strong economic growth and rapid urbanisation. This has become a significant driver of air travel demand (Indriani, 2021). This demographic and economic expansion is projected to increase the number of passengers in Asia-Pacific, including ASEAN, by 2043 with an annual growth rate of 5.1%. Developing economies in ASEAN, such as Indonesia and Vietnam, are expected to be the main contributors to this growth (IATA, 2025). This increase in demand for air travel also contributes to the economies of ASEAN countries by supporting the opening of 17 million jobs and \$ 210 billion in GDP by 2023, which is expected to continue growing (ATAG, 2025).

In addition, rising operating costs, including fuel and maintenance, have become a significant challenge for airlines. Research shows that fuel price fluctuations can significantly impact airline profitability, especially for airlines operating with thin margins (Xiao et al., 2021). Meanwhile, government support in the form of stimulus and financial assistance for airlines is a crucial element in ensuring the industry's resilience during the crisis. Research shows that many governments in ASEAN have provided financial support to help airlines survive and improve air connectivity in the post-pandemic period. However, this financial support is mainly limited to state-owned airlines and not extended to privately owned airlines (Suk et al., 2021).

C. Social Factor

The growth of low-cost carriers has democratised air travel by making it easier for passengers to choose these flights over full-service carriers (IATA, 2025). This growth has played a role in shaping passenger purchasing behaviour. This is indicated by the wide range of preferences available to passengers who opt for economical airlines that still offer good service quality. Low ticket prices are consistently the most dominant factor influencing the choice of low-cost carriers. However, ticket prices are not the only determining factor; other factors include attitudes, subjective norms, and perceived behavioural control. This shows that low-cost carriers cannot compete solely based on price. They must focus on the right strategy to increase customer satisfaction and maintain operating costs to remain profitable (Buaphiban et al., 2017).

In addition to the growth of low-cost carriers, factors such as Southeast Asia's rich cultural diversity form the foundation for the tourism industry to thrive. The region attracts tourists from both intra-ASEAN and global markets. Mainland countries such as Cambodia, Thailand, and Vietnam attract tourists with cultural interests, while maritime countries such as Indonesia and the Philippines focus on marine tourism. Furthermore, cultural heritage is central to defining the region's global tourism appeal (Chong et al., 2019).

Entering a culturally diverse market like ASEAN requires more than a standard marketing strategy. It demands a nuanced understanding of the region's cultures, traditions, and values. Airlines and marketers who invest in cultural intelligence, through collaboration with local experts, will better align their campaigns and

services with local preferences, thereby enhancing authenticity and relevance. This strategy is not only about avoiding cultural mistakes but also about building trust and connections, fostering customer loyalty, and fostering sustainable partnerships (Memon, 2025).

D. Technological Factor

The Covid-19 pandemic has created a situation that minimizes physical interactions within the airline industry. This has led to the rapid adoption of contactless technologies (Law, 2024). Airlines have implemented systems such as mobile check-in, electronic boarding passes, contactless payments, and self-service kiosks, which have significantly shifted passenger interactions from face-to-face to digital transactions (Dube et al., 2021). These not only serve to protect the health of passengers and crew but also meet the growing demand for a seamless and efficient travel experience (Law, 2024). In addition, the Covid-19 pandemic has also accelerated the development of online booking platforms for airlines. Digitalization has changed consumer perceptions, encouraging a switch to online platforms due to convenience, allowing them to compare prices, read reviews, and make purchases quickly without visiting the ticket office (Octaviani et al., 2023).

Digital transformation is being massively adopted by airlines in Southeast Asia. Artificial Intelligence (AI) technologies are being used for better forecasting, planning, maintenance, and incident response. AI complements existing systems to match evolving customer expectations and enhance competitiveness and performance. AI is also useful for predicting weather patterns, optimising ticket prices, and handling customer complaints (Junaida et al., 2022). Airlines such as Singapore Airlines have announced significant partnerships with leading AI providers such as Salesforce and OpenAI, demonstrating an integrated and broad vision of AI across their operations, including flight crew scheduling and operational decision-making (Deepak, 2019).

E. Legal Factor

The legal environment surrounding the ASEAN airline industry includes compliance with international aviation regulations and local laws. The 1944 Chicago Convention is the foundation of international aviation law. It affirms each country's full and exclusive sovereignty over the airspace above its territory, allowing countries

to regulate and control access to foreign airlines. The Comprehensive Air Transportation Agreement (CATA) between the European Union and ASEAN is the first bloc-to-bloc agreement to replace more than 140 bilateral air services agreements with a single set of unified rules (Lee et al., 2024). Meanwhile, within ASEAN, the Roadmap for Integration of Air Travel Sector (RIATS) has led to the adoption of key frameworks for the ASEAN Single Aviation Market (ASAM), including the ASEAN Multilateral Agreement on the Full Liberalisation of Air Freight Services (MAFLAFS), the Multilateral Agreement on Air Services (MAAS), and the Multilateral Agreement on the Full Liberalisation of Passenger Air Services (MAFLPAS) (Heriyanto et al., 2019).

Regarding consumer protection law, the ASEAN Strategic Action Plan for Consumer Protection (ASAPCP 2025) acknowledges the need for an effective consumer protection regime in ASEAN. This can be initiated by adopting and implementing a set of high-level principles on consumer protection that can be adapted to changes in the ASEAN Economic Community (AEC). So, these principles can be the basis for modernising consumer laws in member countries and include alternative dispute resolution mechanisms for consumer redress (ASEAN, 2025). This is due to the various flight codes across ASEAN countries, which can potentially harm consumers. Existing regulations focus more on technical aspects, licensing, and fares, but do not explicitly regulate compensation for denied boarding, delays, cancellations, and personal data protection. Airlines generally set their conditions of carriage, as long as they remain within the boundaries of applicable international conventions (Galasintu et al., 2021).

F. Environmental Factor

The ASEAN airline industry is under pressure to reduce carbon emissions, reflecting global initiatives to address climate change (Klöver et al., 2021). ASEAN airlines must comply with global schemes such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and anticipate regional regulations (IATA, 2025). Sustainable Aviation Fuel (SAF) has also been identified as the most significant opportunity to reduce aviation emissions over the next 30 years, potentially reducing lifecycle carbon emissions by up to 80% (Hapsoro, 2025). Countries in this region are beginning to explore renewable energy sources and more

sustainable practices in aviation, driven by social expectations and regulatory requirements (Li et al., 2019).

SAF is at the core of aviation decarbonisation efforts, offering significant emission reductions and compatibility with existing infrastructure. The agricultural feedstock potential in ASEAN positions the region as a key player in meeting global SAF demand. However, unlocking this potential requires bold action from governments and industry, including harmonisation of sustainability policies, investment in infrastructure, and increased local production to build a robust regional SAF ecosystem (Hapsoro, 2025).

4.2. PT Garuda Indonesia and Singapore Airlines Business Performance Analysis

The highly competitive airline industry landscape makes airline performance a reflection of strategic adaptability and operational efficiency. This analysis discusses a comparison of business performance between two airlines in Southeast Asia: PT Garuda Indonesia and Singapore Airlines. The analysis delves deeper into the strengths and weaknesses of each airline, as well as specific factors that differentiate the performance of the two airlines.

4.2.1. Strengths, Weaknesses, Opportunities, and Threats Analysis

A. Strengths

PT Garuda Indonesia maintains strong brand recognition as Indonesia's national airline. The airline has a robust network connecting various domestic and international routes, allowing it to serve a broad customer base. The airline is also appreciated for its high service quality, which is reflected in various industry awards received over the years (Satyodriyani et al., 2023). This brand strength is fundamental in attracting customers and fostering loyalty. In addition, Garuda also emphasises service differentiation through the Garuda Indonesia Experience concept, highlighting high service quality (Kristanti et al., 2021).

PT Garuda Indonesia has consistently received various prestigious awards that confirm its position as a premium full-service airline with a strong global reputation. The airline was recognised as "The World's Most Punctual Airline 2023" by the OAG Punctuality League (OAG, 2023). Additionally, Garuda once again received global recognition as "The World's Best Cabin Crew 2023" from Skytrax, an award received

for five consecutive years from 2014-2018, demonstrating consistency in providing outstanding cabin service (Garuda Indonesia, 2023).

As a state-owned company, Garuda Indonesia benefits from government support, which provides a safety net during financial crises and assists in strategic decision-making (Lesmana et al., 2018). In addition, partnerships with other airlines and tourism stakeholders in ASEAN can increase Garuda's market reach and operational capabilities, potentially leading to increased profitability through shared resources (Ozali et al., 2023).

Singapore Airlines has some of the same internal strengths as Garuda Indonesia. These strengths include recognition for Singapore Airlines' strong brand image, which is supported by several prestigious awards received. Singapore Airlines is also known as an airline with a good attitude toward cabin crew, which is a strength for the company in serving and providing comfort for passengers. This company is also recognised for its good on-time performance, as reported by several flight data and information analysis companies (Pramitha et al., 2018).

B. Weaknesses

The company's unhealthy financial condition strengthens Garuda's weaknesses. The Covid-19 pandemic has worsened the situation by causing a sharp decline in passenger numbers and revenue, while aircraft lease expenses and financial obligations remain high. Although efforts have been made to negotiate with lessors and reduce operational costs, significant pressure on the company's liquidity and solvency persists. This financial weakness makes Garuda vulnerable to changes in external conditions and less flexible in responding to market opportunities (Kristanti, 2023).

In addition, Garuda also faces internal issues related to management and corporate governance. Several incidents have tarnished the company's reputation, such as allegations of financial statement manipulation in 2018, directors' smuggling of luxury goods, corruption in aircraft procurement, and internal conflicts between employees and management. These incidents damaged the public image, affected investor confidence, and created instability in human resource management (Supeni et al., 2019). Garuda Indonesia has faced scrutiny over corporate governance issues, including allegations of a lack of transparency in financial reporting. Audit violation

reports reveal weaknesses in the internal control system and governance practices that could undermine stakeholder trust (Boedihardjo et al., 2024).

Operational inefficiencies have also affected Garuda Indonesia. Implementing cost-cutting measures, such as temporary employee layoffs and salary reductions, indicates internal challenges in maintaining operational capacity while addressing financial pressures (Juariyah et al., 2023). Such actions can lead to declining employee morale and productivity, making it more difficult to streamline operations and highlighting the lack of agile management practices needed for long-term sustainability in a highly competitive environment (Ayu et al., 2022).

One of Singapore Airlines' weaknesses is its relatively higher ticket prices than competing airlines, particularly for full-service flights. This premium pricing strategy is in line with the company's exclusive image and high-quality service. However, it also limits the airline's appeal to more price-sensitive passenger segments, including some business travellers (Qin, 2020).

Another weakness is that Singapore Airlines is entirely dependent on the international market. Singapore's geographical location influences this, as it is a small country with no high need for domestic air transportation. This weakness makes Singapore Airlines' profitability level very vulnerable to global fluctuations such as pandemics, geopolitical changes, or international economic crises, which can limit revenue from the international flight segment if there are restrictions on overseas flights (Pramitha et al., 2018).

C. Opportunities

As ASEAN countries ease travel restrictions after the Covid-19 pandemic subsided, demand for both domestic and international flights has increased. The Indonesian government has been actively promoting tourism as an economic driver to create a favourable environment for airlines, especially for national carriers such as Garuda Indonesia to expand their routes and services (Khairani et al., 2021). Hence, the rebound in travel after the COVID-19 pandemic presents significant opportunities for Garuda Indonesia.

The ongoing digital transformation in the airline industry also provides Garuda with opportunities to improve operational efficiency and customer engagement. Investments in advanced technologies such as online booking systems, fleet

management software, and customer relationship management tools can improve customer experience and streamline operations. Leveraging data analytics to understand customer preferences better can enable personalised services, increasing overall customer satisfaction and loyalty (Widyani, 2021).

The external opportunities available to Singapore Airlines differ greatly from those available to Garuda Indonesia. Opportunities such as the recovery of tourism and travel following the Covid-19 pandemic, technological advancement, and concentration on sustainability issues, if utilised properly, can strengthen the company not only in terms of profitability but also brand image.

D. Threats

PT Garuda Indonesia faces significant threats from intense competition, especially from low-cost carriers (LCCs) that dominate the regional and ASEAN markets. These airlines often compete on price and flexibility, attracting price-sensitive travellers who prioritise cost over service quality. The competitive pricing strategy of LCCs could substantially damage Garuda's market share, putting pressure on its revenue margins. This situation is further exacerbated by the growing consumer trend favouring low-cost carriers for short-haul flights (Juariyah et al., 2023). Garuda Indonesia responds to this challenge through its subsidiary, Citilink, which aims to compete in the low-cost carrier market. However, Garuda Indonesia continues to face intense competition within the airline industry.

Garuda Indonesia also faces external shocks, such as economic downturns or geopolitical tensions that substantially threaten the company. The airline market is also susceptible to economic fluctuations, with passengers often reducing travel during recessions. Additionally, rising fuel prices can drastically impact operating costs, further squeezing margins and complicating pricing strategies in an already competitive environment. Such economic volatility can decrease customers' willingness to pay a premium for services, potentially affecting revenue streams (Kurniawati et al., 2021).

Singapore Airlines faces a similar external threat situation to Garuda Indonesia. Both companies face intense competition from low-cost carriers and stringent regulations and policies within the airline industry. Other external factors, such as political tensions and unpredictable economic crises, can also threaten the company.

4.2.2. Relevant Airline Industry Key Performance Indicator Analysis

This section comprehensively analyses key performance indicators (KPIs) relevant to the airline industry, focusing on Garuda Indonesia and Singapore Airlines from 2020 to 2024. The analysis is intended to provide insights into how the two airlines performed operationally during the COVID-19 pandemic and the recovery phase thereafter. KPIs such as load factor, revenue per available seat kilometre (RASK), and cost per available seat kilometre (CASK) are calculated to evaluate efficiency and profitability. These indicators are then compared to identify strategic differences, operational resilience, and the effectiveness of recovery measures taken by each company.

Load Factor is used to measure airline capacity utilisation. High load factor indicates high profitability and efficiency in capacity management, contributing to carbon reduction per passenger (Moghadasnian, 2022). The following is an example of calculating the Garuda Indonesia load factor:

$$\begin{aligned}\text{Load factor 2020} &= \frac{\text{Revenue per Passenger Kilometer}}{\text{Available Seat Kilometers}} \times 100\% \\ &= \frac{12.490.000.000}{27.660.000.000} \times 100\% \\ &= 45,2\%\end{aligned}$$

Cost per available seat kilometre (CASK) compares cost efficiency across airlines. A lower CASK generally means an airline operates more efficiently (Moghadasnian, 2022). The example CASK calculation of Garuda Indonesia is:

$$\begin{aligned}\text{CASK 2020} &= \frac{\text{Operating Expenses}}{\text{Available Seat Kilometers}} \\ &= \frac{3.303.826.643}{12.490.000.000} \\ &= 11,94 \text{ US cent}\end{aligned}$$

Revenue per available seat kilometre (RASK) measures the revenue generated per available seat kilometre. If RASK value exceeds CASK, the airline is profitable (Moghadasnian, 2022). The example RASK calculation of Garuda Indonesia is as follows:

$$\begin{aligned}\text{RASK 2020} &= \frac{\text{Total Revenue}}{\text{Available Seat Kilometers}} \\ &= \frac{1.492.331.099}{12.490.000.000}\end{aligned}$$

= 5,40 US cent

The load factor percentages, CASK, and RASK of Garuda Indonesia and Singapore Airlines from 2020-2024 are presented below:

Table 3. Load factor Garuda Indonesia 2020-2024

GARUDA INDONESIA					
	2020	2021	2022	2023	2024
RPK (in billion)	12.490.000.000	10.980.000.000	16.920.000.000	24.580.000.000	31.250.000.000
ASK (in billion)	27.660.000.000	25.280.000.000	23.190.000.000	32.820.000.000	39.610.000.000
Load Factor	45,2%	43,4%	73,0%	74,9%	78,9%
Operating Cost	3.303.826.643	2.609.022.290	2.519.427.385	2.626.771.457	3.107.911.287
CASK (US cent)	11,94	10,32	10,86	8,00	7,85
Total Revenue	1.492.331.099	1.336.678.470	2.100.079.558	2.936.631.094	3.416.526.383
RASK (US cent)	5,40	5,29	9,06	8,95	8,63

Table 4. Load factor Singapore Airlines 2020-2024

SINGAPORE AIRLINE					
	2020	2021	2022	2023	2024
RPK	140.998.500.000	2.890.600.000	20.664.500.000	113.628.100.000	143.889.600.000
ASK	171.211.200.000	21.721.200.000	68.570.300.000	133.031.900.000	163.467.900.000
Load Factor	82,4%	13,3%	30,1%	85,4%	88,0%
Operating Cost	15.916.800.000	6.328.400.000	8.224.500.000	15.082.700.000	16.285.200.000
CASK (US cent)	9,30	29,13	11,99	11,34	9,96
Total Revenue	15.975.900.000	3.815.900.000	7.614.800.000	17.774.800.000	19.012.700.000
RASK (US cent)	9,33	17,57	11,11	13,36	11,63

Garuda Indonesia's load factor during the 2020-2024 shows a gradual recovery trend in the aircraft seat occupancy rate. The decrease in demand and global and domestic mobility restrictions during the Covid-19 pandemic in 2020 and 2021 has positioned Garuda's load factor at a low point of only 45,2% in 2020 and dropping again to 43,4% in 2021. On the other hand, Singapore Airlines' load factor in 2021 was significantly impacted by the Covid-19 pandemic, experiencing a drastic decline from 82,4% in 2020 to only 13,3% in 2021. The decline in load factors in both companies aligned with the decrease in revenue passenger kilometre (RPK) globally in 2020, based on the International Air Transportation Association (IATA) report. Following the decline of Covid-19 pandemic starting in 2022, Garuda's load factor increased significantly to 73%

reaching 78,9% by 2024. Meanwhile, after experiencing a drastic drop in load factor in 2021, Singapore Airlines slowly recovered to 30,1% in 2022 and reached 88% in 2024.

According to the company's annual reports, Garuda Indonesia is more domestically oriented regarding revenue segment, as its business model. This is indicated by the percentage of domestic revenue being greater than international revenue from 2020 to 2024. Meanwhile, Singapore Airlines has a business model focusing more on international flights. This difference in business models presents both strengths and weaknesses for each company. Despite the closure of international airports, Garuda Indonesia could survive by relying on domestic flights.

In contrast, Singapore Airlines was significantly impacted by this closure, as indicated by the decline in its 2021 load factor. Following the reopening of international flights with Covid-19 health protocols, Singapore Airlines restored its operational performance and even achieved a higher load factor than Garuda Indonesia in 2024. This indicates Singapore Airlines' success in capitalising on the momentum of global market reopening.

Garuda Indonesia experienced a gradual decrease in cost per available seat kilometre from 11,94 US cents in 2020 to only 7,85 US cents in 2024. This indicates the company's ability to reduce operating costs for each available seat kilometre. In contrast, Singapore Airlines experienced a spike in its 2021 CASK reaching 29,13 US cents compared to only 9,30 US cents in 2020. This was due to the low seat utilisation rate amidst the company's operating costs, which remained relatively high. However, Singapore Airlines managed to significantly reduce its CASK to 9,96 US cents in 2024 along with increasing load factors and the return of international flights to normal levels.

Meanwhile, regarding revenue per available seat kilometre (RASK), Garuda Indonesia showed an increase from its low point of 5,29 US cents in 2021 to 8,63 US cents in 2024. This indicates an increase in revenue from seat utilisation aligned with rising domestic flight demand and fares recovery. Meanwhile, Singapore Airlines recorded a high RASK value of 17,57 US cents in 2021 despite receiving a low load factor. The high RASK value in 2021 was driven by significant cargo contribution compared to passengers from the full-service carrier segment. In the last three years,

Singapore Airlines has maintained a substantial RASK value above 11 US cents with a peak of 13,36 US cents in 2023, unlike Garuda Indonesia, which only recorded the highest RASK at 9,06 US cents in 2022. This indicates that Singapore Airlines has maintained its premium service strategy and customer loyalty better than Garuda Indonesia post-Covid-19 pandemic, thus successfully boosting revenue even though operating costs remained high.

4.3. PT Garuda Indonesia and Singapore Airlines Financial Performance Analysis

This section analyzes the financial performance of Garuda Indonesia and Singapore Airlines from 2020 to 2024. The objective is to evaluate how both airlines managed their financial resources during the COVID-19 pandemic and the recovery phase afterward. Financial indicators such as profitability, liquidity, solvency, and efficiency ratios are examined to assess each airline's financial health, strategic response, and resilience.

4.3.1. Trend Analysis

Trend analysis is used to show the change in the amount of the corresponding financial statement items of Garuda Indonesia and Singapore Airlines over the 2020-2024 period, hence assessing trend situations within financial statements.

- a. Profit/loss statement of Garuda Indonesia and Singapore Airlines using the trend analysis technique.

The example of trend calculation of Garuda Indonesia's profit/loss statement is as follows:

$$\begin{aligned} \text{Percentage Change of Revenue 2020} &= \frac{\text{Amount change}}{\text{Amount of the item in base year}} \times 100\% \\ &= \frac{(1.200.671.828 - 3.773.399.072)}{3.773.399.072} \times 100\% \\ &= -68,2\% \end{aligned}$$

The trend of Garuda Indonesia and Singapore Airlines' profit/loss statement over the 2020-2024 period is presented below:

Table 5. The trend of Garuda Indonesia's statement of profit/loss 2020-2024

PT GARUDA INDONESIA TBK						
STATEMENT OF PROFIT/LOSS						
	2019	2020	2021	2022	2023	2024
Total Operating Revenue	100%	-67,4%	-10,4%	57,1%	39,8%	16,3%
Total Operating Expenses	100%	-25,9%	-21,0%	-3,4%	4,3%	18,3%
Profit (Loss) From Operations	100%	-2395,1%	79,8%	-209,6%	-84,3%	-44,0%
Profit (Loss) Before Tax	100%	-209999,8%	74,8%	-186,8%	-94,0%	-134,7%
Profit (Loss) For the Year	100%	5457,0%	68,5%	-189,5%	-93,3%	-127,7%

Table 6. The trend of Singapore Airlines' statement of profit/loss 2020-2024

SINGAPORE AIRLINES LTD						
STATEMENT OF PROFIT/LOSS						
	2019	2020	2021	2022	2023	2024
Total Revenue	100%	-2,1%	-76,1%	99,6%	133,4%	7,0%
Total Expenditure	100%	4,3%	-60,2%	30,0%	83,4%	8,0%
Operating Profit	100%	-94,5%	-4351,3%	-75,7%	-541,5%	1,3%
Profit Before Taxation	100%	-125,4%	2151,2%	-78,0%	-341,9%	15,2%
Profit For the Financial Year	100%	-123,5%	2428,6%	-77,9%	-328,2%	24,6%

Based on the profit and loss statement trend table, Garuda Indonesia has experienced significant financial pressure since the beginning of the Covid-19 pandemic 2020. This can be seen from the decline in total revenue of -67,4% compared to 2019. Although there was a revenue recovery in the following years, this recovery rate did not return Garuda Indonesia's revenue to pre-pandemic levels. The company's operating income in 2024 was only USD 3,4 billion compared to 2019, which reached USD 4,5 billion. This indicates that Garuda Indonesia's revenue has not fully recovered despite recovery efforts.

Garuda Indonesia also faces quite fluctuating operating expenses. During 2020-2021, the company's operating expenses decreased by -25,9% and -21% respectively. This decrease aligned with the reduction in the company's revenue during that period. However, in 2022, operating expenses did not decrease significantly, dropping by only -3,4% and tending to increase in 2023-2024 to 18,3%. Although revenue tended to increase after the Covid-19 pandemic from 2022 to 2024, operating expenses also increased, so the company could not generate a substantial profit margin.

This can be seen from the trend in profit/loss from operations, where in 2020 the company experienced an increase in losses of up to 2.395,1% compared to 2019. The increase in losses continued until 2021, amounting to USD 3,96 billion. Although the company recorded a profit from operations of USD 4,34 billion in 2022, the profit from operations in 2023-2024 did not show an increasing trend but rather a decrease compared to the profit in 2022.

Singapore Airlines also experienced a drastic revenue decline during the Covid-19 pandemic in 2021 by -76,1%. Following this drastic decline, a revenue surge occurred in 2022, reaching SGD 7.614,8 million, or an increase of 99.6% from the previous year. This increase continued with a spectacular growth of 133,4% in 2023 and remained positive at 7% in 2024. Compared to Garuda Indonesia, Singapore Airlines' revenue demonstrated a faster and more consistent recovery.

Singapore Airlines, as a full-service carrier, maintains premium service quality for every passenger. This impacts the company's operating expenses, which continue to show an increasing trend along with increasing revenue. An exception occurred in 2021, where the company's operating expenses decreased by -60,2% due to a -76.1% revenue decrease. Singapore Airlines' operating expenses indicate flexibility and follow the company's revenue trend.

Singapore Airlines' operating profit experienced a downward trend in 2020 and 2021. The company recorded operating losses of SGD 2.512,5 million in 2021 and SGD 609,7 million in 2022. Despite these losses in 2021-2022, operating profit was significantly increased in 2023 and 2024. The decrease in the company's operating profit during 2021-2022 occurred simultaneously with the decrease in the company's revenue,

indicating that the company failed to sufficiently streamline operating expenses during this period to maintain positive operating profit.

- b. The trend analysis technique was used to analyze the financial position statements of Garuda Indonesia and Singapore Airlines.

The example of trend calculation of Garuda Indonesia's financial position statement is as follows:

$$\begin{aligned}\text{Percentage Change of Total Asset 2020} &= \frac{\text{Amount change}}{\text{Amount of the item in base year}} \times 100\% \\ &= \frac{(10.789.980.407 - 4.455.675.774)}{4.455.675.774} \times 100\% \\ &= 142,2\%\end{aligned}$$

The trend of Garuda Indonesia and Singapore Airlines' financial position statement over the 2020-2024 period is presented below:

Table 7. The trend of Garuda Indonesia's statement of financial position 2020-2024

PT GARUDA INDONESIA TBK						
STATEMENT OF FINANCIAL POSITION						
	2019	2020	2021	2022	2023	2024
Total Current Assets	100%	-52,7%	-43,0%	162,1%	-18,4%	-15,3%
Total Non-Current Assets	100%	208,7%	-32,8%	-21,1%	11,8%	-0,2%
Total Assets	100%	142,2%	-33,3%	-13,3%	7,9%	-1,6%
Total Current Liabilities	100%	26,5%	34,4%	-70,9%	-30,7%	0,7%
Total Non-Current Liabilities	100%	1668,2%	-10,7%	-19,2%	12,4%	-0,7%
Total Liabilities	100%	228,8%	4,5%	-41,6%	3,1%	-0,5%
Total Equity	100%	-433,5%	214,5%	-74,9%	-16,4%	5,4%
Total Liabilities and Equity	100%	142,2%	-33,3%	-13,3%	7,9%	-1,6%

Table 8. The trend of Singapore Airlines' statement of financial position 2020-2024

SINGAPORE AIRLINES LTD						
STATEMENT OF FINANCIAL POSITION						
	2019	2020	2021	2022	2023	2024
Current Assets	100%	-11,9%	99,7%	82,9%	9,1%	-19,0%
Non-Current Assets	100%	15,5%	-3,3%	11,0%	-3,8%	-4,0%
Total Assets	100%	10,5%	11,5%	29,5%	0,9%	-9,9%
Current Liabilities	100%	49,1%	-48,1%	37,7%	73,7%	-7,3%

Non-Current Liabilities	100%	37,4%	20,1%	15,5%	-15,7%	-2,2%
Total Liabilities	100%	42,6%	-11,2%	21,4%	11,5%	-4,6%
Total Equity	100%	-28,9%	67,3%	40,1%	-11,2%	-17,3%
Total Equity and Liabilities	100%	10,5%	11,5%	29,5%	0,9%	-9,9%

Based on the trend in Garuda Indonesia's financial position reports from 2019 to 2024, there was a sharp decline in total current assets in 2020 by -47,3% compared to 2019 and another decline in 2021 by -43% compared to 2020. This decline was followed by a dramatic increase in 2022 of 162,1% from 2021 and consecutive declines again in 2023-2024 by -18,4% and -15,3% respectively. The sharp decline in 2020 and 2021 reflected the direct impact of the Covid-19 pandemic on Garuda Indonesia's liquidity. When the company's revenue plummeted due to travel restrictions and reduced demand, it consumed its cash reserves and reduced receivables to cover operational costs (Sarjono et al., 2025). This can be seen in the declining trend of cash and cash equivalents in 2021 by -72,9% and restricted cash by -90,9% in 2020. The drastic decline in current assets in early 2020-2021 can be considered a direct quantitative manifestation of a severe liquidity crisis caused by the Covid-19 pandemic, which crippled air travel and the company's revenue streams (Sarjono et al., 2025).

A significant increase in current assets occurred in 2022, indicating a liquidity injection. Based on the financial statement notes, there was an increase in cash in the Bank Rakyat Indonesia account by USD 408 million, or 30,9% compared to 2021. This increased cash in the BRI account was likely the result of a successful debt restructuring agreement through a postponement of the debt payment obligation scheme, as outlined in the Homologation order dated June 27, 2022. This is further supported by the absence of a significant increase in total liabilities in 2022, meaning the cash increase was unlikely from additional debt. In the following years, 2023 and 2024, total assets declined, with cash being the primary contributor. The company likely used this decline in cash to cover operational needs as it sought to recover from the impact of Covid-19 and post-debt restructuring. Although the decline in total current assets was not as severe, it still indicates ongoing pressure on the company's working capital.

Meanwhile, on the non-current assets side, there was an extraordinary increase in 2020 of 208,7% compared to 2019. This increase was followed by a significant decline

in 2021 by -32,8% and another decline in 2022 by -21.1%. After two consecutive years of decline, a moderate increase of 11,8% occurred in 2023. The dramatic increase in non-current assets in 2020 was highly unusual. The primary contributor to this increase was fixed assets, which reached USD 9,39 billion or a 721,3% increase compared to 2019. This increase was due to implementing the Financial Accounting Standard (PSAK) 73 on leases, effective January 1, 2020. As a result of standard implementation, the company recorded right-of-use assets at USD 4,72 billion, restoration assets at USD 2,83 billion, and adjustments to maintenance assets (airframes, engines, and assets under construction) to USD 0,92 billion or a 234% increase from 2019. Subsequently, fixed asset value declined, primarily due to reductions in right-of-use and restoration assets through asset deductions and accumulated depreciation.

On the current liabilities side, Garuda Indonesia showed consistent increases in 2020 and 2021 by 26,5% and 34,4%, respectively. A sharp decline occurred in 2022 by -70,9% compared to 2021, and another decline in 2023 by -30,7% compared to 2022. This downward trend was due to the company's successful debt restructuring, which significantly reduced short-term loans and lease liabilities in 2022. In 2024, current liabilities increased slightly by 0,7%, indicating the company's efforts to manage short-term obligations better, thereby reducing pressure.

Garuda Indonesia's non-current liabilities showed dramatic fluctuations. The trend in 2020 saw a drastic increase of 1.668,2% compared to 2019, followed by declines in 2021-2022 by -10,7% and -19,2% respectively, then an increase again in 2023 by 12,4% and a slight decline in 2024 by -0,7%. The primary contributor to the extraordinary increase in 2020 was the rise in lease liabilities and estimated liability for aircraft return and maintenance costs due to the implementation of PSAK 73. The decline in lease liabilities in 2021 by USD 725 million or 16,1% compared to 2020, contributed to the downward trend in non-current liabilities that year. This reduction occurred due to a decrease in future lease payments after Garuda Indonesia requested relief from Export Development Canada (EDC) regarding aircraft lease payments. The company also proposed early contract termination with EDC to exit the financing lease agreement. Meanwhile, the decline in non-current liabilities in 2022 was due to debt restructuring, resulting in a -69,5% drop in long-term trade payables compared to 2021. However, by

the 2022 Homologation order, the company had to issue new unsecured sukuk worth USD 78 million and new unsecured Trust Certificates worth USD 624 million to settle debts with old sukuk holders and creditors.

Meanwhile, Garuda Indonesia's equity trend showed significant dynamics from 2019 to 2024. In 2019, the company's total equity was still positive at USD 582,58 million. However, in 2020, it sharply declined to negative USD 1,94 billion or a -433,5% drop compared to 2019, reflecting the severe impact of COVID-19. Revenue plummeted while fixed costs like aircraft leases and loan interest remained high, causing retained losses to accumulate from USD -800 million in 2019 to USD -3,26 billion in 2020. The situation worsened in 2021, with equity hitting a record low of negative USD 6,11 billion. A spike in retained losses worth USD-7.41 billion was the main driver, compounded by the reclassification of long-term debt to short-term after failing to meet financial covenants in a loan agreement for financing aircraft lease debt.

While the equity in 2022 marked a turning point for Garuda Indonesia after a successful debt restructuring process. Total equity increased significantly to negative USD 1,53 billion compared to the prior year, reflecting the company's success in restructuring most of its short- and long-term liabilities. The retained earnings deficit also dropped drastically to USD -3,68 billion, indicating a financial burden reduction and operational performance improvement. In 2023 and 2024, equity remained negative at USD -1,28 billion and USD -1,35 billion, respectively. Although still in deficit, financial conditions stabilised, retained losses did not surge, and other comprehensive income components stayed positive. This suggests Garuda has controlled its losses and shows signs of early recovery. However, sustained net profits in the medium-to-long term are needed to restore positive equity.

As a comparator, Singapore Airlines experienced an 11,9% decline in current assets in 2020 compared to 2019. Following the asset value decrease in 2020, there was a steady increase from 2021-2023 by 99,7%, 82,9%, and 9,1% respectively. The current assets reduction was primarily caused by a 46,3% decrease in trade debtors compared to 2019, due to credit losses and indications of uncollectible receivables during the COVID-19 pandemic. The subsequent recovery in current assets from 2021 to 2023 resulted from improved trade debtor collections and significant increases in cash and bank balances.

In 2021, the company's cash surged dramatically by 189,8%, following an 8,8% decline in 2020 compared to 2019. This cash increase came from additional short-term deposits worth SGD 5.701,9 million, which continued growing through 2023. During the pandemic year, the cash spike reflected the company's conservative liquidity strategy through short-term deposit accumulation. The 2024 cash reduction indicates fund utilisation for debt repayment and operational financing as business activities resumed.

Singapore Airlines' non-current assets showed fluctuating but generally stable trends. The effective implementation of IFRS 16 on leases, which was on January 1, 2019, caused adjustments to property, plant, and equipment values and new right-of-use asset recognition. These right-of-use assets have consistently grown since 2020, contributing to non-current asset growth.

Regarding current liabilities, it showed a generally rising trend except for 2021 and 2024, which decreased by -48,1% and -7,3% respectively compared to prior years. The 2020 current liabilities surge was driven by SGD 2.161 million in additional loan borrowings. This surge was followed by a sharp decline because of prior year loan repayment, significantly reducing the current liabilities' value. While the company's non-current liabilities steadily increased from 2020 to 2022, before declining from 2023 to 2024. The rise was mainly attributable to long-term borrowings and the adoption of IFRS 16 on leases. The 2023-2024 decreases in non-current liabilities demonstrate the company's debt reduction focus amid improving financial health.

On the equity side, a drastic decline occurred in 2020 to SGD 9,7 billion or by – 28,9% compared to 2019. After the equity decline in 2020, an equity recovery occurred in 2021 to SGD 16,2 billion with a sharp increase to SGD 22,8 billion in 2022, obtained from the issuance of Mandatory Convertible Bonds (MCB) worth SGD 9,6 billion and the issuance of new shares under the rights issue, thus adding share capital of SGD 5,3 billion. However, from 2023 to 2024, the equity value decreased again to SGD 16,7 billion in 2024, which was caused by the redemption of mandatory convertible bonds. This decline can also be linked to management's capital structure adjustments. The nature of the equity support received by Singapore Airlines can be seen as a strategic investment made by the Singapore government to maintain the company's performance amidst the pandemic crisis. At the same time, the equity change that occurred at Garuda Indonesia

can be assessed as a bailout effort undertaken by the Indonesian government to save Garuda Indonesia from bankruptcy.

4.3.2. Common-Size Analysis

Common-size analysis facilitates the comparison of financial statements between periods and companies.

- a. Profit/loss statement of Garuda Indonesia and Singapore Airlines using the common-size analysis technique.

The example of common size percentage calculation of Garuda Indonesia's profit/loss statement is as follows:

$$\begin{aligned}\text{Percentage of operating expenses over revenue 2020} &= \frac{\text{Operating expenses}}{\text{Revenue}} \times 100\% \\ &= \frac{-3.303.826.643}{1.492.331.099} \times 100\% \\ &= -221,4\%\end{aligned}$$

The percentage calculation of Garuda Indonesia and Singapore Airlines' profit or loss statement over the 2020-2024 period using the common-size analysis technique is presented below:

Table 9. Garuda Indonesia's profit or loss statement using the common-size analysis technique for 2020-2024

PT GARUDA INDONESIA TBK					
STATEMENT OF PROFIT/LOSS					
	2020	2021	2022	2023	2024
Scheduled airline services	80,5%	77,9%	80,5%	81,0%	80,3%
Non-scheduled airline services	5,2%	6,6%	8,3%	9,8%	9,8%
Others	14,4%	15,5%	11,2%	9,2%	10,0%
Total operating revenue	100,0%	100,0%	100,0%	100,0%	100,0%
Total operating expenses	-221,4%	-195,2%	-120,0%	-89,4%	-91,0%
Other operating income (charges)	-26,2%	-201,2%	226,8%	12,7%	2,1%
Profit (loss) from operations	-147,6%	-296,4%	206,8%	23,2%	11,2%
Profit (loss) before tax	-173,7%	-339,1%	187,4%	8,0%	-2,4%
Profit (loss) for the year	-166,0%	-312,3%	177,9%	8,6%	-2,0%

Table 10. Singapore Airlines' profit or loss statement using the common-size analysis technique for 2020-2024

SINGAPORE AIRLINES LTD					
STATEMENT OF PROFIT/LOSS					
	2020	2021	2022	2023	2024
Total revenue	100,0%	100,0%	100,0%	100,0%	100,0%
Total expenditure	-99,6%	-165,8%	-108,0%	-84,9%	-85,7%
Operating profit	0,4%	-65,8%	-8,0%	15,1%	14,3%
Profit before taxation	-1,4%	-129,9%	-14,3%	14,8%	16,0%
Profit for the financial year	-1,1%	-112,3%	-12,5%	12,2%	14,2%

The proportion of Garuda Indonesia's total operating expenses to revenue in 2020 reached 221,4%. This indicates the company was experiencing extreme financial difficulty where more than two dollars of expenses offset every dollar of revenue. Although there was a slight recovery in 2021 to 195,2%, the company's operating expenses remained nearly double its total revenue. In 2022, operating expenses showed improvement by dropping to just 120%, meaning expenses exceeded revenue by only 20%, marking an important turning point for the company after facing severe financial challenges during 2020-2021. The improvement in the proportion of operating expenses continued into 2023, declining to 89,4% of total revenue. However, a slight setback occurred in 2024 as operating expenses again consumed a significant % of revenue at 91%. This condition indicates that cost-control recovery has not yet fully stabilized.

The impact of high operating expenses led the company to record an extremely high operating loss margin of -147,6% in 2020. This condition indicates the company's inability to quickly adjust variable costs in line with the drastic decline in demand during the Covid-19 pandemic. The situation worsened in 2021 when the company's operating margin reached its lowest point in the last five years at -296,4%. Nevertheless, a dramatic change occurred in 2022 when the operating profit margin reached a positive figure of 206,8%. This high figure was an impact of debt restructuring. The company recorded a gain on payment term restructuring and income from debt restructuring, thereby increasing the company's operating profit. In 2023, the company recorded a more realistic yet healthy operating profit of 23,2%. However, a decline in operating profitability occurred again in 2024 to 11,2% showing the company still faces challenges in cost control.

In 2020, Garuda Indonesia experienced a pre-tax loss of -173,7% of total revenue and reached its lowest point in 2021 at -339,1%. Not much different from operating profit, in 2022 the company recorded an increase in pre-tax profit of 187,4% which was an impact of successful debt restructuring. Meanwhile, in 2023, the proportion of pre-tax profit was positive at 8%, lower than the operating profit. This was caused by an increase in finance costs that year. The company again recorded a pre-tax loss of -2,4% in 2024, showing that the positive momentum from 2023 was not sustainable when all financial items were accounted for.

In comparison, Singapore Airlines in 2020 had total expenses reaching 99,6% of total revenue. This represents an extraordinary level of cost control and resilience for an international airline during the early pandemic, especially when compared to Garuda Indonesia, which reached 221,4% in the same year. In the following year, operating expenses significantly exceeded revenue at 165,8% reflecting the peak impact of the pandemic on Singapore Airlines. 2022 became a recovery point for the company's operating expenses, where operating expenses dropped to 108% in that year until in 2023 and 2024 operating expenses fell far below revenue to 84,9% and 85,7% respectively. This shows strong cost control occurring within Singapore Airlines' management.

Singapore Airlines recorded a slightly positive operating profit of 0,4% in 2020. A significant operating loss occurred in 2021 at -65% indicating a decline in revenue due to international travel restrictions. Improvement was seen in 2022 to -8% approaching breakeven for operating profit, showing a gradual operational recovery. In 2023, operating profitability strengthened again to 15,1% showing Singapore Airlines effectively leveraged the recovery in passenger demand and made its operational costs more efficient. This strong operating profitability continued to be maintained in 2024 at 14,3% demonstrating consistent operational performance.

- b. The financial position statement of Garuda Indonesia and Singapore Airlines uses the common-size analysis technique.

The example of common size percentage calculation of Garuda Indonesia's financial position statement is as follows:

$$\text{Percentage of inventory over total asset 2020} = \frac{\text{Inventory}}{\text{Total assets}} \times 100\%$$

$$= \frac{105.199.006}{10.789.980.407} \times 100\%$$

$$= 1\%$$

The percentage calculation of Garuda Indonesia and Singapore Airlines' financial position statement over the 2020-2024 period using the common-size analysis technique is presented below:

Table 11. Garuda Indonesia's financial position statement using the common-size analysis technique for 2020-2024

PT GARUDA INDONESIA TBK					
STATEMENT OF FINANCIAL POSITION					
	2020	2021	2022	2023	2024
Total current assets	5,0%	4,3%	12,8%	9,7%	8,4%
Total non-current assets	95,0%	95,7%	87,2%	90,3%	91,6%
Total assets	100,0%	100,0%	100,0%	100,0%	100,0%
Total current liabilities	39,8%	80,2%	27,0%	17,3%	17,7%
Total non-current liabilities	78,2%	104,7%	97,7%	101,7%	102,7%
Total liabilities	118,0%	184,9%	124,6%	119,1%	120,4%
Total equity	-18,0%	-84,9%	-24,6%	-19,1%	-20,4%
Total liabilities and equity	100,0%	100,0%	100,0%	100,0%	100,0%

Table 12. Singapore Airlines' financial position statement using the common-size analysis technique for 2020-2024

SINGAPORE AIRLINES LTD					
STATEMENT OF FINANCIAL POSITION					
	2020	2021	2022	2023	2024
Current assets	14,4%	25,7%	36,3%	39,3%	35,3%
Non-current assets	85,6%	74,3%	63,7%	60,7%	64,7%
Total assets	100,0%	100,0%	100,0%	100,0%	100,0%
Current liabilities	32,6%	15,2%	16,2%	27,8%	28,6%
Non-current liabilities	38,5%	41,5%	37,0%	30,9%	33,5%
Total liabilities	71,1%	56,7%	53,2%	58,8%	62,2%
Total equity	28,9%	43,3%	46,8%	41,2%	37,8%
Total equity and liabilities	100,0%	100,0%	100,0%	100,0%	100,0%

Garuda Indonesia's asset structure consistently showed a high reliance on non-current assets at 95% in 2020 and 91,6% in 2024. This composition was standard for airlines, reflecting significant investment in aircraft, property, and equipment, which are

long-term and illiquid assets. However, the persistently low percentage of current assets indicates limited liquidity, which can be a vulnerability for the company, especially during the Covid-19 pandemic. The increase in 2022's current assets occurred after the company successfully achieved a debt restructuring agreement.

During the 2020-2022 period, Garuda Indonesia showed severe financial difficulties. Total liabilities significantly exceeded total assets, ranging from 118% in 2020 to its peak in 2021-2022 at 184,9% and 124,6% respectively. The company's equity became negative due to the high total liabilities plummeting from -18% in 2020 to -84,9% and -24,6% in 2021-2022. Current liabilities in 2021 showed a very high percentage proportion of 80,2% of total assets. During 2022, the company completed debt restructuring, which enabled it to reduce its current liabilities.

The dramatic negative equity and liabilities consistently exceeding total assets during 2020-2022 indicate an existential crisis for Garuda Indonesia. This was not merely a liquidity crisis or a period of poor performance but a fundamental breakdown of its capital structure requiring drastic external intervention to prevent immediate bankruptcy. When the company's liabilities were 118% to 184,9% of its assets, creditors effectively owned more of its assets than the company itself, and shareholder equity was eroded entirely.

In contrast to Garuda Indonesia, Singapore Airlines' proportion of current assets increased substantially from 14,4% in 2020 to 39,3% in 2023 and decreased slightly to 35,3% in 2024. This significant increase indicated a proactive strategy to strengthen liquidity and financial flexibility. This involved accumulating cash reserves and managing receivables efficiently to navigate market uncertainty and operational disruptions. This approach strongly contrasts with Garuda Indonesia's persistently low proportion of current assets.

Singapore Airlines successfully maintained total liabilities well below 100% of total assets, demonstrating a healthy corporate capital structure and strong solvency. Equity injections caused the decrease in the proportion of total liabilities in 2021-2022. Meanwhile, Singapore Airlines' current liabilities showed controlled proportional fluctuations from 32,6% in 2020, sharply declining to 15,2% in 2021, then increasing to

28,6% in 2024. The sharp decline in 2021's current liabilities indicated effective short-term debt management through refinancing and reclassifying short-term debt into long-term debt. The subsequent increase reflected a return to more normal operational patterns and an increase in short-term borrowing for recovery efforts. Nevertheless, these fluctuations remained within healthy bounds and demonstrated effective working capital management.

The proportion of Singapore Airlines' non-current liabilities also remained relatively stable, ranging between 30,9% and 41,5% during the 2020-2024. This stable proportion of non-current liabilities and a healthy equity base indicated a well-structured long-term financing strategy. This suggests that Singapore Airlines relies on a balanced mix of long-term debt and equity, stabilizing its capital-intensive operations. Singapore Airlines' total equity proportion also remained strong and generally increased from 28,9% in 2020, reaching its peak in 2022 at 46,8%. This increase in 2022 equity occurred due to a new share issuance to strengthen the company's financial position. This substantial equity indicated that the company had sound capitalisation and was less vulnerable to financial shocks, contrasting Garuda Indonesia's situation.

4.3.3. Ratios Analysis

Ratio analysis is used to evaluate a company's financial condition and operational performance in more depth. This is done by calculating and interpreting financial ratios such as profitability, liquidity, activity, and solvency to obtain a clearer picture regarding operational efficiency, the company's ability to meet short-term and long-term obligations, and the potential profits generated.

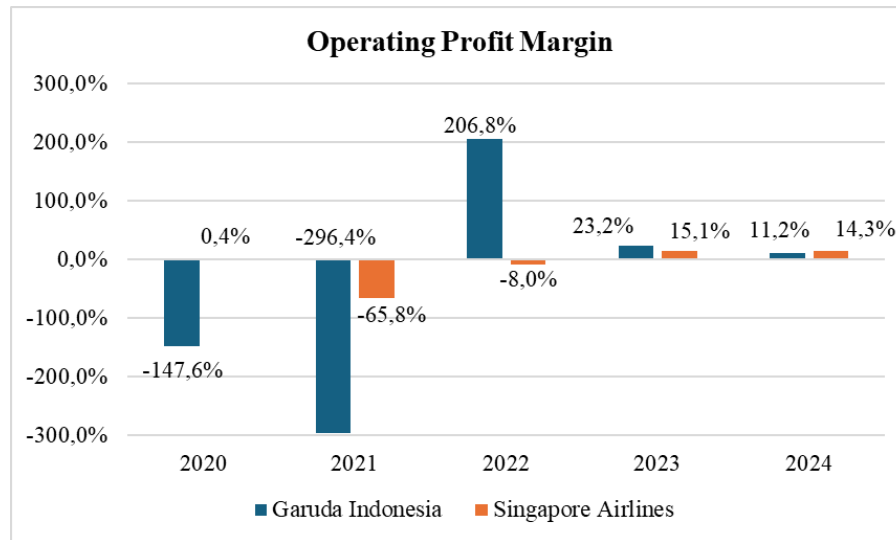
a. Profitability Ratio Analysis

Profitability ratios assess a company's ability to generate profits from its revenues, assets, and equity. Some types of profitability ratios used are operating profit margin (OPM), net profit margin (NPM), and return on assets (ROA).

1. Operating Profit Margin

The graphs of Garuda Indonesia and Singapore Airlines' operating profit margin over the 2020-2024 period are shown below:

Figure 4. Operating Profit Margin



Based on the above graph, 2020-2021 marked a crisis period for Garuda Indonesia, with operating profit margins of -147% and -296% respectively. These figures reflected unprecedented financial collapse driven by global flight suspensions, severe travel restrictions, and a drastic decline in passenger numbers. An extreme operating profit margin surge occurred in 2022 to 206,8% indicating that Garuda Indonesia's reported operating income was heavily influenced by non-operational financial restructuring activities rather than pure operational performance. After this 2022 spike, Garuda's operating profit margin normalised to 23,2% in 2023. This period shows early benefits of post-pandemic market recovery combined with direct positive impacts from debt restructuring, which reduced financial burdens and strengthened the company's balance sheet. However, in 2024, operating profit margin declined again to 11,2%. Though still positive, this decrease signalled renewed challenges for the company, where the primary contributor to Garuda Indonesia's 2024 operating profit margin drop was increased maintenance and user charge expenses.

In contrast to Garuda Indonesia, Singapore Airlines recorded operating profit margins of 0,4% and -65,8% for 2020 and 2021. Despite negative margins in 2021 and 2022, these percentages demonstrate significantly greater resilience than Garuda Indonesia. The cargo revenue segment boosted Singapore Airlines' total revenue when passenger revenue plummeted during 2021-2022, which was

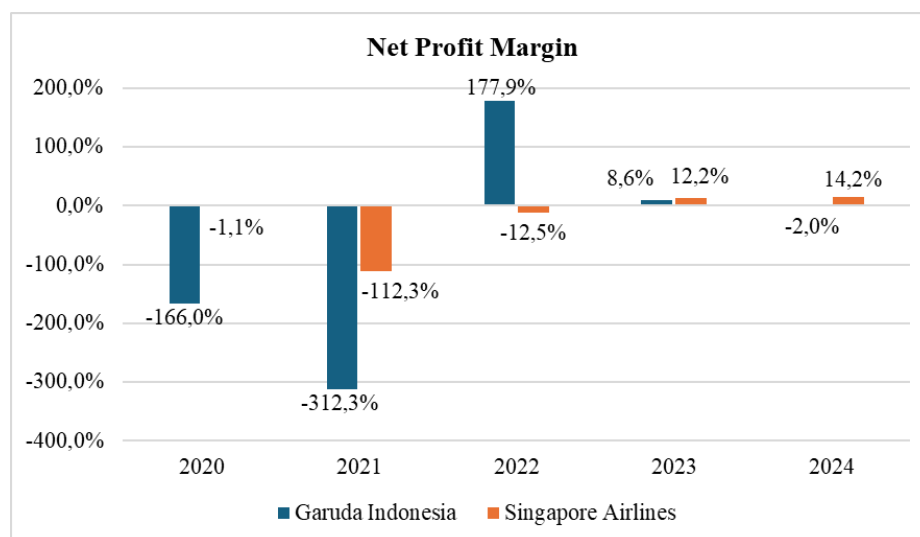
driven by surging cargo demand amid rising e-commerce popularity. In the following years, 2023-2024, Singapore Airlines achieved positive operating profit margins of 15,1% and 14,3% respectively. This post-pandemic recovery was fuelled by the reopening of air travel and Singapore Airlines' rapid adaptation.

The operating profit margin comparison between the two airlines reveals vastly different starting points. Garuda Indonesia suffered far deeper negative operating profit margins in 2020-2021 than Singapore Airlines, indicating its more precarious pre-pandemic financial condition and less effective initial crisis response. Both companies' recovery patterns also diverged radically. The increased Garuda Indonesia's 2022 operating margin to 206,8% was driven by debt restructuring gains, which starkly contrasted with Singapore Airlines' more organic and market-driven recovery. This disparity indicates that Singapore Airlines' recovery is a stronger and more sustainable operationally. At the same time, Garuda Indonesia remains heavily debt-restructuring-dependent and faces challenges in converting operational growth into sustainable net profitability.

2. Net Profit Margin

The graphs of Garuda Indonesia and Singapore Airlines' net profit margin over the 2020-2024 period are shown below:

Figure 5. Net Profit Margin



Based on the above graph, Garuda Indonesia experienced very large losses at the start of the pandemic, with its net profit margin decreasing to -166% in 2020 and declining even further in 2021 to -312,3%. Although the global airline industry suffered greatly during the pandemic, Garuda Indonesia's net profit margin in 2021 was significantly worse than Singapore Airlines', which was only -112,3% in the same year.

The sharp change in Garuda Indonesia's net profit margin in 2022 and 2023 to 177,9% and 8,6% respectively was the impact of aggressive debt restructuring efforts. Therefore, the high net profit margin in 2022 did not reflect Garuda Indonesia's actual operational profitability value. If the USD 4,2 billion gain from debt restructuring were excluded from the 2022 financial statements, Garuda Indonesia would not have generated a profit but a net loss of USD -502 million or produced a net profit margin value of -23,9%.

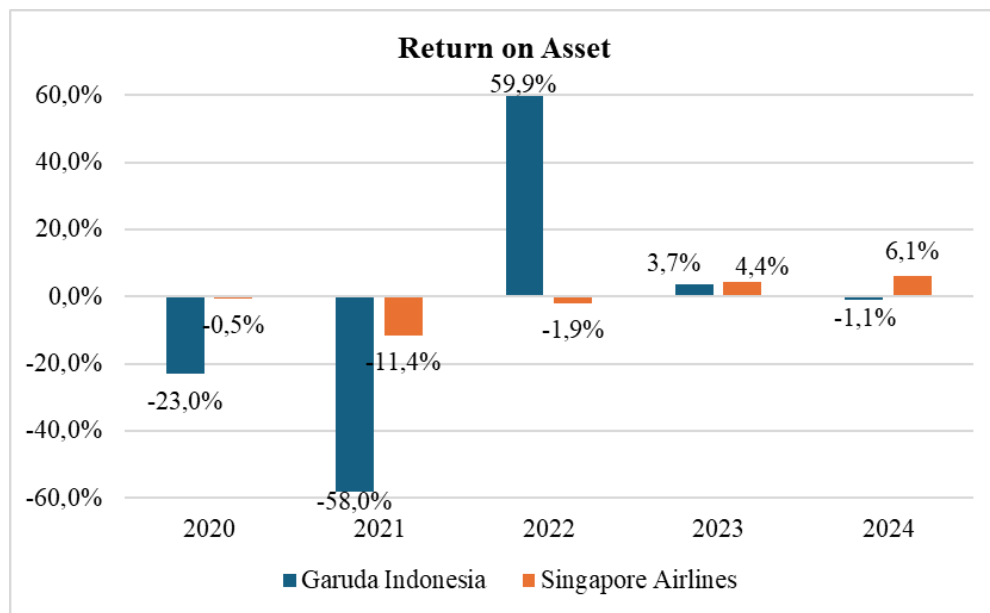
As a competitor, Singapore Airlines also experienced a negative net profit margin of -1,1% in 2020, -112,3% in 2021, and -12,5% in 2022. Although significant, the losses in 2020 and 2022 were notably not as severe as those experienced by Garuda Indonesia. After three consecutive years of negative net profit margin figures, Singapore Airlines experienced a strong recovery and achieved a positive net profit margin value of 12,2% in 2023, which then increased again to 14,2% in 2024.

When observing the net profit margin trend of each company post Covid-19 pandemic in 2023-2024, Singapore Airlines was able to generate an NPM figure not far different from its OPM figure. This indicates that Singapore Airlines could efficiently manage non-operating expenses, usually from finance charges. Whereas Garuda Indonesia's NPM figure fell significantly compared to its OPM figure, such as the 2024 OPM figure of 11,2%, the resulting NPM figure was only -2%. The high finance charges during that recovery period contributed mainly to the low NPM value generated by Garuda Indonesia.

3. Return on Assets

The graphs of Garuda Indonesia and Singapore Airlines' return on assets over the 2020-2024 period are shown below:

Figure 6. Return on Assets



Garuda Indonesia recorded a return on asset (ROA) value of -23% in 2020. This figure was an early indicator of the pandemic's impact, where the airline suffered a net loss of USD -2,47 billion with total assets of USD 10,78 billion. The condition worsened significantly in 2021, with ROA declining to -58%, where net losses increased to USD -4,17 billion, and total assets shrank to USD 7,19 billion. In 2022, Garuda Indonesia showed a drastic ROA increase to 59,9%. This extraordinary increase occurred despite continued declines in total assets to USD 6,23 billion. The high ROA value was caused by gains from debt restructuring, which boosted company profits. However, the high ROA in 2022 did not accurately reflect the company's total asset ability to generate profits because the profit obtained did not originate from core operational activities.

In 2023, Garuda Indonesia's ROA returned to a more moderate positive level at 3.7%, with a net profit of USD 251 million and total assets of USD 6,72 billion. But in 2024, Garuda Indonesia's ROA again recorded a negative figure of -1.1%, where the company reported a net loss of USD -69,7 million and assets of

USD 6,61 billion. The company's financial statements indicate significant aircraft maintenance costs caused the 2024 net loss.

Unlike Garuda Indonesia, Singapore Airlines showed a more gradual, consistent, and resilient ROA recovery. In 2020, Singapore Airlines recorded an ROA of -0,5% with a net loss of SGD -169,4 million and total assets of SGD 33.712,8 million. Singapore Airlines' ROA in 2021 worsened significantly to -11,4% where the company recorded a net loss of SGD -4.283,4 million against total assets of SGD 37.581,3 million. Singapore Airlines showed initial signs of ROA recovery in 2022 at -1,9% with a net loss of SGD -948.1 million and total assets of SGD 48.671 million following the easing of travel restrictions in many countries. The ROA recovery continued in 2023 and 2024 with 4,4% and 6,1% values respectively.

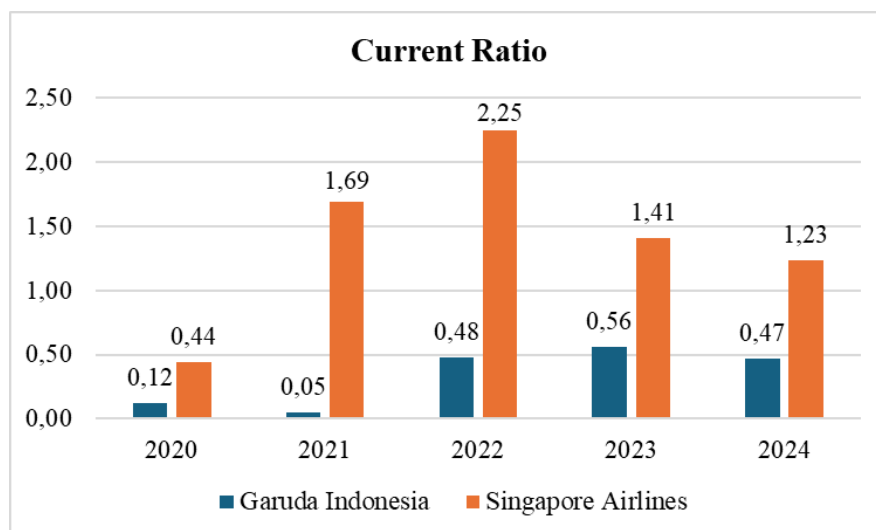
b. Liquidity Ratio Analysis

The liquidity ratio measures a company's ability, through the value of its current assets, to pay short-term liabilities or debts that mature within one year. Some types of liquidity ratios used are the current ratio and the cash ratio.

1. Current Ratio

The graphs of Garuda Indonesia and Singapore Airlines' current ratios over the 2020-2024 period are shown below:

Figure 7. Current Ratio



At the start of the pandemic, Garuda Indonesia's current ratio showed an alarming trend, decreasing from 0,12 in 2020 to a critically low point of 0,05 in 2021. This figure indicates an extreme inability to meet short-term obligations. The drastic decline to 0,05 in 2021 meant Garuda Indonesia had only 5 cents of current assets for every dollar of current liabilities. The current ratio increased significantly in 2022 to 0,48, followed by a slight rise to 0,56 in 2023, then decreased to 0,47 in 2024.

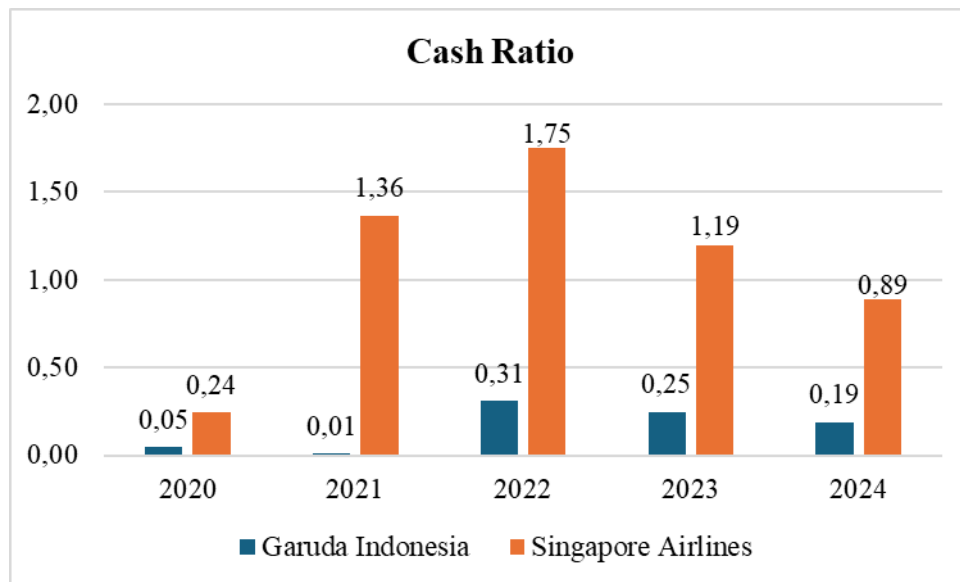
The improvement in the 2022 current ratio involved significant debt restructuring through a debt payment obligation suspension process supported by most creditors. This restructuring included various schemes such as debt-to-equity conversion, modification of short-term loans into long-term loans, and financial support from the Indonesian government through state capital injection. Although substantial improvement occurred in Garuda Indonesia's current ratio from 2022 to 2024, this figure remained significantly below the airline industry's current ratio benchmark of 2.0. This condition indicated that restructuring prevented bankruptcy but did not fully restore strong short-term financial health according to industry standards.

As a comparison, Singapore Airlines' current ratio declined in 2020 to 0,44. A spike in the current ratio occurred the following year to 1,69 in 2021, peaking at 2,25 in 2022. Subsequently, the current ratio normalised, decreasing to 1,41 in 2023 and 1,23 in 2024. The increase in Singapore Airlines' current ratio, exceeding the industry benchmark of 2.0 in 2022, demonstrated a proactive liquidity management strategy to survive and recover from the pandemic. The normalisation in subsequent years indicated a shift from cash-hoarding strategies toward more efficient asset utilisation, including the redemption of mandatory convertible bonds.

2. Cash Ratio

The graphs of Garuda Indonesia and Singapore Airlines' cash ratios over the 2020-2024 period are shown below:

Figure 8. Cash Ratio



Garuda Indonesia's cash ratio showed a highly volatile trend during the 2020-2024, reflecting significant financial challenges. In 2020, the cash ratio stood at 0,05, indicating Garuda Indonesia faced difficulties meeting current liabilities due to low cash availability. This condition worsened drastically in 2021 when the cash ratio decreased to a highly worrisome level of 0,01. A significant recovery occurred in 2022, where the cash ratio increased to 0,31 due to debt restructuring. In 2023, the ratio slightly decreased to 0,25 but remained relatively stable compared to the previous year. However, in 2024, a further decline occurred to 0,19. This decrease indicated new pressures on cash reserves and slower-than-expected revenue to cash conversion.

Despite substantial improvement from 2021, Garuda's cash ratio remained consistently below 1,0, indicating persistent short-term liquidity vulnerability from a cash availability perspective. The company still heavily relies on converting other current assets or generating future revenue to meet immediate obligations. The 2024 cash ratio decline also raised concerns. The contradiction between reported revenue growth and the declining cash ratio in 2024 demonstrated that revenue has not fully translated into cash. This may be caused by high operational costs draining cash and challenges in managing trade payables.

Meanwhile, Singapore Airlines demonstrated a strong and significantly different cash ratio trend compared to Garuda Indonesia. Singapore Airlines entered the pandemic with a 0,24 cash ratio in 2020, which was relatively stronger than Garuda Indonesia's and indicated a better initial liquidity buffer. Singapore Airlines' cash ratio also increased in 2021 to 1,36. This figure showed that cash balances significantly exceeded its current liabilities. The ratio peaked in 2022 at 1,75, demonstrating a powerful liquidity position well beyond the ideal 1,0 threshold. Gradual normalisation began from 2023 to 2024, where the cash ratio decreased to 1,19 and 0,89, respectively. Although the 2024 cash ratio was slightly below 1.0, this figure still represents a healthy liquidity position, especially when compared to Garuda Indonesia's cash ratio.

c. Activity Ratio Analysis

Activity ratios measure how efficiently a company manages its assets to generate revenue. Some activity ratios used are the receivable collection period, the payable payment period, and the total asset turnover.

1. Receivable Collection Period

The graphs of Garuda Indonesia and Singapore Airlines' receivable collection period over the 2020-2024 period are shown below:

Figure 9. Receivable Collection Period



The receivable collection period graph for Garuda Indonesia shows a downward trend throughout 2020-2024. Starting at 44 days in 2020, which indicated a delay in accounts receivable collection during the Covid-19 pandemic. The receivable collection period quickly improved to 28 days in 2021, then 17 days in 2022, and finally stabilised at 15 days in 2023-2024. This gradual decrease in the receivable collection period indicates an improvement in the company's ability to collect its receivables. The dramatic improvement in Garuda Indonesia's receivable collection period from 44 days to 15 days directly correlated with substantial debt restructuring efforts and government financial assistance. When a company faces the brink of bankruptcy and undergoes major debt restructuring, its survival depends on optimizing every aspect of its cash flow. The strategic decision to cut unprofitable international routes and focus on domestic and cargo operations was a key strategy during the pandemic. This is because domestic passenger sales are largely upfront cash transactions, and cargo services often have shorter payment cycles than complex international B2B contracts (Kurniawati et al., 2023).

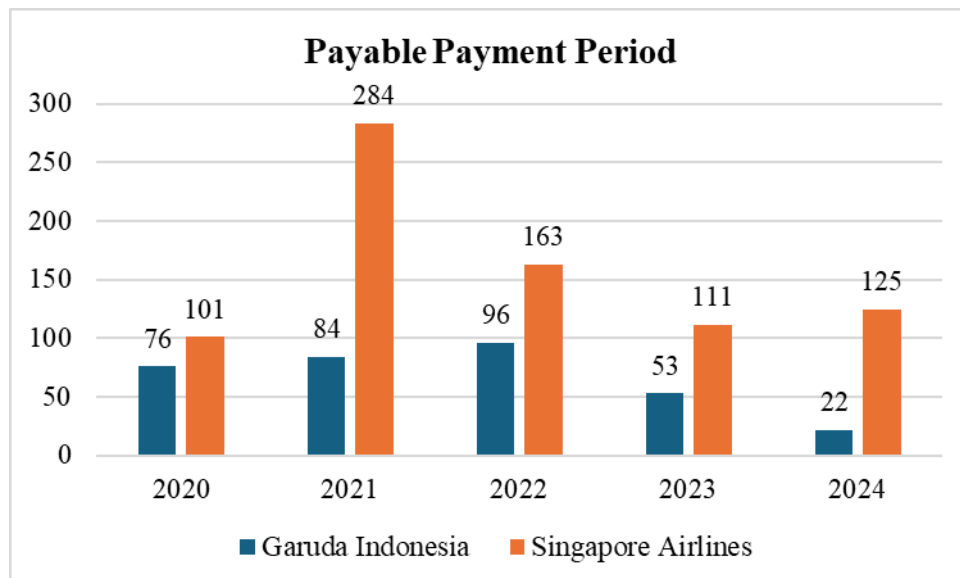
As a competitor, Singapore Airlines showed a different receivable collection period trend from Garuda Indonesia. It started from a relatively low 27 days in 2020, then experienced a dramatic increase to 84 days and 60 days in 2021-2022, respectively. Then, in 2023, the receivable collection period returned to an efficient level of 28 days in 2023 and 25 days in 2024. The increase in the receivable collection period 2021 indicates a relaxation of credit policies undertaken by Singapore Airlines to retain its customers during the Covid-19 pandemic. This is shown by an increase in past due but not impaired receivables alongside a drastic decrease in revenue. The recovery of Singapore Airlines' receivable collection period to pre-pandemic levels in 2023-2024 aligned with the global and regional airline recovery. This also indicated that the increase in the receivable collection period in 2021 and 2022 was a temporary operational and accounting challenge. During this period, financial support from the Singaporean government helped Singapore Airlines weather the inefficiencies in receivable management without facing immediate liquidity threats.

The most striking difference in the receivable collection period trends of the two companies is the significant increase in Singapore Airlines' receivable collection in 2021, while Garuda Indonesia improved. This difference indicated that the nature of operations and the accounts receivable response mechanisms of the two companies to the pandemic were different. Strong liquidity assistance from the Singaporean government allowed Singapore Airlines to survive amid accounts receivable inefficiencies. Conversely, Garuda Indonesia faced an existential threat requiring more fundamental and aggressive operational restructuring, which drove the company's receivable collection period efficiency metrics. This highlighted that both airlines received state aid. However, their situations were fundamentally different, so the receivable collection period trend reflected the impact of the pandemic, the nature of the crisis, and state intervention for each company.

2. Payable Payment Period

The graphs of Garuda Indonesia and Singapore Airlines' payable payment period over the 2020-2024 period are shown below:

Figure 10. Payable Payment Period



The payable payment period of Garuda Indonesia continued to increase from 76 days in 2020 to 96 days in 2022. This upward trend indicated a deliberate

strategy by Garuda Indonesia to extend payment terms to suppliers. An increasing payable payment period signified that the company took longer to pay its debts to suppliers. Garuda Indonesia's payable payment period decreased from 96 days in 2022 to 53 days in 2023 and 22 days in 2024. This decrease in the payable payment period was driven by creditor pressure and efforts to restore supplier confidence post-debt restructuring. However, a payable payment period of 22 days is considered too low for the airline industry, indicating a potential loss of financing benefits from debt.

As a competitor, Singapore Airlines' payable payment period dramatically increased in 2021 to 284 days, compared to 101 days in 2020. This high-payable payment period demonstrated a highly aggressive strategy to conserve cash during the peak of travel restrictions. Unlike Garuda Indonesia's payable payment period, which reflected difficulties, the dramatic increase in Singapore Airlines' payable payment period to 284 days in 2021 was a proactive liquidity management strategy. This is because the extension of debt payment was not an act of desperation but a deliberate decision to maximise internal cash retention and provide an additional layer of financial resilience during extreme uncertainty. After that, Singapore Airlines' payable payment period significantly decreased to 163 days in 2022 and 111 days in 2023, then slightly increased to 125 days in 2024. This trend reflects the company's recovery from the pandemic, supported by increased revenue. The decrease and stabilisation of Singapore Airlines' payable payment period indicated a return to normal operational and financial conditions. As flight demand recovers and revenue increases, the extreme need to delay debt payments subsides.

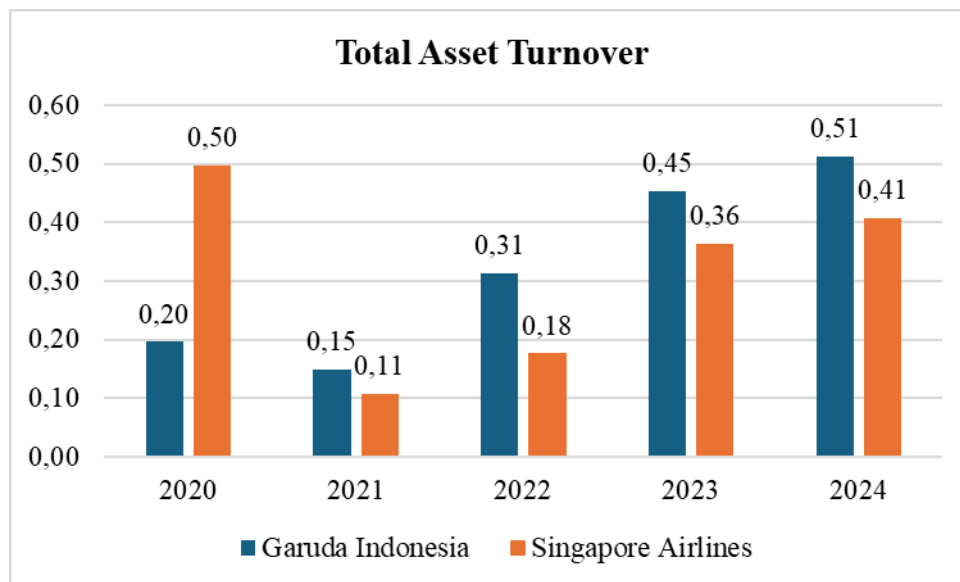
When comparing the payable payment periods of the two companies, Singapore Airlines consistently had a much more extended payable period than Garuda Indonesia from 2020 to 2024. This reflected different cash management strategies, where Singapore Airlines appeared to be more aggressive in extending payments to suppliers to maintain liquidity. Meanwhile, Garuda Indonesia showed the opposite tendency: after a period of extended payments at the

beginning of the crisis, the company accelerated debt payments to restore supplier confidence.

3. Total Asset Turnover

The graphs of Garuda Indonesia and Singapore Airlines' total asset turnover over the 2020-2024 period are shown below:

Figure 11. Total Asset Turnover



Garuda Indonesia experienced a decrease in its total asset turnover from 0,20 in 2020 to 0,15 in 2021. After reaching its lowest point in 2021, Garuda Indonesia showed a strong and consistent recovery in its total asset turnover, continuously increasing to 0,31 in 2022, 0,45 in 2023, and significantly reaching 0,51 in 2024. This significant increase indicated that Garuda Indonesia was recovering strongly in generating sales from its asset base. The substantial increase in total asset turnover in 2024 could be due to increased sales during that year and reduced average total assets. A leaner and more optimal asset base and revenue recovery will result in a higher total asset turnover.

Singapore Airlines' total asset turnover drastically decreased from 0,50 in 2020 to 0,11 in 2021. This was a more severe percentage decline compared to Garuda Indonesia. After reaching its lowest point in 2021, Singapore Airlines' total asset turnover consistently recovered, increasing to 0,18 in 2022, 0,36 in

2023, and 0,41 in 2024. This condition indicated a gradual but stable re-utilisation of assets as global travel resumed. Singapore Airlines operated predominantly as an international airline with a business model highly dependent on cross-border passenger traffic and global connectivity.

Both airlines experienced a sharp decline in total asset turnover in 2021, a universal consequence of the pandemic's impact on air travel. However, Singapore Airlines' percentage decline was from 0,50 to 0,11, or a decrease of 78% compared to Garuda Indonesia's decline from 0,20 to 0,15, or 25%. This disparity was due to Singapore Airlines' high reliance on international travel, which faced strict restrictions, while Garuda Indonesia could still leverage the domestic airline market. After reaching their lowest point in 2021, both airlines showed a recovery trend. Garuda Indonesia's total asset turnover increased by approximately 240% from 0,15 to 0,51, while Singapore Airlines' increased by approximately 273% from 0,11 to 0,41. Nevertheless, Garuda Indonesia's total asset turnover 2024 was still higher than Singapore Airlines'.

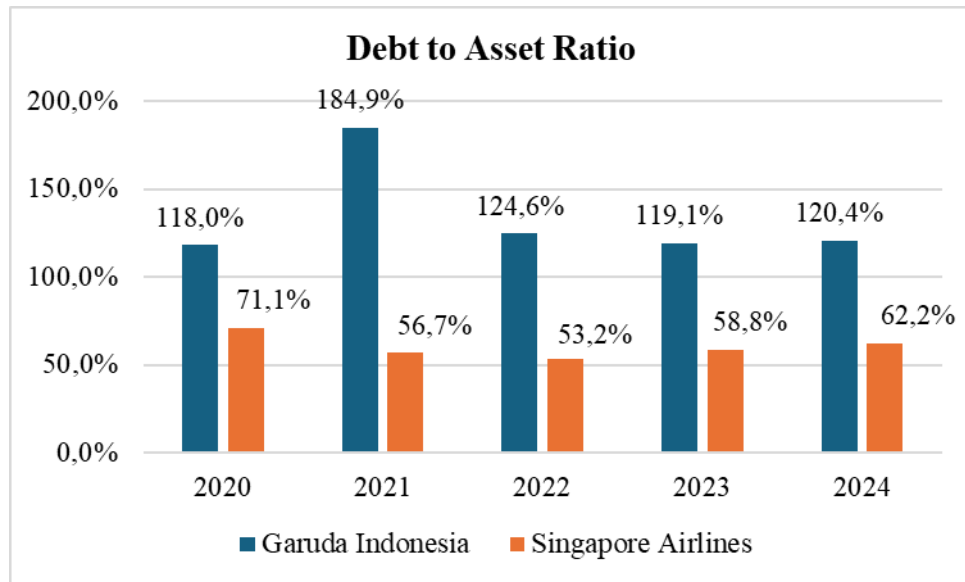
d. Solvency Ratio Analysis

Solvency ratio analysis measures a company's ability to meet its long-term obligations. This ratio provides information about the relative amount of debt in the company's capital structure and the adequacy of earnings to cover interest expenses when due. Some types of solvency ratios used are debt-to-asset ratios and interest coverage ratios.

1. Debt-to-Asset Ratio

The graphs of Garuda Indonesia and Singapore Airlines' debt-to-asset ratio over the 2020-2024 period are shown below:

Figure 12. Debt-to-Asset Ratio



The debt-to-asset ratio of Garuda Indonesia showed a very concerning trend during the 2020-2024 period. Garuda Indonesia's debt-to-asset ratio in 2020 was 118% increasing to a peak of 184,9% in 2021, then showing a gradual decrease to 124,6% in 2022, 119,1% in 2023, and a slight increase to 120,4% in 2024. A debt-to-asset ratio consistently above 100% indicates that Garuda Indonesia's total liabilities exceed its total assets. This condition was directly correlated with negative equity, which illustrated the depth of the solvency crisis experienced by the company.

The decrease in Garuda Indonesia's debt-to-asset ratio from its peak in 2021 to around 120% in 2024 was a direct consequence of the massive debt restructuring supported by the Indonesian government. Nevertheless, the ratio remained above 100%, indicating a continued reliance on debt and a negative equity value. This condition implied that the company's equity base was very small compared to its debt, making it highly vulnerable to future operational or market shifts without further recapitalisation or sustained profitability. This was due to companies with a negative equity base being inherently fragile and having little buffer against losses. Any new operational challenges or economic downturns could quickly push Garuda Indonesia back into severe difficulties, requiring further intervention.

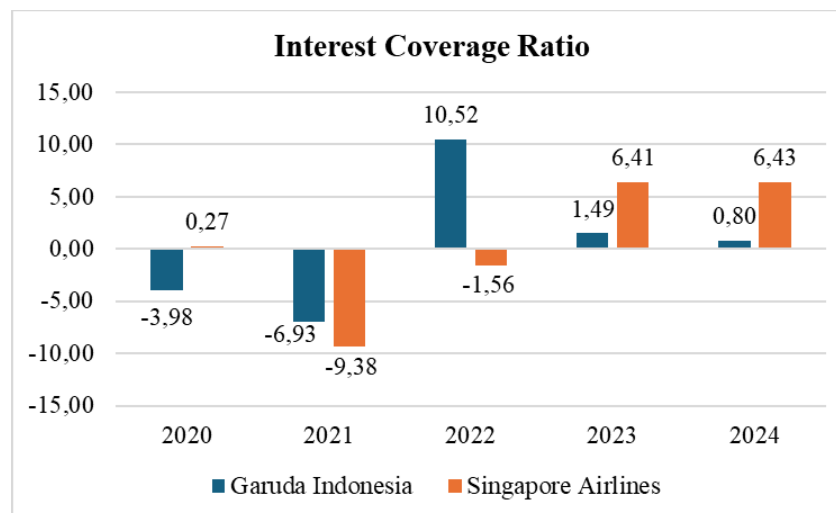
For comparison, Singapore Airlines' debt-to-asset ratio in 2020 was 71,1%, significantly lower than that of Garuda Indonesia. It then decreased to 56,7% in 2021 and 53,2% in 2022. After the decline in 2021 and 2022, the debt-to-asset ratio again increased in 2023 and 2024, reaching 58,8% and 62,2% respectively. Singapore Airlines' debt-to-asset ratio consistently remained below 100% over the last five years. This indicated that the company's total assets were always greater than its liabilities, meaning it was in a healthy solvency position.

The most striking difference in the debt-to-asset ratio trends of the two companies was their consistent solvency position. Garuda Indonesia's debt-to-asset ratio remained significantly above 100% throughout 2020-2024 and reached a worrying peak of 184,9% in 2021. In contrast, Singapore Airlines managed to maintain its debt-to-asset ratio well below 100%, fluctuating between 53,2% and 71,1% signifying a healthier solvency position. Despite this, Singapore Airlines' solvency was far better than Garuda Indonesia's, which had negative equity, meaning Singapore Airlines had a much lower level of financial risk and more effective financial management.

2. Interest Coverage Ratio

The graphs of Garuda Indonesia and Singapore Airlines' interest coverage ratio over the 2020-2024 period are shown below:

Figure 13. Interest Coverage Ratio



The interest coverage ratio of Garuda Indonesia plunged to -3,98 in 2020 and further to -6,93 in 2021. This negative ratio indicated that Garuda Indonesia's earnings before interest and taxes (EBIT) were highly negative, meaning the company was not generating enough revenue to cover its operating and interest expenses. A remarkable increase in the interest coverage ratio occurred in 2022, which rose to 10,52. This condition was due to a debt restructuring gain, which increased the profit value before interest and tax. This was supported by the graph trend showing a decrease followed by a sharp increase in 2022, the following year. The interest coverage ratio graph dropped significantly in 2023 to 1,49 and fell to 0,80 in 2024. Although the interest coverage ratio values in the last two years showed favorable ratios, these figures remained below the generally accepted threshold for an acceptable interest coverage ratio of 2.00. The interest coverage ratio in 2024, which was below 1.00, indicated that operating income was barely sufficient to cover interest payments.

Singapore Airlines' interest coverage trend in 2020 was 0,27, which fell to -9,38 in 2021 and remained negative at -1,56 in 2022. The ratio of -9,38 in 2021 indicated that Singapore Airlines' operating losses were quite substantial and significantly exceeded interest expenses. This period aligned with the drastic reduction in global air traffic and passenger numbers. After that, Singapore Airlines showed a drastic increase in its interest coverage ratio to 6,41 in 2023 and maintained a strong ratio of 6,43 in 2024. This high and stable ratio indicated that the company's operating income was more than six times its interest payments. This showed the company's remarkable ability to pay its debts and interest comfortably.

Both airlines experienced severe financial difficulties in the early years of the pandemic, reflected in their negative interest coverage ratios. This similar initial decline validated external shocks like the Covid-19 pandemic as the primary cause of the initial financial collapse in the airline industry. The sharp increase in Garuda Indonesia's interest coverage ratio to 10,52 in 2022, followed by a decrease to 1,49 in 2023 and 0,80 in 2024, indicated an unsustainable recovery. This condition raised concerns about Garuda Indonesia's ability to avoid

default or further restructuring. In contrast, after its low point in 2021, Singapore Airlines' interest coverage ratio showed a sustainable and consistent recovery above 6.00 in 2023-2024.

4.3.4. Prospective Analysis

Prospective analysis evaluates the future prospects and business continuity of Garuda Indonesia and Singapore Airlines. It is conducted using two main approaches: bankruptcy prediction and company valuation through the discounted cash flow method.

a. Bankruptcy Prediction Analysis

Bankruptcy prediction to evaluate financial difficulties at Garuda Indonesia and Singapore Airlines over the 2020-2024 period is done using the Altman Z-Score Model. The calculation of the five variables in the Altman model is as follows:

Table 13. Garuda Indonesia's Z-score variables

PT GARUDA INDONESIA TBK						
		2020	2021	2022	2023	2024
Working capital to total asset	X1	-0,35	-0,76	-0,14	-0,08	-0,09
Retained earnings to total assets	X2	-0,30	-1,03	-0,59	-0,51	-0,53
EBIT to total assets	X3	-0,20	-0,55	0,70	0,10	0,06
Equity to total liabilities	X4	-0,15	-0,46	-0,20	-0,16	-0,17
Sales to total assets	X5	0,14	0,19	0,34	0,44	0,52

Variable X1 for Garuda Indonesia, or working capital to total assets, showed a consistently negative ratio throughout 2020-2024. Starting at -0,35 in 2020, it declined to a low of -0,76 in 2021, and only showed a slight improvement to -0,09 in 2024. A continuously negative X1 ratio is a critical indicator of severe liquidity problems. This signifies that Garuda Indonesia's current liabilities consistently exceed its current assets, making it challenging for the company to meet its short-term financial obligations. The sharp decline in 2021 directly reflects the peak of operational and financial pressures caused by pandemic travel restrictions. Although the ratio showed a moderate improvement towards a less harmful value in 2024, it remained in deficit, underscoring ongoing liquidity concerns.

Variable X2, or retained earnings to total assets, also showed a negative ratio throughout 2020-2024. Starting at -0,30 in 2020, it reached a concerning -1,03 in 2021 and slightly improved to -0,53 in 2024. The highly negative X2 variable highlights significant accumulated losses that have eroded Garuda's shareholders' equity. The -1,03 figure in 2021 is particularly alarming, implying that accumulated losses exceeded the company's total assets, a serious red flag for long-term financial stability and solvency. This indicates that Garuda has primarily financed its operations and expenditures through external borrowing rather than internally generated profits, thus exposing it to higher financial risks. The slight improvement in subsequent years suggests a slowdown in losses, but not a return to sustained profitability.

Variable X3, or EBIT to total assets, showed significant fluctuations. This ratio was negative in 2020 and 2021, at -0,20 and -0,55 respectively. Surprisingly, it increased to a positive 0,70 in 2022, before declining again to 0,10 in 2023 and 0,06 in 2024. The initial negative values in 2020-2021 indicate that Garuda could not generate sufficient operating income from its assets, a direct consequence of the drastic decline in flight operations and revenue during the pandemic's peak. The anomalous positive increase in 2022 could be attributed to cost restructuring rather than a fundamental and sustained improvement in core operational profitability. The subsequent decline in 2023 and 2024 suggests that this profitability was not sustainable.

Variable X4, or equity to total liabilities, remained consistently negative, ranging from -0,15 in 2020 to a low of -0,46 in 2021, then improving slightly to -0,17 in 2024. A consistently negative X4 variable is a critical indicator of severe solvency problems. Garuda Indonesia's total liabilities consistently exceeded its shareholders' equity. This condition implies a state of negative equity, where the company is technically unable to pay its debts. This trend indicates a persistent capital deficiency, reflecting a highly indebted and financially vulnerable position.

Variable X5, or sales to assets, was the only ratio consistently showing a positive trend. Starting at 0.14 in 2020, it steadily increased to 0.52 in 2024. The upward trend in X5 indicates a gradual improvement in Garuda's efficiency in generating revenue

from its assets as air travel demand slowly recovered after the Covid-19 pandemic. This suggests some success in operational recovery and asset utilization post-pandemic. However, the initially low values reflect the severe revenue contraction experienced at the beginning of the crisis.

Table 14. Singapore Airlines' Z-score variables

SINGAPORE AIRLINES LTD						
		2020	2021	2022	2023	2024
Working capital to total asset	X1	-0,18	0,11	0,20	0,11	0,07
Retained earnings to total assets	X2	0,23	0,14	0,12	0,13	0,17
EBIT to total assets	X3	0,00	-0,07	-0,01	0,05	0,06
Equity to total liabilities	X4	0,41	0,76	0,88	0,70	0,61
Sales to total assets	X5	0,47	0,10	0,16	0,36	0,43

For comparison, variable X1, or working capital to total assets, for Singapore Airlines showed fluctuations but quickly turned positive after 2020. It started at -0,18 in 2020, then became positive at 0,11 in 2021, peaked at 0,20 in 2022, and slightly decreased to 0,07 in 2024. The initial negative value in 2020 reflects the immediate liquidity pressure experienced by the airline industry at the beginning of the pandemic. However, Singapore Airlines' rapid shift into positive working capital territory starting in 2021 indicates effective management of short-term obligations and its ability to maintain healthy liquidity. Even with slight fluctuations, this positive trend signifies operational fluidity and strong financial health.

Variable X2, or retained earnings to total assets, remained consistently positive throughout the 2020-2024 period, ranging from 0,23 in 2020, slightly decreasing to 0,12 in 2022, and recovering to 0,17 in 2024. A consistently positive X2 ratio is a significant indicator of Singapore Airlines' long-term financial strength. This demonstrates that the company has historically generated and retained substantial earnings, providing a strong internal funding base and reducing its reliance on external debt. This robust foundation allowed Singapore Airlines to absorb the financial shocks of the pandemic more effectively than Garuda Indonesia.

For Singapore Airlines, variable X3, or EBIT to total assets, was close to zero in the early years, at 0,00 in 2020, -0,07 in 2021, and -0,01 in 2022. However, this ratio became consistently positive, from 0,05 in 2023 to 0,06 in 2024. The negative or near-zero values at the beginning reflect operational losses or significantly reduced profitability during the pandemic's peak, when travel demand decreased. The positive shift in 2023-2024 signals a clear return to operational profitability and improved efficiency in generating income from its assets as global travel demand recovered.

Variable X4, or equity to total liabilities, remained consistent and positive throughout the period. It started at 0,41 in 2020, peaked at 0,88 in 2022, and settled at 0,61 in 2024. A consistently strong X4 ratio is a key indicator of Singapore Airlines' strong solvency and healthy capital structure. This reflects a significant shareholder equity buffer relative to its liabilities, indicating high investor confidence and a substantial cushion against potential asset impairment. This fundamental strength is a key differentiator from Garuda and underscores Singapore Airlines' lower insolvency risk.

Variable X5, or sales to total assets, showed fluctuations. It started at 0,47 in 2020, sharply decreased to 0,10 in 2021, then strongly recovered to 0,16 in 2022, 0,36 in 2023, and 0,43 in 2024. The sharp decline in 2021 reflects severe revenue contraction due to widespread travel restrictions. The subsequent strong recovery indicates Singapore Airlines' ability to generate sales from its assets as air travel resumed efficiently, and demand increased.

The next step is to calculate the weight of each variable to compute a bankruptcy score. The model predicts bankruptcy if $Z < 1,81$. Scores between 1,81 and 2,67 are referred to as the grey area. The results of the Z-score calculation of Garuda Indonesia and Singapore Airlines are as follows:

Table 15. Garuda Indonesia's Z-score results

PT GARUDA INDONESIA TBK							
	X1	X2	X3	X4	X5	Z-Score	Note
2020	-0,35	-0,30	-0,20	-0,15	0,14	-1,47	Distress Zone
2021	-0,76	-1,03	-0,55	-0,46	0,19	-4,26	Distress Zone
2022	-0,14	-0,59	0,70	-0,20	0,34	1,52	Distress Zone

2023	-0,08	-0,51	0,10	-0,16	0,44	-0,13	Distress Zone
2024	-0,09	-0,53	0,06	-0,17	0,52	-0,25	Distress Zone

Garuda was already in deep financial distress at the beginning of the pandemic. This condition indicates pre-existing weaknesses exacerbated by the direct impact of early travel restrictions. 2021 marked the lowest point in Garuda's Z-score, signifying extreme financial difficulty and the highest probability of bankruptcy during 2020-2024. The extremely low scores on X1, X2, and X4 directly contributed to this alarming score. In 2022, there was a significant increase in the Z-score to positive territory compared to 2021. This increase was primarily driven by the anomalous positive X3 in 2022. Despite being positive, a Z-score of 1,52 was still well below the traditional threshold 1,81 for the "Distress Zone."

In 2023, there was a worrying shift in the Z-score back into negative territory. This indicates that the positive momentum from 2022 was not sustainable and that underlying fundamental problems persisted despite operational improvements. The Z-score remained negative in 2024, confirming a high and persistent risk of bankruptcy for Garuda Indonesia. There was a slight decrease in the Z-score from 2023, even though the X5 variable improved. This suggests that the heavy burden of negative working capital, retained earnings, and equity continued to outweigh the gains from revenue-generating efficiency.

Garuda Indonesia remained in critical financial distress throughout 2020-2024. Its Z-score, which was largely negative and consistently well below conventional thresholds of 1,81, underscores a persistent and severe risk of bankruptcy. The consistently negative X1 (working capital), X2 (retained earnings), and X4 (equity to liabilities) ratios indicate fundamental and severe structural problems related to liquidity, accumulated losses, and solvency. These issues predated the pandemic and were significantly exacerbated by it. The dramatic drop in the Z-score to -4,26 in 2021 highlights the airline's extreme vulnerability to external shocks like the Covid-19 pandemic, underscoring its limited financial resilience and significant exposure to systemic risk.

Table 16. Singapore Airlines' Z-score results

SINGAPORE AIRLINES LTD							
	X1	X2	X3	X4	X5	Z-Score	Note
2020	-0,18	0,23	0,00	0,41	0,47	0,82	Distress Zone
2021	0,11	0,14	-0,07	0,76	0,10	0,67	Distress Zone
2022	0,20	0,12	-0,01	0,88	0,16	1,05	Distress Zone
2023	0,11	0,13	0,05	0,70	0,36	1,29	Distress Zone
2024	0,07	0,17	0,06	0,61	0,43	1,32	Distress Zone

Singapore Airlines demonstrated remarkable resilience throughout the pandemic. It consistently maintained a positive Z-score and showed a clear and strong upward trend starting in 2021. Although the positive Z-score in 2020 and 2021 was relatively low, it still classified Singapore Airlines in the distress zone. A significant increase in the Z-score occurred in 2022 and continued to rise until 2024, primarily driven by positive X1 and a strong X4 figure. This marks a clear upward trajectory in Singapore Airlines' financial health as global travel gradually resumed. Despite still being in the distress zone, the Z-score steadily moved away from the critical zero threshold.

Key strengths were Singapore Airlines' consistently positive X2 (retained earnings) and X4 (equity to liabilities) variables. These ratios signify a robust foundation for internal funding and solvency, which effectively cushioned the impact of the pandemic and allowed for a faster recovery. The recovery of X1 (working capital), X3 (EBIT), and X5 (sales efficiency) variables in subsequent years demonstrates successful adaptation to the post-pandemic environment and a return to strong operational profitability and efficient asset utilization. Singapore Airlines' ability to maintain a positive Z-score and show a strong recovery, even while operating in the same aviation environment as Garuda Indonesia, indicates a superior strategic position and highly effective balance sheet management. This allowed Singapore Airlines to absorb severe shocks and recover more effectively. This condition highlights the critical role of strong financial health in crisis management.

Singapore Airlines presents a significantly healthier financial profile with a clear recovery trajectory and substantially lower bankruptcy risk. This is supported by its strong fundamental base, such as robust liquidity, substantial retained earnings, and a healthy equity base, enabling Singapore Airlines to absorb the pandemic's shocks

and recover effectively. Although still susceptible to potential bankruptcy based on its Z-score range, Singapore Airlines shows consistently positive and improving Z-scores, moving significantly away from the critical negative threshold. In contrast, Garuda Indonesia faces persistent and severe financial distress. Its consistently negative Z-scores and critical fundamental ratios indicate a high and ongoing bankruptcy risk. The temporary positive Z-score in 2022 was an anomaly rather than a sustained recovery, suggesting that the airline grapples with fundamental solvency issues.

b. Discounted Cash Flow (DCF) Valuation

The discounted cash flow valuation method focuses on projecting future cash flows discounted to their present value, considering the company's risk and cost of capital. In this context, Garuda Indonesia and Singapore Airlines are analysed to assess how each company's intrinsic value reflects its current market price. A comparison is made to identify differences in financial prospects, operational efficiency, and capital structure post-Covid-19 pandemic, which significantly impacted the airline industry in the Southeast Asian region.

This DCF valuation model involves two main phases: the explicit projection period and the terminal value calculation. The explicit projection period is the phase where detailed annual financial projections are made. These financial projections will serve as the basis for calculating the free cash flow to the firm, which will then be discounted to the present value and used to determine the company's intrinsic value. Subsequently, the terminal value calculation represents the value of the company's cash flows beyond the explicit projection period. This is typically calculated using a perpetual growth model, which assumes a stable growth rate into perpetuity.

I. The calculation of Garuda Indonesia's DCF valuation

To discount the free cash flow to the firm, it is necessary to calculate the company's weighted average cost of capital (WACC). WACC is calculated based on the proportion of total equity values and debts to the cost of equity and debt.

a. Proportion of debt and equity

Determining the ratio between debt and equity is the initial step in calculating WACC. The total debt in this calculation is derived from the average net debt from 2020 to 2024. It used the market capitalisation for the equity value by multiplying the outstanding shares by the share price. This approach is chosen because Garuda Indonesia's total equity in its financial statements shows a negative value, necessitating a cautious and realistic approach. Even though book equity is negative, Garuda Indonesia's shares are still traded and hence can be used as a denominator in the WACC weighting.

Table 17. Proportion of Garuda Indonesia's debt and equity

	2020	2021*	2022*	2023	2024	Average
Net Debt	5.173.778.191	5.008.399.389	3.435.044.444	3.747.494.758	3.647.945.947	4.202.532.546
Equity Value	748.931.270	-	-	409.455.760	392.518.837	310.181.174
Proportion to debt	0,87	1,00	1,00	0,90	0,90	0,94
Proportion to equity	0,13	0,00	0,00	0,10	0,10	0,06

Based on the table above, Garuda Indonesia did not have a market capitalization value in 2021 and 2022. This was because the Indonesia Stock Exchange temporarily suspended the trading of the company's securities effective from the first trading session on June 18, 2021, until January 3, 2023. Subsequently, based on the average debt and equity from 2020 to 2024, it was found that the proportion of debt to the company's capital structure was 0.94 or 94%, while the proportion of equity to the company's capital structure was 0.06 or 6%.

b. Cost of debt

In the WACC calculation, the cost of debt used is after-tax. This is generally because interest on debt can reduce a company's tax burden, resulting in a lower net debt cost. The method used to estimate Garuda Indonesia's cost of debt based on available financial statement data is by dividing the average net interest charge by the average net debt from 2020 to 2024, which is then adjusted by the company's effective tax rate to obtain the after-tax cost of debt.

$$\text{After-tax cost of debt} = \frac{\text{Interest charge}}{\text{Net debt}} \times (1 - \text{corporate income tax rate})$$

$$\text{After-tax cost of debt} = \frac{454.268.761}{4.202.532.545} \times (1 - 22\%)$$

$$\text{After-tax cost of debt} = 8,43\%$$

c. Cost of equity

The cost of equity is calculated using the capital asset pricing model. The risk-free rate (R_f) is taken from the yield of Indonesian 10-year government bonds. Based on data as of June 19, 2025, the latest risk-free rate is 6,727%. Equity market risk premium (RP_m) is the difference between the risk-free and return rates of equity investments. The determination of the equity market risk premium incorporates country-specific risk premiums, such as stock price volatility, to generate a base equity market risk premium. A risk premium rate of 6,87% is used for this valuation, obtained from research by Aswath Damodaran of New York University Business School in 2024, published in January 2025. The beta value used is 2,1575 based on Garuda Indonesia's beta data recorded by the Financial Times.

$$k_e = R_f + (\beta \times RP_m)$$

$$k_e = 6,727\% + (2,1575 \times 6,87\%)$$

$$k_e = 21,55\%$$

d. Cost of capital

The weighted average cost of capital (WACC) value can then be calculated based on the proportion of total equity values and debts to the cost of equity and debt, resulting in a WACC of 9,33%.

$$WACC = \left(\frac{E}{V} \times k_e \right) + \left(\frac{D}{V} \times k_d \times (1 - T) \right)$$

$$WACC = \left(\frac{310.181.174}{4.512.713.720} \times 21,55\% \right) + \left(\frac{4.202.532.546}{4.512.713.720} \times 8,43\% \times (1 - 22\%) \right)$$

$$WACC = 9,33\%$$

The calculation table for Garuda Indonesia's weighted average cost of capital is as follows:

Table 18. Garuda Indonesia's Weighted Average Cost of Capital

Equity values (\$)	310.181.174
Net debts (\$)	4.202.532.546
Total equity and debts (\$)	4.512.713.720
Cost of debt	8,43%
Cost of equity	21,55%
WACC	9,33%

Garuda Indonesia's financial statements are projected for 5 years, from 2025 to 2029. These projections are used for valuation analysis by calculating Free Cash Flow to Firm (FCFF). The results are then applied using the Discounted Cash Flow (DCF) method, where the projected FCFF is discounted to its present value using the weighted average cost of capital. Subsequently, the estimated terminal value of the company beyond this forecast period is calculated and discounted to its present value. The terminal value calculation uses a terminal growth rate of 2%. This is due to Garuda Indonesia's financial condition being in the recovery phase post-COVID-19 and debt restructuring. Therefore, a highly conservative terminal growth rate can provide a more prudent valuation result. The FCFF calculation for Garuda Indonesia from 2025 to 2029, utilising the projected income statement, balance sheet, and cash flow statement, is as follows.

Table 19. Garuda Indonesia's free cash flow to firm 2025-2029

	2025F	2026F	2027F	2028F	2029F
EBIT	493.542.230	520.935.240	596.428.667	702.865.587	958.507.486
Tax Rate (T)	22%	22%	22%	22%	22%
EBIT (1-T)	384.962.939	406.329.487	465.214.360	548.235.158	747.635.839
(+) Depreciation and Amortisation	571.314.414	684.855.964	739.160.535	871.444.857	1.029.800.529
(-) CAPEX	101.737.882	111.911.670	123.102.837	135.413.121	148.954.433
(-) Change in Net Working Capital	53.990.630	(26.995.315)	13.497.658	(6.748.829)	3.374.414
FCFF	800.548.842	1.006.269.096	1.067.774.400	1.291.015.723	1.625.107.520

These FCFF are then discounted using a WACC of 9.33% with the following formula:

$$PV\ FCFF = \sum_{t=1}^n \frac{FCFF_t}{(1 + WACC)^t}$$

Table 20. Garuda Indonesia's discounted FCFF value

	2025F	2026F	2027F	2028F	2029F
FCFF	800.548.842	1.006.269.096	1.067.774.400	1.291.015.723	1.625.107.520
WACC	9,33%	9,33%	9,33%	9,33%	9,33%
t	1	2	3	4	5
PV of FCFF	732.231.630	841.851.401	817.074.130	903.595.666	1.040.364.105
Total PV of FCFF	4.335.116.931				

After obtaining the total present value of FCFF, the terminal value can be calculated using the last projected FCFF with a terminal growth rate of 2%. The formula for calculating terminal value is as follows:

$$\begin{aligned} \text{Terminal value} &= \frac{FCFF_n \times (1 + g)}{(WACC - g)} \\ \text{Terminal value} &= \frac{1.625.107.520 \times (1 + 2\%)}{(9,33\% - 2\%)} \\ \text{Terminal value} &= 22.614.047.345 \end{aligned}$$

The terminal value is then discounted to the present value using the WACC through the following calculation:

$$\begin{aligned} PV\ \text{terminal value} &= \frac{\text{Terminal value}}{(1 + WACC)^t} \\ PV\ \text{terminal value} &= \frac{22.614.047.345}{(1 + 9,33\%)^5} \\ PV\ \text{terminal value} &= 14.477.099.409 \end{aligned}$$

After calculating the total present value of FCFF and the terminal value, the enterprise value can be calculated by summing both as follows:

$$\text{Enterprise value} = \text{Total PV of FCFF} + \text{PV terminal value}$$

$$\text{Enterprise value} = 4.335.116.931 + 14.477.099.409$$

$$\text{Enterprise value} = 18.812.216.340$$

To determine if a company's value is overvalued or undervalued, its intrinsic value per share must be calculated and compared with the market share price. This is done by dividing the previously calculated company value by the total number of outstanding shares, as follows:

$$\text{Share value} = \frac{\text{Enterprise value}}{\text{Outstanding share}}$$

$$\text{Share value} = \frac{18.812.216.340}{91.480.783.837}$$

$$\text{Share value} = 0,21 \text{ (in USD)}$$

After the above calculation, Garuda Indonesia's share value was found to be USD 0,21. To compare this value with the current market share price, the share value needs to be converted into Indonesian Rupiah using the selling exchange rate per December 31, 2024, which was 1:16.243. This results in Garuda Indonesia's share value in Rupiah being Rp3.340. Compared to the current market price of Rp70 per share as of December 31, 2024, this result indicates that Garuda Indonesia shares are significantly undervalued based on the recovery assumptions made in the model. The most influential assumptions in driving this valuation result are aggressive revenue growth rates in the early years of recovery, significant improvements in operating margins, and the calculated WACC rate. However, it should be noted that for the past five years from 2020 to 2024, Garuda Indonesia experienced financial distress due to negative equity. Therefore, it is important for long-term investors who will invest in Garuda Indonesia to observe the success of the company's recovery strategy implementation and operational improvements. This is because the success of this valuation calculation is highly dependent on Garuda Indonesia management's ability to increase profitability and manage its debt burden consistently. Investors should closely monitor the company's progress in achieving its projected operational and financial targets.

II. The calculation of Singapore Airlines' DCF valuation

The following steps are used to calculate the DCF valuation of Singapore Airlines.

a. Proportion of debt and equity

The initial step in calculating WACC is determining the ratio between debt and equity. The average total liabilities and equity from 2020 to 2024 is used.

Table 21. Proportion of Singapore Airlines' debt and equity

	2020	2021	2022	2023	2024	Average
Total liabilities	23.980,1	21.303,2	25.870,6	28.851,4	27.520,1	25.505,1
Total equity	9.732,7	16.278,1	22.800,4	20.249,8	16.744,6	17.161,1
Proportion to debt	0,71	0,57	0,53	0,59	0,62	0,60
Proportion to equity	0,29	0,43	0,47	0,41	0,38	0,40

Based on the table above, the proportion of debt to the company's capital structure was 0.60 or 60%, while the proportion of equity to the company's capital structure was 0.40 or 40%.

b. Cost of debt

In the WACC calculation, the cost of debt used is after-tax. The method used to estimate Singapore Airlines' cost of debt based on available financial statement data is by dividing the average interest charge by the average total liabilities from 2020 to 2024, which is then adjusted by the company's effective tax rate to obtain the after-tax cost of debt.

$$\text{After-tax cost of debt} = \frac{\text{Interest charge}}{\text{Total liabilities}} \times (1 - \text{corporate income tax rate})$$

$$\text{After-tax cost of debt} = \frac{345}{25.505,1} \times (1 - 17\%)$$

$$\text{After-tax cost of debt} = 1,12\%$$

c. Cost of equity

The cost of equity is calculated using the capital asset pricing model. Data for calculating the CAPM was taken from alphaspread.com, where the risk-free rate of

return is 2,09%, Singapore Airlines' beta is 1,01, and the equity risk premium is 4,12%. So, the cost of equity value is obtained through the following calculation:

$$ke = Rf + (\beta \times Rpm)$$

$$ke = 2,09\% + (1,01 \times 4,12\%)$$

$$ke = 6,25\%$$

d. Cost of capital

The weighted average cost of capital (WACC) value can then be calculated based on the proportion of total equity values and debts to the cost of equity and debt, resulting in a WACC of 4,19%.

$$WACC = \left(\frac{E}{V} \times ke \right) + \left(\frac{D}{V} \times kd \times (1 - T) \right)$$

$$WACC = \left(\frac{17.161,12}{42.666,20} \times 6,25\% \right) + \left(\frac{25.505,08}{42.666,20} \times 1,12\% \times (1 - 17\%) \right)$$

$$WACC = 4,19\%$$

The calculation table for Singapore Airlines' weighted average cost of capital is as follows:

Table 22. Singapore Airlines Weighted Average Cost of Capital (in SGD million)

Total liabilities	25.505,08
Total equity	17.161,12
Total equity and liabilities	42.666,20
Cost of debt	1,12%
Cost of equity	6,25%
WACC	4,19%

Singapore Airlines' financial statements are projected for 5 years, from 2025 to 2029. These projections are used for valuation analysis by calculating Free Cash Flow to Firm (FCFF). The results are then applied using the Discounted Cash Flow (DCF) method, where the projected FCFF is discounted to its present value using the

weighted average cost of capital. Subsequently, the estimated terminal value of the company beyond this forecast period is calculated and discounted to its present value using a terminal growth rate 2,5%. This value reflects a conservative rate for calculating terminal value, which is consistent with the structural inflation rate and does not exceed the WACC. The FCFF calculation for Singapore Airlines from 2025 to 2029, utilising the projected income statement, balance sheet, and cash flow statement, is as follows.

Table 23. Singapore Airlines' free cash flow to the firm 2025-2029 (in SGD million)

	2025F	2026F	2027F	2028F	2029F
EBIT	3.190,1	3.991,5	4.862,7	6.068,3	7.476,6
Tax Rate (T)	17%	17%	17%	17%	17%
EBIT (1-T)	2.647,8	3.313,0	4.036,0	5.036,7	6.205,6
(+) Depreciation and Amortisation	2.273,2	2.386,9	2.506,2	2.656,6	2.816,0
(-) CAPEX	1.960,6	1.597,9	1.596,6	1.718,4	1.637,6
(-) Change in Net Working Capital	1.077,4	(628,3)	(631,7)	(81,6)	(468,5)
FCFF	1.883,1	4.730,2	5.577,3	6.056,6	7.852,5

These FCFF are then discounted using a WACC of 4.19% with the following formula:

$$PV\ FCFF = \sum_{t=1}^n \frac{FCFF_t}{(1 + WACC)^t}$$

Table 24. Singapore Airlines' discounted FCFF value (in SGD million)

	2025F	2026F	2027F	2028F	2029F
FCFF	1.883,1	4.730,2	5.577,3	6.056,6	7.852,5
WACC	4,19%	4,19%	4,19%	4,19%	4,19%
t	1	2	3	4	5
PV of FCFF	1.807,3	4.357,4	4.931,1	5.139,5	6.395,6
Total PV of FCFF	22.631,0				

After obtaining the total present value of FCFF, the terminal value can be calculated using the last projected FCFF with a terminal growth rate of 2,5%. The formula for calculating terminal value is as follows:

$$\begin{aligned} \text{Terminal value} &= \frac{FCFF_n \times (1 + g)}{(WACC - g)} \\ \text{Terminal value} &= \frac{SGD 7.852,5 \text{ million} \times (1 + 2,5\%)}{(4,19\% - 2,5\%)} \\ \text{Terminal value} &= SGD 476.262,7 \text{ million} \end{aligned}$$

The terminal value is then discounted to the present value using the WACC through the following calculation:

$$\begin{aligned} PV \text{ terminal value} &= \frac{\text{Terminal value}}{(1 + WACC)^t} \\ PV \text{ terminal value} &= \frac{SGD 476.262,7 \text{ million}}{(1 + 4,19\%)^5} \\ PV \text{ terminal value} &= SGD 387.896,9 \text{ million} \end{aligned}$$

After calculating the total present value of FCFF and the terminal value, the enterprise value can be calculated by summing both as follows:

$$\begin{aligned} \text{Enterprise value} &= \text{Total PV of FCFF} + PV \text{ terminal value} \\ \text{Enterprise value} &= SGD 22.631,0 \text{ million} + SGD 387.896,9 \text{ million} \\ \text{Enterprise value} &= SGD 410.527,9 \text{ million} \end{aligned}$$

To determine if a company's value is overvalued or undervalued, its intrinsic value per share must be calculated and compared with the market share price. This is done by dividing the previously calculated enterprise value by the total number of outstanding shares, as follows:

$$\text{Share value} = \frac{\text{Enterprise value}}{\text{Outstanding share}}$$

$$\text{Share value} = \frac{\text{SGD } 410.527.900.000}{3.019.245.948}$$

$$\text{Share value} = \text{SGD } 136$$

The above calculations show Singapore Airlines' intrinsic value is SGD 136 per share. Compared to the market share price of SGD 6,44 per December 31, 2024, this market price is lower than its intrinsic value, indicating that the stock is cheaper than its intrinsic value. When comparing the intrinsic values of both companies, it was found that both have undervalued share values. However, for investment decisions, it is necessary to reconsider each company's financial condition and fundamentals.

Singapore Airlines demonstrates a strong and stable financial performance, with a solid cash position, well-managed interest expenses, and a consistent profit record. Furthermore, its debt-to-asset ratio is within reasonable limits, and the company has not undergone restructuring or significant financial issues in recent years. The good reputation of its management and the support from Temasek Holdings as the major shareholder also strengthen investor confidence in the company's long-term prospects.

Conversely, Garuda Indonesia still faces significant structural pressures. The company underwent debt restructuring, recorded significant losses for several years, and only posted a temporary profit in 2022. Additionally, Garuda Indonesia has shown negative equity over the past five years, a very high debt-to-asset ratio of over 100%, and interest expenses far exceeding financial income. The company's management also faced reputational and efficiency challenges post-pandemic.

CHAPTER V

CONCLUSION

This chapter summarizes the previous chapters' findings, including limitations, implications of the research, and recommendations for future research.

5.1. Summary

This research analyses and evaluates the business and financial performance of PT Garuda Indonesia and Singapore Airlines Ltd. during the period 2020-2024, focusing on the impact of the COVID-19 pandemic and post-pandemic recovery strategies. Both companies are national airlines, with the majority of their shares owned by their respective governments. Garuda Indonesia and Singapore Airlines operate in the ASEAN airline industry, which generally has a competitive and challenging environment. The ASEAN airline industry faces significant challenges from intense competition, high bargaining power of suppliers and customers, and a moderate threat of substitution. Nevertheless, implementing the ASEAN Single Aviation Market (ASAM) and digitalisation offer significant growth opportunities.

Business performance analysis shows that Singapore Airlines has an advantage in its strong brand image, premium service quality, and better operational resilience against external shocks. The company successfully leveraged its cargo segment during the pandemic and maintained a high RASK (Revenue per Available Seat Kilometre). On the other hand, Garuda Indonesia, despite having strong brand recognition in the domestic market and government support, continues to face significant weaknesses. Garuda Indonesia faces critical weaknesses in unhealthy financial conditions, characterised by reliance on debt financing and persistent negative equity. There are also corporate governance issues, such as alleged manipulation of financial statements and internal management problems, which can damage reputation and investor confidence. Operational inefficiencies, including high maintenance costs, further aggravate the situation. Besides that condition, both airlines have similar opportunities from post-pandemic tourism recovery and the ongoing digital transformation in the industry. However, they also face common threats from intense competition, especially from low-cost carriers dominating the regional market, as well as external shocks like fuel price

fluctuations and geopolitical tensions. The main difference is that Singapore Airlines is better prepared to capitalise on these opportunities and face these threats through its more resilient business fundamentals.

From a financial performance perspective, Garuda Indonesia experienced severe financial pressure since the beginning of the pandemic, with a drastic decline in revenue in 2020 and massive operating and net losses reaching a low point in 2021. Furthermore, its asset structure was dominated by non-current assets, indicating limited liquidity. Garuda Indonesia also has very low current and cash ratios, indicating an extreme inability to meet short-term obligations. Garuda Indonesia's total liabilities consistently exceeded total assets, resulting in persistent negative equity and a very high debt-to-asset ratio. This condition indicates the company faces a deep solvency crisis. Although debt restructuring efforts in 2022 provided a temporary improvement in profitability and liquidity ratios, this recovery was not sustainable, and the company still faces a high burden of financial costs, as proven by the decline in OPM and NPM in 2024 and an interest coverage ratio below the healthy threshold in 2024. The drastically shortened trade payable period in 2024 also indicates pressure from creditors.

Conversely, Singapore Airlines showed a faster and more consistent revenue recovery post-pandemic, with high growth in 2023. The company successfully maintained strong cost control with total expenses more proportional to revenue and achieved positive and stable operating and net profitability in 2023-2024. Singapore Airlines also managed to maintain a powerful liquidity position with current and cash ratios well above industry standards in 2021-2022. The accumulation of cash reserves and strategic capital injections from Temasek Holdings supported this. Singapore Airlines' debt-to-asset ratio consistently remained below 100% indicating a healthy solvency position and significantly lower financial risk from long-term debt. A high and stable interest coverage ratio above 6,00 in 2023-2024 demonstrates the company's ability to cover interest expenses comfortably. Although the accounts receivable collection period extended in 2021-2022, this was a proactive strategy to retain customers, and a consistently longer trade payable period also indicates aggressive yet effective cash management.

Bankruptcy prediction analysis using the Altman Z-Score model confirmed that, despite debt restructuring efforts, Garuda Indonesia remained in a severe financial distress zone with a high risk of bankruptcy throughout the research period. Negative working capital, retained earnings, and equity to total assets ratios indicate deep structural problems. Meanwhile, although in a distress zone at the beginning of the pandemic, Singapore Airlines showed resilience with positive Z-scores and a strong recovery trend, supported by solid financial fundamentals. On the other hand, valuation using the Discounted Cash Flow (DCF) method shows that, based on the recovery assumptions, both companies have an intrinsic share value higher than the market price on December 31, 2024, indicating that their shares are undervalued. However, it should be noted that Garuda Indonesia's valuation is highly dependent on successful recovery strategies and consistent operational improvements to address negative equity and debt burden. In contrast, Singapore Airlines' valuation is supported by stable financial performance, a strong cash position, and reputable management.

Overall, despite operating in the same challenging industry environment, this research highlights fundamental differences in resilience and recovery strategies between PT Garuda Indonesia and Singapore Airlines Ltd. Singapore Airlines demonstrates a more resilient business model and more effective financial management in facing global crises, allowing the company to recover faster and more sustainably. Meanwhile, Garuda Indonesia is still struggling with structural challenges that require continuous intervention and significant operational improvements to achieve long-term stability and profitability.

5.2. Limitation of Research

This research has several limitations that could affect the depth and generalisability of its findings. Some limitations that need to be acknowledged include:

1. This research has a limited study period, covering only 2020-2024, a period heavily influenced by the COVID-19 pandemic. While this period is crucial for analysing the impact of the crisis and recovery, a long-term analysis might provide a more comprehensive overview of the companies' performance under more stable market conditions.

2. The data is entirely secondary from public annual reports, financial statements, and scholarly articles. This limitation could hinder a deeper understanding of internal strategic decisions and non-financial factors that may not be fully reflected in publicly available data.
3. The valuation calculations using the Discounted Cash Flow (DCF) model are highly sensitive to assumptions, such as projected free cash flow to firms, terminal growth rates, and the weighted average cost of capital (WACC). Small changes in these assumptions can significantly affect the calculated intrinsic value. Therefore, uncertainties remain even though assumptions were made based on available data and conservative considerations.

5.3. Implications of Research

This research provides several implications for various stakeholders as follows:

a. For company management

Garuda Indonesia's management needs to focus more on sustainable operational profitability and effectively leverage debt restructuring efforts to improve the company's financial condition. Priority should be given to cost efficiency, route optimisation, and service enhancement to attract passengers back and reduce reliance on debt. Corporate governance and transparency improvements are also crucial to rebuild investor and public trust. Meanwhile, Singapore Airlines' management can maintain its competitive advantage in premium services and operational efficiency. Revenue diversification strategies through the cargo segment and low-cost subsidiaries have proven effective and should continue to be developed. The company's strong financial condition can serve as capital for business expansion and broadening its international market reach. The company could also consider further optimising accounts receivable and trade payable management to improve working capital efficiency.

b. For investors

This research provides in-depth insights into the financial condition and prospects of two major airlines in ASEAN. Although the valuation indicates both stocks are

undervalued, investors need to consider the fundamental differences in financial health and risk. Singapore Airlines offers a lower risk profile and more stable recovery, while investment in Garuda Indonesia requires close monitoring of the success of restructuring debt and operational improvements. On the other hand, the airline industry's sensitivity to external shocks can also be a factor for investors to consider portfolio diversification and avoid over-reliance on a single sector or company.

c. For regulators and the government

This research can guide regulators and governments in formulating more effective policies to support the growth of the airline industry. This includes ensuring a healthy competitive environment, facilitating access to funding, and encouraging investment in infrastructure and technology. This research highlights the need for a balanced approach between financial support and pressure to achieve operational efficiency and good governance practice for governments that own national airlines. Government support should be structured to encourage reform and not merely as an unconditional bailout, so that it can ensure long-term sustainability. Furthermore, governments should actively promote transparent and accountable corporate governance practices, especially in state-owned airlines, to prevent incidents like financial statement manipulation and corruption that can harm long-term reputation and performance.

d. For academics and researchers

This research provides a foundation for further studies on airline industry resilience, post-crisis recovery strategies, and performance comparisons between airlines with different business models and ownership structures. Moreover, it can be used as a reference to understand the macroeconomic and microeconomic impacts on specific industry sectors and companies' responses to unexpected crises.

5.4. Recommendation for Future Research

Based on the limitations and findings in this study, several recommendations for further research are:

1. Future researchers can conduct studies covering a more extended period after a full recovery from the pandemic to evaluate the sustainability of both airlines' performance and strategies under more normal market conditions.
2. Future researchers are recommended to strengthen qualitative studies with primary sources and data, such as conducting interviews with management or industry experts to gain deeper insights into strategic challenges, operational decisions, and the future prospects of the airlines.
3. Future researchers are also recommended to use other valuation models, such as sensitivity analysis, scenario analysis, relative valuation, and asset-based valuation, to vary assumptions and compare results, to strengthen valuation estimates.

REFERENCES

- ACCA. (2017). *Study text financial accounting*. Kaplan.
- ACCA. (2020). *Study text financial reporting*. Kaplan.
- Air Transport Action Group. (2024). *Aviation: Benefit beyond borders 2024*. Oxford Economics. https://aviationbenefits.org/media/e5ynn4x0/abbb2024_full_report.pdf
- Asian Development Bank. (2023). *Landscape study on Southeast Asia's aviation industry: COVID-19 impact and post-pandemic strategy*. <https://dx.doi.org/10.22617/TCS230118>
- Association of South-East Asian Nations. (2025). *Overview of consumer protection*. <https://asean.org/our-communities/economic-community/competitive-innovative-and-inclusive-economic-region/consumer-protection/>
- Ayu, D. R., Ananta, Y. D., & Zai, P. P. (2022). Failure analysis of state-owned enterprises in the new public management perspective: A case study of PT. Garuda Indonesia Tbk. *Jurnal Administrasi Publik Public Administration Journal*, 12(2), 161–169. <https://doi.org/10.31289/jap.v12i2.7224>
- Badan Pusat Statistik. (2020). *Pertumbuhan Ekonomi Indonesia Triwulan II-2020*. Jakarta. <https://www.bps.go.id/id/pressrelease/2020/08/05/1737/ekonomi-indonesia-triwulan-ii-2020-turun-5-32-persen.html>
- Bakker, S., Contreras, K. D., Kappiantari, M., Tuấn, N. A., Guillen, M. D., Gunthawong, G., & Maarseveen, M. v. (2017). Low-carbon transport policy in four ASEAN countries: Developments in Indonesia, the Philippines, Thailand and Vietnam. *Sustainability*, 9(7), 1217. <https://doi.org/10.3390/su9071217>
- Boedihardjo, D. C., & Ardini, L. (2024). Analisis pelanggaran postulat audit dalam kasus audit laporan keuangan PT Garuda Indonesia tahun 2018. *BIP's Jurnal Bisnis Perspektif*, 16(1), 64–77. <https://doi.org/10.37477/bip.v16i1.509>
- Boroh, J. (2021). Investigation into the hub-and-spoke model using brand and frequent-flyer program. *Journal of Airline and Airport Management*, 11(2), 73. <https://doi.org/10.3926/jairm.190>
- Buaphiban, T., & Truong, D. (2017). Evaluation of passengers' buying behaviors toward low cost carriers in Southeast Asia. *Journal of Air Transport Management*, 59, 124–133.

- Bull, M. (2007). "Balance": The development of a social enterprise business performance analysis tool. *Social Enterprise Journal*, 3(1), 49–66.
- CAPA. (n.d). *Singapore Airlines Group*. Centre for Aviation. <https://centreforaviation.com/data/profiles/airline-groups/singapore-airlines-group>
- CFA Institute. (2024). *Financial statements analysis, Level 1: Volume 4, CFA Program Curriculum*.
- Chen, W. (2024). Leapfrogging the clouds: Singapore Airlines' innovative transformation and voyage to the future. *IJGEM*, 4(1), 199–204. <https://doi.org/10.62051/ijgem.v4n1.27>
- Chong, K. Y., & Balasingam, A. S. (2019). Tourism sustainability: Economic benefits and strategies for preservation and conservation of heritage sites in Southeast Asia. *Tourism Review*, 74(2), 268–279.
- Damodaran, A. (2012). *Investment valuation: Tools and techniques for determining the value of any asset*. John Wiley & Sons.
- Deepak, S. (2019). *Operations: Southeast Asian airlines leverage the precision of AI*. International Finance. <https://internationalfinance.com/magazine/aviation-magazine/operations-southeast-asian-airlines-leverage-the-precision-ai/>
- Direktorat Jenderal Kekayaan Negara Kementerian Keuangan. (2024, October 20). *PT Garuda Indonesia mulai untung, pemerintah siapkan dana segar Rp7,5 triliun*. https://www.djkn.kemenkeu.go.id/berita_media/baca/13254/PT-Garuda-Indonesia-Mulai-Untung-Pemerintah-Siapkan-Dana-Segar-Rp75-Triliun.html
- Dube, K., Nhamo, G., & Chikodzi, D. (2021). Covid-19 pandemic and prospects for recovery of the global aviation industry. *Journal of Air Transport Management*, 92, 102022. <https://doi.org/10.1016/j.jairtraman.2021.102022>
- Fageda, X., Jiménez, J. L., & Perdiguerro, J. (2011). Price rivalry in airline markets: A study of a successful strategy of a network carrier against a low-cost carrier. *Journal of Transport Geography*, 19(4), 658–669. <https://doi.org/10.1016/j.jtrangeo.2010.07.006>
- Fahmi, I. (2018). *Pengantar Manajemen Keuangan*. Alfabeta.
- Farida, Y., Laili, H., Wibowo, A., Desinaini, L., & Sari, S. (2022). Selecting the best-performing low-cost carrier (LCC) airlines using analytical hierarchy process (AHP) and elimination et choix traduisant la realite (ELECTRE). *Journal of Information*

- Systems Engineering and Business Intelligence*, 8(2), 196–206.
<https://doi.org/10.20473/jisebi.8.2.196-206>
- Febrianty, F., & Syafitri, A. (n.d.). Financial Performance Analysis Using the Economic Value Added Method in the Food and Beverage Sub-Sector Listed on the Indonesia Stock Exchange. *International Journal of Multidisciplinary Sciences and Arts*, 1(1), 16–34.
- Fleisher, C. S., & Bensoussan, B. (2002). *Strategic and competitive analysis: Methods and techniques for analyzing business competition*.
- Friedlob, G. T., & Schleifer, L. L. (2003). *Essentials of financial analysis* (Vol. 23). John Wiley & Sons.
- Galasintu, S., & Loveera, C. (2021). The comparative study on consumer protection laws in ASEAN. *Kasetsart Journal of Social Sciences*, 42(4), 804–809.
<https://doi.org/10.34044/j.kjss.2021.42.4.13>
- Ganatra, V., Sinha, R., Chawla, P., Yi, T. C., Kee, D. M. H., Fei, N. M., & Pandey, R. (2021). A Case Study on Key Success Factors of Garuda Indonesia Airlines. *International Journal of Tourism and Hospitality in Asia Pasific*, 4(1), 82–96.
- Garuda Indonesia. (2023). *Garuda Indonesia once again achieved the title of the world's best airline cabin crew Skytrax in 2013*. <https://web.garuda-indonesia.com/oc/en/news-and-events/WBCC2023>
- Garuda Indonesia. (2025). *Company profile*. <https://www.garuda-indonesia.com/my/en/corporate-partners/company-profile/index>
- Garuda Indonesia. (2025). *Corporate presentation 1Q 2025*. https://www.garuda-indonesia.com/static/content/dam/garuda/files/pdf/investor-relations/company-presentation/Corp%20Presentation%201Q%202025_Final.pdf
- Garuda Indonesia. (2025). *Corporate presentation full year 2024*. https://www.garuda-indonesia.com/static/content/dam/garuda/files/pdf/investor-relations/company-presentation/Corporate%20Presentation_Earnings%20Call%20FY%202024.pdf
- Garuda Indonesia. (2025). *Service concept*. <https://www.garuda-indonesia.com/oc/en/garuda-indonesia-experience/service-concept/index>
- Garuda Indonesia. (2025). *PT Garuda Indonesia Annual Report*.
- Hanaoka, S., Takebayashi, M., Ishikura, T., & Saraswati, B. (2014). Low-cost carriers versus full-service carriers in ASEAN: The impact of liberalization policy on

- competition. *Journal of Air Transport Management*, 40, 96–105.
<https://doi.org/10.1016/j.jairtraman.2014.06.008>
- Hapsoro, M. L. (2019). *Southeast Asia poised to become a global hub for sustainable aviation fuel*. Association of Southeast Asian Nations. <https://asean.org/southeast-asia-poised-to-become-a-global-hub-for-sustainable-aviation-fuel/>
- Heriyanto, D. S. N., & Putro, Y. M. (2019). Challenges and opportunities of the establishment ASEAN open skies policy. *Padjadjaran Jurnal Ilmu Hukum (Journal of Law)*, 6(3), 466–488.
- Hidayati, F., & Sijabat, Y. P. (2022). Financial Performance Analysis Using Economic Value Added (EVA) Method (Case Research at PT. Taman Wisata Candi Borobudur, Prambanan Dan Ratu Boko (Persero)). *The Management Journal of Binaniaga*, 7(1), 1–12.
- Hu, J., Yang, L., & Tung, H. (2017). Operational efficiency of ASEAN airlines: Based on DEA and bootstrapping approaches. *Management Decision*, 55(5), 957–986.
<https://doi.org/10.1108/md-07-2016-0489>
- Indriani, M. (2021). Aviation diplomacy in Southeast Asia. *Journal of Social Political Sciences*, 2(4), 369–380. <https://doi.org/10.52166/jsps.v2i4.78>
- International Air Transport Association. (2021). *IATA air cargo market analysis - June 2021*. <https://www.iata.org/en/pressroom/pressroom-archive/2021-releases/2021-08-03-01>
- International Air Transport Association. (2023). *Strong industry momentum as passenger demand recovers further in 2023*. <https://www.iata.org/en/pressroom/2023-releases/2023-02-06-02>
- International Air Transport Association. (2024). *IATA provides 2024 outlook for air cargo and aviation safety*. <https://www.iata.org/en/pressroom/2024-releases/2024-01-31-02>
- International Air Transport Association. (2025). *Asia-Pacific's air travel market: Opportunities and challenges*. <https://www.iata.org/en/publications/newsletters/iata-knowledge-hub/asia-pacifics-air-travel-market-opportunities-and-challenges/>
- International Air Transport Association. (2025). *Offsetting CO2 emissions with CORSIA*. <https://www.iata.org/en/programs/sustainability/corsia/>

- Isabelle, D. A., Horak, K., McKinnon, S., & Palumbo, C. (2020). Is Porter's five forces framework still relevant? A study of the capital/labour intensity continuum via mining and its industries. *Technology Innovation Management Review*, 10(6), 28–41. <https://doi.org/10.22215/timreview/1366>
- Juariyah, L., & Putra, D. (2023). Employee performance in aviation industry based on Koopman's Individual Work Performance Questionnaire (IWPQ). *International Journal of Multidisciplinary Research and Analysis*, 06(12). <https://doi.org/10.47191/ijmra/v6-i12-28>
- Junaida, Z., & Iskandar, M. (2022). The context of digital transformation in aviation, tourism, and hospitality in Southeast Asia. In *Digital Transformation in Aviation, Tourism and Hospitality in Southeast Asia* (pp. 7–23).
- Kaufmann, R., Gadmer, A., & Klett, R. (2001). Introduction to dynamic financial analysis. *ASTIN Bulletin: The Journal of the IAA*, 31(1), 213–249.
- Khairani, A., Asrie, P. D., & Lailatul, F. R. (2021). Implementation of Porter's Generic Strategies in Indonesian Airlines Industry During Covid-19 Pandemic (Case Study: Garuda Indonesia and AirAsia). In *4th European International Conference on Industrial Engineering and Operations Management, IEOM 2021* (pp. 842–852). IEOM Society.
- Klöwer, M., Allen, M., Lee, D. S., Proud, S., Gallagher, L., & Skowron, A. (2021). Quantifying aviation's contribution to global warming. *Environmental Research Letters*, 16(10), 104027. <https://doi.org/10.1088/1748-9326/ac286e>
- Kristanti, D. S., Rosestino, Y. D., Sutawijaya, I. E., Elvana, Y., Ramadhanty, D. A., & Gunarso, R. (2021). Manajemen Strategi PT Garuda Indonesia (Persero) Tbk di tengah Masa Pandemi. *Jurnal Bisnis Dan Kajian Strategi Manajemen*, 5(1).
- Kumar, C. R. S., & Praveena, K. B. (2023). SWOT ANALYSIS. *International Journal of Advanced Research*.
- Kurniawati, R. D., & Listyowati, L. (2021). Analisis kinerja keuangan perusahaan penerbangan pada masa pandemi covid-19. *Jurnal Akuntansi Dan Perpajakan*, 7(2), 81–91. <https://doi.org/10.26905/ap.v7i2.6709>
- Kurniawati, T., & Kerti, N. R. M. (2023). Penyelamatan perusahaan melalui restrukturisasi utang (studi di PT Garuda Indonesia (Persero) Tbk). *Tribuere*, 1(2), 210–222.

- Lakada, M. N., Lopian, S. J., & Tumiwa, J. R. (2017). Analyzing the financial statement using horizontal-vertical analysis to evaluate the company financial performance period 2012-2016 (Case Study at PT. Unilever Indonesia Tbk). *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 5(3).
- Law, C. C. (2022). COVID-19: ASEAN aviation policy and the significance of intra-regional connectivity. *Journal of Asian Economic Integration*, 4(1), 1–23. <https://doi.org/10.1177/26316846221075476>
- Law, C. C. H. (2024). The impact of vaccination, infection and fatality rate on ASEAN air transport industry in the pandemic period. *Journal of Asian Economic Integration*, 6(1), 31–62. <https://doi.org/10.1177/26316846241227482>
- Lee, J. W., Lykotrafiti, A., & Gergely, M. (2024). The EU-ASEAN Comprehensive Air Transport Agreement (2022): From Regional to Inter-Regional to Global? *J. Air L. & Com.*, 89, 391.
- Lesmana, R., & Susanti, N. (2018). Analisa strategi bersaing PT. Garuda Indonesia Tbk. (Persero). *Jurnal Pemasaran Kompetitif*, 1(3). <https://doi.org/10.32493/jpkpk.v1i3.1145>
- Li, B., Nian, V., Shi, X., Li, H., & Boey, A. (2019). Perspectives of energy transitions in East and Southeast Asia. *WIREs Energy and Environment*, 9(1). <https://doi.org/10.1002/wene.364>
- Lu, Z., Zhu, L., Li, Z., Liang, X., & Zhang, Y. (2022). The effects of passenger risk perception during the covid-19 pandemic on the airline industry: Evidence from the United States stock market. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.795940>
- MarkWide Research. (2025). *South-East Asia civil aviation market analysis-industry size, share, research report, insights, covid-19 impact, statistics, trends, growth and forecast 2025-2034*. <https://markwideresearch.com/south-east-asia-civil-aviation-market/>
- Memon, M. A. (2025). *Navigating cultural nuances in Southeast Asia: A professional guide for aviation marketers*. Aviation Business Consultants. <https://aviationbusinessconsultants.com/2025/01/navigating-cultural-nuances-in-southeast-asia-a-professional-guide-for-aviation-marketers/>

- Moghadasnian, S. (2022). *Flight to excellence: A comprehensive guide to key performance indicators in the airline industry: Unlocking success through data-driven strategies and performance metrics*. Aviation and Tourism Research and Innovation Center (ATRIC). Digital Publication.
- Moses, A. (2023). The effect of digital applications on customer satisfaction in the Malaysian passenger airline industry: Post-pandemic era. *International Journal of Academic Research in Economics and Management Sciences*, 12(4). <https://doi.org/10.6007/ijarems/v12-i4/19661>
- Mulyana, D. (2013). *Metodologi penelitian kualitatif: Paradigma baru ilmu komunikasi dan ilmu sosial lainnya*. Remaja Rosdakarya.
- Murdiyanto, E. (2020). *Metode penelitian kualitatif: Teori dan aplikasi disertai contoh proposal*. UPN “Veteran” Yogyakarta Press.
- National Library Board Singapore. (2025). *Singapore Airlines is incorporated*. <https://www.nlb.gov.sg/main/article-detail?cmsuuid=64aa59aa-7a46-4bd5-a543-e259ffb97666>
- Octaviani, R. D., Sucherly, S., Prabowo, H., & Sari, D. (2023). Determinants of Indonesian gen Z’s purchase behavior on online travel platforms: Extending UTAUT model. *Innovative Marketing*, 19(4), 54–65.
- Official Aviation Global. (2023). *Punctuality League 2023*. <https://www.oag.com/punctuality-league-2023>
- Official Aviation Global. (2025). *Southeast Asia aviation market data*. <https://www.oag.com/south-east-asia-aviation-flight-data>
- Ozali, I., Sarbanon, E., & Gugat, R. M. D. (2023). Strategi pemasaran Garuda Indonesia Tanjungpinang dalam menghadapi epidemi virus covid-19. *JIIIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(1), 387–393. <https://doi.org/10.54371/jiip.v6i1.1497>
- Palepu, K. G., Healy, P. M., Wright, S., Bradbury, M., & Coulton, J. (2020). *Business analysis and valuation: Using financial statements*. Cengage AU.
- Paramadita, S., & Hidayat, D. (2022). Industry competitiveness analysis using Porter’s five forces: Indonesian multi-industry study case. *ARBITRASE: Journal of Economics and Accounting*, 3(2), 317–322. <https://doi.org/10.47065/arbitrase.v3i2.465>

- Paraschi, E. (2022). Why ESG reporting is particularly important for the airlines during the covid-19 pandemic. *Journal of Business and Management Studies*, 4(3), 63–67. <https://doi.org/10.32996/jbms.2022.4.3.6>
- Paul, D., & Cadle, J. (2014). *Business analysis*. In D. Yeates (Ed.). BCS, The Chartered Institute for IT.
- Pelekh, U., Khocha, N., & Holovchak, H. (2020). Financial statements as a management tool. *Management Science Letters*, 197–208. <https://doi.org/10.5267/j.msl.2019.8.003>
- Peraturan Pemerintah Republik Indonesia Nomor 51 Tahun 2022 tentang Penambahan Penyertaan Modal Negara Republik Indonesia ke dalam Modal Perusahaan Perseroan (Persero) PT Perusahaan Penerbangan Garuda Indonesia Tbk. (2022). <https://jdih.maritim.go.id/cfind/source/files/pp/2022/pp-nomor-51-tahun-2022.pdf>
- Permana, P., Hoen, H., & Holzhacker, R. (2020). Political economy of ASEAN open skies policy: Business preferences, competition and commitment to economic integration. *Journal of Asian Economic Integration*, 2(1), 44–61. <https://doi.org/10.1177/2631684620910520>
- Phong, H. (2025). *Asian nations race to expand airport infrastructure amid tourism scramble*. VN Express Internasional. <https://e.vnexpress.net/news/travel/asian-nations-race-to-expand-airport-infrastructure-amid-tourism-scramble-4887767.html>
- Pinar, A. (2023). A PESTEL Analysis of The Impacts of COVID-19 Crisis on Air Transportation Sector's Future. *Journal of Aviation*, 7(2), 215–225.
- Porter, M. E. (2008). The five competitive forces that shape strategy. *Harvard Business Review*, 86(1), 78.
- Pramitha, D. A., Wasito, T., & Ozali. (2018). Strategy formulation to increase passengers of Singapore Airlines. *Jurnal Manajemen Transportasi Logistik*, 5(2), 141–152.
- Purwoko, H., Kamsariaty, R., Saksana, J. C., & Soehaditama, J. P. (2023). Key performance indicator: Concept, implementation to performance management. *East Asian Journal of Multidisciplinary Research*, 2(8), 3261–3268.
- Qin, T. (2020). Elevating value marketing strategies in Singapore Airlines driven by macro and micro environment. In *The 3rd International Conference on Economy, Management and Entrepreneurship (ICOEME 2020)* (pp. 271–279). Atlant¹is Press.
- Ramdhan, M. (2021). *Metode penelitian*. Cipta Media Nusantara.

- Sarjono, H., Alvian, C., & Marcelino, K. (2025). The Effects of COVID-19 on Garuda Indonesia Airlines. *Golden Ratio of Data in Summary*, 5(3), 425–432.
- Satyodriyani, K. R., Restarani, H., & Rufaidah, P. (2023). Strategi penciutan PT Garuda Indonesia Tbk dalam menghadapi kesulitan keuangan. *Jurnal Manajerial*, 10(02), 233. <https://doi.org/10.30587/jurnalmanajerial.v10i02.5459>
- Setiawan, I., & Purba, H. H. (2020). A systematic literature review of key performance indicators (KPIs) implementation. *Journal of Industrial Engineering & Management Research*, 1(3), 200–208.
- Singapore Airline Ltd. (2025). *Annual Report*.
- Singapore Airlines. (2025). *Cabins*. https://www.singaporeair.com/en_UK/gb/flying-withus/cabins/
- Singapore Airlines. (2025). *Where we fly*. https://www.singaporeair.com/en_UK/sg/plan-travel/destinations/where-we-fly/
- Supeni, N., & Ningsih, W. F. (2021). Strategi pengembangan dan analisis SWOT pada PT Garuda Indoneisa Tbk. *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 15(2), 179–190.
- Tamošiūnas, A., & Kitkovskij, D. (2022). Peculiarities of competitiveness assessment of airlines. *Mokslas - Lietuvos Ateitis*, 14(0), 1–9. <https://doi.org/10.3846/mla.2022.17696>
- Taufik, A. (2023). Dominant position in the aviation industry: Case analysis of appointment of strategic business partners (wholesaler) by PT. Garuda perspective UU no. 5 of 1999. *Khazanah Sosial*, 5(3), 418–427. <https://doi.org/10.15575/ks.v5i3.29520>
- Thompson, D. (2023). The impact of the covid-19 pandemic on air traffic in the asian region: How the aviation industry adapted throughout the pandemic. *International Journal of Membrane Science and Technology*, 10(2), 1545–1562. <https://doi.org/10.15379/ijmst.v10i2.1823>
- Tran, T. B. T. (2024). Strategic Fit in a Dynamic Airline Industry: Case Studies of ASEAN-Region Airlines. *Transportation Research Procedia*, 80, 53–63.
- Tyana, & Abdillah, A. M. (2021). Various policies of PT Garuda Indonesia (Persero) Tbk in increasing its productivity, efficiency, and income. *Journal of Social Research*, 1(1), 54–64. <https://doi.org/10.55324/josr.v1i1.4>

- Ugale, V. (2015). PESTLE based event detection and classification. *International Journal of Research in Engineering and Technology*, 04(05), 611–616. <https://doi.org/10.15623/ijret.2015.0405112>
- Velimirović, D., Velimirović, M., & Stanković, R. (2011). Role and importance of key performance indicators measurement. *Serbian Journal of Management*, 6(1), 63–72.
- Wahjoe, O., Heniarti, D. D., & Puspawati, A. (2019). The impact of liberalization of ASEAN air transportation on Indonesian airlines. *International Journal of Research -GRANTHAALAYAH*, 7(9), 332–341. <https://doi.org/10.29121/granthaalayah.v7.i9.2019.616>
- Wahyu, D. R. (2017a). Analisis Nilai Tambah Ekonomi dan Rasio Keuangan. 9(6), 65–68.
- Wendel, L. M., Albers, S., & Dewulf, W. (2024). Creating architectural advantage in the airline industry: Strategic options for airlines to migrate value. *Journal of the Air Transport Research Society*, 2, 100002. <https://doi.org/10.1016/j.jatrs.2024.100002>
- Widyani, D. (2021). Gamification as a marketing strategy for Garuda Indonesia loyalty program. *International Journal of Research in Business and Social Science* (2147-4478), 10(7), 418–422. <https://doi.org/10.20525/ijrbs.v10i7.1405>
- Yaemsuksawat, Y. (2021). ASEAN tourism management for high-end tourists. *Ph. D. in Social Sciences Journal*, 11(2), 310-320.
- Yohannan, R. (2025). *Skytrax 2025: Singapore Airlines is Asia's best airline, with world's top cabin crew and first class*. TimeOut. <https://www.timeout.com/singapore/news/skytrax-2025-singapore-is-asias-best-airline-with-worlds-best-cabin-crew-and-first-class-061825>

APPENDICES

Appendix 1. Garuda Indonesia's Statement of Profit or Loss 2019-2024

PT GARUDA INDONESIA TBK						
CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME						
(in USD)						
	2019	2020	2021	2022	2023	2024
Scheduled airline services	3.773.399.072	1.200.671.828	1.041.146.408	1.689.971.738	2.378.010.240	2.742.407.685
Non-scheduled airline services	249.906.152	77.242.260	88.053.843	174.812.244	288.031.848	333.752.431
Others	549.332.859	214.417.011	207.478.219	235.295.576	270.589.006	340.366.267
Total operating revenue	4.572.638.083	1.492.331.099	1.336.678.470	2.100.079.558	2.936.631.094	3.416.526.383
Flight operations expenses	(2.549.469.922)	(1.653.741.214)	(1.484.323.240)	(1.490.352.099)	(1.521.806.816)	(1.667.905.835)
Maintenance and repairs expenses	(585.900.437)	(800.558.373)	(559.241.814)	(407.371.304)	(386.604.041)	(536.957.979)
User charges and station expenses	(385.298.616)	(184.974.225)	(153.719.394)	(145.754.891)	(202.507.863)	(252.277.455)
Ticketing, sales, and promotion expenses	(342.771.452)	(129.234.980)	(94.878.738)	(107.931.719)	(139.705.334)	(179.304.099)
Passenger services expenses	(271.817.792)	(133.279.727)	(81.741.861)	(96.645.016)	(163.486.092)	(221.636.816)
General and administrative expenses	(249.984.716)	(350.253.350)	(192.180.422)	(236.781.145)	(176.828.573)	(212.229.556)
Hotel operation expenses	(31.980.015)	(23.416.387)	(22.215.692)	(19.832.325)	(20.105.736)	(20.145.943)
Transportation operations expenses	(29.440.247)	(20.205.283)	(13.494.498)	(10.699.453)	(11.400.277)	(12.421.603)
Network operation expenses	(10.382.106)	(8.163.104)	(7.226.631)	(4.059.433)	(4.326.725)	(5.032.001)
Total operating expenses	(4.457.045.303)	(3.303.826.643)	(2.609.022.290)	(2.519.427.385)	(2.626.771.457)	(3.107.911.287)
Loss/gain on foreign exchange	(32.601.114)	(35.247.323)	22.118.829	124.022.650	(20.850.223)	18.044.682
Early lease contract termination	-	-	(887.922.715)	-	-	-
Other income-net	12.997.724	(356.316.758)	(1.824.019.741)	4.638.246.957	392.604.130	55.189.342

Total other operating income (charges)	(19.603.390)	(391.564.081)	(2.689.823.627)	4.762.269.607	371.753.907	73.234.024
Profit (loss) from operations	95.989.390	(2.203.059.625)	(3.962.167.447)	4.342.921.780	681.613.544	381.849.120
Equity in profit of associates	(21.484)	(3.888.337)	(16.599.396)	2.754.209	3.690.203	7.377.798
Finance income	45.257.323	168.034.422	17.954.502	2.138.080	6.068.038	9.207.260
Finance cost	(139.990.076)	(553.669.995)	(571.741.475)	(412.654.065)	(456.782.640)	(479.897.933)
Profit (loss) before tax	1.235.153	(2.592.583.535)	(4.532.553.816)	3.935.160.004	234.589.145	(81.463.755)
Tax expenses/benefits	(45.802.668)	115.950.186	358.549.048	(198.489.700)	17.407.435	11.687.426
Profit (loss) for the year	(44.567.515)	(2.476.633.349)	(4.174.004.768)	3.736.670.304	251.996.580	(69.776.329)
Other comprehensive income						
Item that will not be reclassified to profit or loss:						
Revaluation deficit/surplus on fixed asset	26.489.594	(36.726.782)	11.043.960	(1.249.198)	9.115.311	8.556.434
Actuarial gain (loss) on liabilities for employee benefit	(10.390.757)	(3.256.098)	4.079.401	5.703.017	(5.024.168)	(1.007.768)
Related deferred tax expenses	631.188	11.015.897	(4.037.374)	(1.227.329)	(390.053)	(934.720)
Fair value changes of share investments	-	316.684	-	-	(2.301.206)	16.971
Sub-total	16.730.025	(28.650.299)	11.085.987	3.226.490	1.399.884	6.630.917
Item that will be reclassified to profit or loss:						
Unrealized gain (loss) on hedge transaction	60.083.572	(1.168.525)	-	-	-	-
Exchange differences on translating foreign operations	8.307.132	103.235	381.213	(2.488.933)	(1.024.488)	(6.024.260)
Sub-total	68.390.704	(1.065.290)	381.213	(2.488.933)	(1.024.488)	(6.024.260)
Total other comprehensive income (loss)	85.120.729	(29.715.589)	11.467.200	737.557	375.396	606.657
Total comprehensive income (loss) for the year	40.553.214	(2.506.348.938)	(4.162.537.568)	3.737.407.861	252.371.976	(69.169.672)
Profit (loss) attributable to						

Owners of the parents	(38.936.612)	(2.443.042.762)	(4.159.342.510)	3.737.905.012	250.046.769	(72.709.450)
Non-controlling interest	(5.630.903)	(33.590.587)	(14.662.258)	(1.234.708)	1.949.811	2.933.121
Total	(44.567.515)	(2.476.633.349)	(4.174.004.768)	3.736.670.304	251.996.580	(69.776.329)
Total comprehensive income (loss) attributable to						
Owners of the parents	46.721.666	(2.472.917.795)	(4.148.159.013)	3.736.768.668	250.641.588	(72.096.219)
Non-controlling interest	(6.168.452)	(33.431.143)	(14.378.555)	639.193	1.730.388	2.926.547
Total	40.553.214	(2.506.348.938)	(4.162.537.568)	3.737.407.861	252.371.976	(69.169.672)
Basic/diluted earnings (loss) per share	(0,0015)	(0,09437)	(0,16068)	0,14145	0,00273	(0,00079)

Sources: Garuda Indonesia's annual report period 2019-2024

Appendix 2. Garuda Indonesia's Projected Statement of Profit or Loss 2025-2029

Income Statement	2025F	2026F	2027F	2028F	2029F
Operating Revenue					
Regional Breakdown					
Domestic	3.248.993.766	3.522.009.970	3.814.137.309	4.126.713.561	4.461.170.151
Overseas	559.768.995	708.438.270	925.782.955	1.356.986.121	2.080.170.594
East and South-East Asia	333.233.297	359.891.961	377.886.559	466.372.209	540.740.690
Sydney	116.929.378	126.283.728	132.597.915	175.096.661	234.625.364
Amsterdam	109.606.319	222.262.580	415.298.482	715.517.251	1.304.804.541
Net Revenue	3.808.762.761	4.230.448.240	4.739.920.264	5.483.699.682	6.541.340.746
Operating expenses	(3.401.311.958)	(3.804.582.068)	(4.246.961.034)	(4.894.281.455)	(5.706.887.575)
Gross Profit	407.450.803	425.866.172	492.959.231	589.418.228	834.453.170
Other Income (Expenses)	80.557.426	88.613.169	97.474.486	107.221.935	117.944.128
OPM	488.008.230	514.479.341	590.433.717	696.640.162	952.397.298
Equity in profit of associates	5.534.001	6.455.899	5.994.950	6.225.425	6.110.187

Finance income	5.804.459	7.026.586	7.346.102	6.725.716	7.032.801
Finance cost	(449.778.213)	(462.152.929)	(463.943.025)	(458.624.722)	(461.573.558)
Net Income Before Taxes (EBT)	49.568.477	65.808.897	139.831.743	250.966.580	503.966.728
Tax expenses/benefits	(56.464.946)	(9.123.362)	(17.966.961)	(27.851.756)	(18.314.026)
Net Income After Taxes	(6.896.470)	56.685.535	121.864.783	223.114.824	485.652.702

Source: Data processed from Garuda Indonesia's annual report period 2019-2024

Appendix 3. Garuda Indonesia's Statement of Financial Position 2019-2024

PT GARUDA INDONESIA TBK						
CONSOLIDATED STATEMENT OF FINANCIAL POSITION						
(in USD)						
	2019	2020	2021	2022	2023	2024
Cash and cash equivalents	299.348.853	200.979.909	54.442.439	521.682.689	289.846.369	219.173.953
Restricted cash	5.651.945	512.150	5.938.273	16.400.351	13.223.278	14.741.696
Trade receivables:						
Related parties	13.884.667	10.323.841	9.996.478	16.591.272	24.600.917	23.039.050
Third parties	235.971.750	100.583.150	84.742.853	86.289.993	113.469.359	114.735.411
Contract assets	98.633.447	10.383.010	1.799.100	11.429.851	11.449.080	14.657.151
Other receivables	37.666.598	5.992.422	7.347.430	11.698.529	13.716.445	16.169.076
Inventories	167.744.331	105.199.006	73.033.991	67.986.260	116.246.316	83.988.197
Advances and prepaid expenses	249.803.162	64.688.636	45.163.998	49.256.522	60.236.988	47.029.220
Prepaid taxes:						
Corporate income taxes	11.761.518	13.894.653	11.561.857	11.187.372	-	-
Other taxes	13.426.262	14.287.713	11.698.610	8.630.986	10.984.149	20.375.117
Non-current assets classified as held for sale	-	9.702.686	-	-	-	-

Total current assets	1.133.892.533	536.547.176	305.725.029	801.153.825	653.772.901	553.908.871
Maintenance reserve fund and security deposits	1.731.560.436	314.359.197	164.856.914	223.894.513	247.175.925	309.697.991
Advances for purchase of aircraft	183.026.120	185.640.719	153.616.395	137.640.940	138.090.940	162.685.793
Investment in associates	23.945.705	20.006.880	2.599.119	5.390.400	9.085.728	16.445.967
Investment properties	83.957.127	83.894.322	83.083.551	79.431.585	77.042.630	76.293.630
Deferred tax assets	85.066.368	211.828.238	571.753.237	372.316.463	390.800.460	403.002.299
Fixed assets	1.143.600.991	9.392.106.273	5.854.523.982	4.565.021.490	5.162.091.463	5.034.137.815
Intangible assets	738.387	253.178	35.943	4.758	10.350	15.394
Deferred charges	598.608	42.977	23.480	7.773	2.757	1.305
Other non-current assets	69.289.499	45.301.447	56.527.710	50.149.232	49.571.899	62.425.876
Total non-current assets	3.321.783.241	10.253.433.231	6.887.020.331	5.433.857.154	6.073.872.152	6.064.706.070
Total assets	4.455.675.774	10.789.980.407	7.192.745.360	6.235.010.979	6.727.645.053	6.618.614.941
Short-term loans	984.853.063	805.272.996	699.191.633	16.490.706	194.603	-
Trade payable:						
Related parties	428.233.049	121.073.351	287.662.388	269.507.661	31.250.610	28.773.362
Third parties	306.362.661	299.900.564	341.916.442	231.099.576	129.822.249	129.104.622
Factoring liabilities	54.570.560	94.019.723	-	-		
Other payables	45.890.412	38.678.877	40.363.360	53.023.319	55.445.124	51.771.143
Tax payable:						
Corporate income taxes	1.500.235	680.082	1.343.867	633.768	701.238	1.418.302
Other taxes	136.085.178	211.857.149	232.294.335	193.422.369	131.192.172	38.926.028
Accruals	326.205.722	378.376.163	739.304.926	240.024.695	260.014.083	243.027.679
Unearned revenue	200.141.599	168.091.594	166.425.468	232.439.248	194.393.702	269.954.499
Advances received	106.982.911	57.922.908	50.967.321	36.320.205	42.055.943	42.035.441

Liabilities related to non-current assets classified as held for sale	-	2.028.374	-	-		
Current maturities of long-term liabilities:						
Long-term loans	141.779.239	51.068.979	55.720.909	20.305.381	32.273.687	47.619.663
Liabilities for employee benefits	14.858.629	17.854.160	16.237.370	8.144.593	16.651.370	13.865.151
Lease liabilities	52.533.237	1.505.258.580	1.842.202.619	170.058.419	231.727.927	260.167.745
Estimated liability for aircraft return and maintenance cost	70.990.245	25.117.040	667.012.510	209.559.732	36.227.257	43.047.944
Bonds payable	498.996.741	492.074.369	495.188.854	-	-	-
Asset-backed securitisation loan	25.897.408	25.522.846	65.549.397	-	3.205.587	3.561.203
Mandatory convertible bond	-	-	69.931.786	-	-	-
Total current liabilities	3.395.880.889	4.294.797.755	5.771.313.185	1.681.029.672	1.165.155.552	1.173.272.782
Long-term liabilities-net of current maturities:						
Long-term trade payables	-	582.500.342	580.361.465	176.948.646	385.592.114	374.132.515
Long-term loans	1.597.426	248.159.518	720.187.820	655.540.935	684.442.215	666.447.024
Asset-backed securitisation loan	77.692.229	51.045.692	-	32.230.672	34.135.037	33.874.508
Finance lease liabilities	35.340	4.493.564.698	3.768.230.816	2.406.975.640	2.308.621.782	2.122.832.262
Estimated liability for aircraft return and maintenance cost	241.281.636	2.955.512.646	2.348.193.989	2.005.968.253	2.691.420.285	2.811.089.164
Bonds payable	-	-	-	701.431.591	637.773.257	684.575.287
Deferred tax liabilities	939.520	804.629	779.089	617.036	629.261	680.690
Liabilities for employee benefits	107.396.582	100.087.608	94.140.107	92.093.932	92.690.830	96.858.914
Other non-current liabilities	48.273.883	6.531.766	19.598.604	17.273.752	9.911.894	6.748.641
Total non-current liabilities	477.216.616	8.438.206.899	7.531.491.890	6.089.080.457	6.845.216.675	6.797.239.005
Total liabilities	3.873.097.505	12.733.004.654	13.302.805.075	7.770.110.129	8.010.372.227	7.970.511.787
Issued and paid-up capital	1.310.326.950	1.310.326.950	1.310.326.950	2.131.354.134	2.131.354.134	2.131.354.134

Additional paid-in capital	13.753.694	13.753.694	13.753.694	30.279.214	30.279.214	30.279.214
Retained earnings (deficit):						
Appropriated	6.081.861	6.081.861	6.081.861	6.081.861	6.081.861	6.081.861
Unappropriated	(799.660.846)	(3.263.966.450)	(7.418.846.826)	(3.678.709.527)	(3.432.485.976)	(3.505.981.485)
Other comprehensive income	40.255.513	14.118.586	16.342.049	12.973.418	17.391.455	18.790.745
Equity attributable to owners of the parents	570.757.172	(1.919.685.359)	(6.072.342.272)	(1.498.020.900)	(1.247.379.312)	(1.319.475.531)
Non-controlling interest	11.821.097	(23.338.888)	(37.717.443)	(37.078.250)	(35.347.862)	(32.421.315)
Total equity	582.578.269	(1.943.024.247)	(6.110.059.715)	(1.535.099.150)	(1.282.727.174)	(1.351.896.846)

Source: Garuda Indonesia's annual report period 2019-2024

Appendix 4. Garuda Indonesia's Projected Statement of Financial Position 2025-2029

Balance Sheet	2025F	2026F	2027F	2028F	2029F
Assets					
Cash	268.492.648	251.204.149	259.848.398	255.526.273	257.687.336
Total Receivables, Net (from trade)	165.918.245	167.259.466	166.588.855	166.924.161	166.756.508
Total Inventory	100.117.257	92.052.727	96.084.992	94.068.859	95.076.925
Other Current Assets, Total	69.312.737	68.358.537	68.835.637	68.597.087	68.716.362
Total Current Assets	603.840.886	578.874.879	591.357.882	585.116.380	588.237.131
Maintenance reserve fund and security deposits	278.436.958	294.067.475	286.252.216	290.159.845	288.206.031
Advances for purchase of aircraft	150.388.367	156.537.080	153.462.723	154.999.901	154.231.312
Investment in associates	12.765.848	14.605.907	13.685.877	14.145.892	13.915.885
Investment properties	76.668.130	76.480.880	76.574.505	76.527.693	76.551.099
Deferred tax assets	396.901.380	399.951.839	398.426.609	399.189.224	398.807.917
Fixed assets	5.098.114.639	5.066.126.227	5.082.120.433	5.074.123.330	5.078.121.882
Intangible assets	12.872	14.133	13.503	13.818	13.660
Deferred charges	2.031	1.668	1.850	1.759	1.804

Other non-current assets	55.998.888	59.212.382	57.605.635	58.409.008	58.007.321
Total Non-Current Assets	6.069.289.111	6.066.997.591	6.068.143.351	6.067.570.471	6.067.856.911
Total Assets	6.673.129.997	6.645.872.469	6.659.501.233	6.652.686.851	6.656.094.042
Liabilities					
Accounts Payable	213.083.555	211.366.341	212.224.948	211.795.645	212.010.296
Short term loans - Current LT portion	43.427.372	47.304.119	45.365.745	46.334.932	45.850.339
Accrued Expense	525.740.674	540.379.146	533.059.910	536.719.528	534.889.719
Accrued Tax	86.118.870	63.231.600	74.675.235	68.953.418	71.814.326
Employee Liabilities	15.258.261	14.561.706	14.909.983	14.735.844	14.822.914
Other Current Liabilities	285.585.437	294.400.563	289.993.000	292.196.781	291.094.890
Total Current Liabilities	1.169.214.167	1.171.243.475	1.170.228.821	1.170.736.148	1.170.482.484
Long Term Debt	1.689.041.267	1.730.004.408	1.726.025.003	1.715.023.559	1.723.684.323
Pension Liabilities	93.881.225	94.476.990	95.072.376	94.476.864	94.675.410
Deferred Income Tax	642.329	650.760	657.926	650.338	653.008
Other Long-Term Liabilities	5.081.549.863	4.952.872.893	4.848.984.709	4.630.560.922	4.139.449.517
Total Non-current Liabilities	6.865.114.685	6.778.005.051	6.670.740.015	6.440.711.684	5.958.462.259
Total Liabilities	8.034.328.852	7.949.248.525	7.840.968.835	7.611.447.831	7.128.944.743
Shareholders' Equity					
Issued and paid-up capital	2.131.354.134	2.131.354.134	2.131.354.134	2.131.354.134	2.131.354.134
Additional paid-in capital	30.279.214	30.279.214	30.279.214	30.279.214	30.279.214
Retained Earnings	(3.506.796.094)	(3.450.110.558)	(3.328.245.775)	(3.105.130.951)	(2.619.478.249)
Other comprehensive income	16.385.206	17.522.469	17.566.140	17.157.938	17.415.516
Non-controlling interest	(32.421.315)	(32.421.315)	(32.421.315)	(32.421.315)	(32.421.315)
Total Equity	(1.361.198.855)	(1.303.376.056)	(1.181.467.602)	(958.760.980)	(472.850.701)
Total Liabilities & Shareholders' Equity	6.673.129.997	6.645.872.469	6.659.501.233	6.652.686.851	6.656.094.042
Net Operating Working Capital	(565.373.281)	(592.368.596)	(578.870.939)	(585.619.767)	(582.245.353)

Net Change	53.990.630	(26.995.315)	13.497.658	(6.748.829)	3.374.414
------------	------------	--------------	------------	-------------	-----------

Source: Data processed from Garuda Indonesia's annual report period 2019-2024

Appendix 5. Garuda Indonesia's Projected Statement of Cash Flow 2025-2029

Cash Flow Statement	2025F	2026F	2027F	2028F	2029F
Cash Flow-Operating Activities					
Cash Receipts	3.179.856.482	3.324.635.396	3.252.245.939	3.288.440.668	3.270.343.303
Cash Payments to Suppliers & Employee	(2.747.568.156)	(2.799.051.484)	(2.773.309.820)	(2.786.180.652)	(2.779.745.236)
Receipts of Interest Income	7.219.605	7.795.388	7.507.496	7.651.442	7.579.469
Cash Taxes Paid	(4.288.406)	(4.588.282)	(4.438.344)	(4.513.313)	(4.475.828)
Cash Interest Paid	(35.498.748)	(37.753.939)	(36.626.343)	(37.190.141)	(36.908.242)
Tax Refund	1.475.640	1.330.834	1.403.237	1.367.035	1.385.136
Cash from Operating Activities	401.196.417	492.367.914	446.782.165	469.575.039	458.178.602
Cash Flow-Investing Activities					
Capital Expenditure	(101.737.882)	(111.911.670)	(123.102.837)	(135.413.121)	(148.954.433)
Receipts of aircraft maintenance reimbursements	23.128.159	32.879.626	28.003.892	30.441.759	29.222.826
Payments for aircraft maintenance reserve fund	(267.932.014)	(273.409.942)	(270.670.978)	(272.040.460)	(271.355.719)
Receipts of security deposit	-	-	-	-	-
Payments for security deposit	(16.493.852)	(13.364.806)	(14.929.329)	(14.147.068)	(14.538.198)
Dividend received	-	-	-	-	-
Proceeds from disposal of fixed assets	714.736	805.284	760.010	782.647	771.329
Other Investing Cash Flow	-	-	-	-	-
Cash from Investing Activities	(362.320.853)	(365.001.509)	(379.939.242)	(390.376.243)	(404.854.196)
Cash Flow-Financing Activities					
(Payments)/proceeds of short-term loans - net	(181.587)	(181.587)	(181.587)	(181.587)	(181.587)
Proceeds/(payments) of long-term loans	(1.197.404)	(7.139.404)	(4.168.404)	(5.653.904)	(4.911.154)

(Payment)/proceeds of factoring liabilities - net	-	-	-	-	-
Payment for bonds payable	-	-	-	-	-
(Payment)/proceeds of asset-backed securitisation loan	(3.073.638)	(3.073.638)	(3.073.638)	(3.073.638)	(3.073.638)
Proceeds of mandatory convertible bonds	-	-	-	-	-
Payment of finance lease liabilities	(168.285.836)	(197.572.138)	(182.928.987)	(190.250.562)	(186.589.774)
Increase in restricted cash	2.689.880	2.446.284	2.568.082	2.507.183	2.537.632
Dividend payment by subsidiaries to their NCI	-	-	-	-	-
Proceeds of issuance of share capital	-	-	-	-	-
Payment of bonds retirement	-	-	-	-	-
Payment for other financing activities	-	-	-	-	-
Cash from Financing Activities	(170.048.585)	(205.520.483)	(187.784.534)	(196.652.508)	(192.218.521)
Net Change in Cash	(131.173.022)	(78.154.077)	(120.941.611)	(117.453.711)	(138.894.115)
Net Cash - Beginning Balance (Inc. Overdraft)	219.173.953	89.804.618	8.543.582	(113.049.665)	(232.382.674)
Effect of foreign exchange rate changes	1.803.686	(3.106.959)	(651.636)	(1.879.297)	(1.265.467)
Net Cash - Ending Balance	89.804.618	8.543.582	(113.049.665)	(232.382.674)	(372.542.256)

Source: Data processed from Garuda Indonesia's annual report period 2019-2024

Appendix 6. Singapore Airlines' Statement of Profit or Loss 2019-2024

SINGAPORE AIRLINES						
CONSOLIDATED PROFIT AND LOSS ACCOUNT						
(in SGD million)						
	2019	2020	2021	2022	2023	2024
Revenue	16.323,2	15.975,9	3.815,9	7.614,8	17.774,8	19.012,7
Staff costs	(2.816,9)	(2.563,6)	(1.160,5)	(1.473,6)	(3.055,8)	(3.551,3)
Fuel costs	(4.587,1)	(4.636,5)	(1.015,5)	(2.189,3)	(5.209,4)	(5.076,6)
Fuel hedging ineffectiveness	-	(709,8)	(214,0)	78,2	0,5	-

Depreciation	(1.327,9)	(2.134,2)	(2.075,9)	(1.927,6)	(2.004,9)	(2.109,6)
Impairment of property, plant and equipment	-	(14,2)	(2,0)	-	-	(0,5)
Amortisation of intangible assets	(61,9)	(57,5)	(65,8)	(72,0)	(75,6)	(76,2)
Aircraft maintenance and overhaul costs	(899,2)	(835,4)	(446,4)	(453,4)	(527,2)	(727,3)
Commission and incentives	(472,5)	(489,8)	13,6	(117,8)	(488,3)	(477,8)
Landing, parking and overflying charges	(884,0)	(886,4)	(219,0)	(451,9)	(657,2)	(811,5)
Handling charges	(1.315,0)	(1.276,7)	(394,1)	(646,8)	(951,5)	(1.195,3)
Rentals on leased aircraft	(679,7)	(79,2)	(9,8)	(16,9)	(23,7)	3,9
Inflight meals	(550,4)	(539,0)	(10,7)	(89,5)	(423,9)	(616,4)
Advertising and sales costs	(331,8)	(334,2)	(12,6)	(120,9)	(326,1)	(331,2)
Company accommodation and utilities	(93,5)	(50,2)	(35,7)	(35,4)	(43,2)	(46,6)
Other passenger costs	(188,0)	(187,7)	(31,1)	(56,6)	(151,4)	(207,0)
Crew expenses	(168,1)	(172,4)	(15,0)	(56,1)	(100,2)	(138,2)
Impairment of amount owing by a joint venture company	-	(61,6)	(12,6)	-	-	-
Other operating expenses	(880,1)	(888,4)	(621,3)	(594,9)	(1.044,8)	(923,6)
Expenditure	(15.256,1)	(15.916,8)	(6.328,4)	(8.224,5)	(15.082,7)	(16.285,2)
Operating profit	1.067,1	59,1	(2.512,5)	(609,7)	2.692,1	2.727,5
Finance charges	(116,1)	(220,9)	(267,9)	(391,6)	(419,9)	(424,5)
Interest income	41,9	42,1	35,4	45,9	412,6	631,7
Impairment of aircraft	-	-	(1.734,3)	(50,5)	57,2	13,8
Impairment of base maintenance assets	-	-	(36,9)	(8,4)	1,7	-
Impairment of deferred engine programme	-	-	-	-	-	(25,1)
Impairment of goodwill	-	-	(170,4)	-	(14,0)	-
Impairment of intangible assets	-	-	(11,4)	-	-	-
(Loss)/Surplus on disposal of aircraft, spares and spare engines	(5,8)	6,9	(27,0)	85,9	(7,3)	65,2

Dividends from long-term investments	3,1	3,2	8,4	4,0	4,0	-
Other non-operating items	(47,4)	(31,9)	(127,8)	(49,5)	(58,4)	(25,2)
Share of profits of joint venture companies	23,2	46,4	14,0	29,8	31,8	32,8
Share of losses of associated companies	(97,4)	(125,1)	(126,8)	(145,9)	(63,0)	40,9
Profit before taxation	868,6	(220,2)	(4.957,2)	(1.090,0)	2.636,8	3.037,1
Taxation	(147,0)	50,8	673,8	141,9	(473,5)	(342,0)
Profit for the financial year	721,6	(169,4)	(4.283,4)	(948,1)	2.163,3	2.695,1
Other comprehensive income for the financial year, net of tax	184,9	(2.567,7)	1.943,9	1.258,3	(575,9)	(12,1)
Total comprehensive income for the financial year	906,5	(2.737,1)	(2.339,5)	310,2	1.587,4	2.683,0

Source: Singapore Airlines' annual report period 2019-2024

Appendix 7. Singapore Airlines' Projected Statement of Profit or Loss 2025-2029

Income Statement (in SGD million)	2025F	2026F	2027F	2028F	2029F
Net Revenue	20.153,5	21.765,7	23.507,0	25.857,7	28.443,5
Operating expenses	16.936,6	17.783,4	18.672,6	19.793,0	20.980,5
Gross Profit	3.216,9	3.982,3	4.834,4	6.064,7	7.462,9
Other Income (Expenses)	(26,7)	9,2	28,3	3,6	13,7
OPM	3.190,1	3.991,5	4.862,7	6.068,3	7.476,6
Finance income	363,4	469,2	488,1	440,2	465,9
Finance cost	(412,0)	(418,8)	(418,4)	(416,4)	(417,9)
Net Income Before Taxes (EBT)	3.141,5	4.042,0	4.932,4	6.092,2	7.524,6
Tax expenses/benefits	(691,1)	(929,6)	(1.183,8)	(1.523,0)	(1.956,4)
Net Income After Taxes	2.450,4	3.112,3	3.748,6	4.569,1	5.568,2

Source: Data processed from Singapore Airlines' annual report period 2019-2024

Appendix 8. Singapore Airlines' Statement of Financial Position 2019-2024

SINGAPORE AIRLINE						
STATEMENTS OF FINANCIAL POSITION						
(in SGD Million)						
	2019	2020	2021	2022	2023	2024
Deferred account	8,9	-	-	-	-	-
Derivative assets	371,4	169,3	156,8	1.402,0	662,7	769,2
Inventories	229,9	239,3	194,9	187,4	227,0	268,0
Trade debtors	1.527,2	820,5	939,5	1.566,4	1.192,7	1.388,7
Deposits and other debtors	93,8	330,8	117,3	202,5	284,0	382,2
Prepayments	164,9	121,1	80,7	93,2	105,0	153,9
Other short-term assets	42,8	38,9	29,4	30,4	70,5	890,7
Investments	116,8	423,5	271,8	406,4	403,9	519,7
Cash and bank balances	2.944,0	2.685,3	7.783,0	13.762,7	16.327,6	11.268,8
Assets held for sale	-	14,2	98,6	37,1	25,9	0,5
Current assets	5.499,7	4.842,9	9.672,0	17.688,1	19.299,3	15.641,7
Property, plants, and equipment	22.176,3	25.485,8	23.483,3	24.570,6	23.832,5	23.435,8
Right of use assets	-	1.477,7	2.395,7	3.290,1	3.854,5	3.371,0
Intangible asset	451,3	487,0	301,1	303,2	297,5	304,5
Associated companies	1.104,5	817,0	833,1	805,8	757,3	780,5
Joint venture companies	171,7	191,5	200,2	233,4	265,0	297,1
Long-term investment	343,9	65,2	49,9	42,6	39,4	38,9
Other long-term assets	713,7	345,7	646,0	1.737,2	755,7	395,2
Deferred account	44,1	-	-	-	-	-

Non-current assets	25.005,5	28.869,9	27.909,3	30.982,9	29.801,9	28.623,0
Total assets	30.505,2	33.712,8	37.581,3	48.671,0	49.101,2	44.264,7
Borrowings	231,1	2.661,0	907,1	606,8	2.547,7	915,4
Lease liabilities	-	493,0	491,4	567,7	617,3	613,0
Current tax payable	87,3	68,5	95,4	153,3	128,1	68,2
Trade and other creditors	3.163,6	3.016,0	2.117,2	2.733,3	4.039,8	4.383,8
Sales in advance of carriage	2.715,4	2.041,4	568,1	2.107,8	4.631,4	4.713,2
Deferred revenue	610,9	755,8	957,8	925,7	866,3	1.028,0
Deferred account	44,9	31,6	16,9	15,9	51,0	24,6
Derivative liabilities	89,5	1.570,8	130,4	574,7	399,0	489,5
Provisions	435,7	364,0	428,9	183,4	390,3	436,0
Current liabilities	7.378,4	11.002,1	5.713,2	7.868,6	13.670,9	12.671,7
Deferred account	83,9	33,3	41,0	95,4	55,8	15,0
Deferred taxation	2.040,3	1.335,3	1.032,5	1.064,3	1.430,2	1.802,9
Long term lease liabilities	-	1.467,6	2.373,6	3.114,8	3.560,6	3.182,2
Borrowings	6.423,3	7.162,9	10.564,8	11.405,5	8.613,7	8.737,4
Other long-term liabilities	89,1	1.875,7	506,4	1.077,7	381,9	110,4
Provisions	702,5	990,7	965,1	1.144,4	1.047,1	915,8
Defined benefit plans	104,5	112,5	106,6	99,9	91,2	84,7
Non-current liabilities	9.443,6	12.978,0	15.590,0	18.002,0	15.180,5	14.848,4
Total liabilities	16.822,0	23.980,1	21.303,2	25.870,6	28.851,4	27.520,1
Share capital	1.856,1	1.856,1	7.180,2	7.180,2	7.180,2	7.180,4
Mandatory convertible bonds	-	-	3.496,1	9.691,2	6.195,1	1.547,5
Treasury shares	(171,5)	(156,0)	(133,2)	(106,5)	(73,8)	(37,5)
Other reserves	11.602,2	7.614,0	5.362,8	5.647,0	6.556,8	7.647,5
Non-controlling interest	396,4	418,6	372,2	388,5	391,5	406,7

Total equity	13.683,2	9.732,7	16.278,1	22.800,4	20.249,8	16.744,6
Total equity and liabilities	30.505,2	33.712,8	37.581,3	48.671,0	49.101,2	44.264,7

Source: Singapore Airlines' annual report period 2019-2024

Appendix 9. Singapore Airlines' Projected Statement of Financial Position 2025-2029

Balance Sheet	2025F	2026F	2027F	2028F	2029F
Assets					
Cash	13.786,4	13.794,3	12.949,8	13.510,1	13.418,1
Total Receivables, Net (from trade)	1.382,6	1.321,3	1.364,2	1.356,0	1.347,2
Total Inventory	227,5	240,8	245,4	237,9	241,4
Other Current Assets, Total	2.146,6	2.138,3	2.333,7	2.206,2	2.226,0
Total Current Assets	17.543,0	17.494,7	16.893,1	17.310,3	17.232,7
Property, plants, and equipment	23.946,3	23.738,2	23.706,8	23.797,1	23.747,4
Right of use assets	3.505,2	3.576,9	3.484,4	3.522,2	3.527,8
Intangible asset	301,7	301,2	302,5	301,8	301,9
Associated companies	781,2	773,0	778,2	777,5	776,2
Joint venture companies	265,2	275,8	279,3	273,4	276,2
Long-term investment	40,3	39,5	39,6	39,8	39,6
Other long-term assets	962,7	704,5	687,5	784,9	725,6
Total Non-Current Assets	29.802,6	29.409,2	29.278,3	29.496,7	29.394,7
Total Assets	47.345,6	46.903,8	46.171,4	46.807,0	46.627,4
Liabilities					
Borrowings	1.356,6	1.606,6	1.292,9	1.418,7	1.439,4
Lease liabilities	615,2	615,2	614,4	614,9	614,8
Current tax payable	116,5	104,3	96,3	105,7	102,1
Trade and other creditors	4.515,3	4.650,8	4.790,3	4.934,0	5.082,0

Sales in advance of carriage	4.854,6	5.000,2	5.150,2	5.304,7	5.463,9
Other Current Liabilities	2.037,4	2.098,6	2.161,5	2.226,4	2.293,2
Total Current Liabilities	13.495,7	14.075,6	14.105,7	14.604,4	14.995,4
Deferred account	55,4	42,1	37,5	45,0	41,5
Deferred taxation	1.432,5	1.555,2	1.596,9	1.528,2	1.560,1
Long term lease liabilities	3.285,9	3.342,9	3.270,3	3.299,7	3.304,3
Borrowings	9.585,5	8.978,9	9.100,6	9.221,7	9.100,4
Other long-term liabilities	523,3	338,5	324,1	395,3	352,7
Provisions	1.035,8	999,6	983,7	1.006,3	996,5
Defined benefit plans	91,9	89,3	88,6	89,9	89,3
Total Non-current Liabilities	16.010,3	15.346,4	15.401,7	15.586,1	15.444,7
Total Liabilities	29.506,0	29.422,0	29.507,4	30.190,6	30.440,1
Shareholders' Equity					
Share capital	7.180,4	7.180,4	7.180,4	7.180,4	7.180,4
Mandatory convertible bonds	-	-	-	-	-
Treasury shares	(72,6)	(61,3)	(57,1)	(63,7)	(60,7)
Other reserves	10.336,3	9.964,8	9.140,7	9.101,8	8.668,9
Non-controlling interest	395,6	397,9	400,1	397,9	398,6
Total Equity	17.839,7	17.481,8	16.664,0	16.616,4	16.187,3
Total Liabilities & Shareholders' Equity	47.345,6	46.903,8	46.171,4	46.807,0	46.627,4
Net Operating Working Capital	4.047,4	3.419,1	2.787,4	2.705,8	2.237,3
Net Change	1.077,4	(628,3)	(631,7)	(81,6)	(468,5)

Source: Data processed from Singapore Airlines' annual report period 2019-2024

Appendix 10. Singapore Airlines' Projected Statement of Cash Flow 2025-2029

Cash Flow Statement	2025F	2026F	2027F	2028F	2029F
Cash Flow-Operating Activities					
Cash generated from operations	5.750,2	6.650,4	5.822,1	6.074,2	6.182,2
Income taxes (paid)/refunded	(8,1)	(8,0)	(8,9)	(8,3)	(8,4)
Cash from Operating Activities	5.742,2	6.642,4	5.813,2	6.065,9	6.173,8
Cash Flow-Investing Activities					
Capital Expenditure	(1.960,6)	(1.597,9)	(1.596,6)	(1.718,4)	(1.637,6)
Purchase of intangible assets	(84,2)	(87,5)	(89,2)	(87,0)	(87,9)
Proceeds from disposal of aircraft and other property, plant and equipment	10,6	6,5	9,9	9,0	8,4
Proceeds from disposal of long-term investments	21,6	21,8	21,9	21,8	21,9
Purchase of short-term investments	(163,1)	(150,6)	(155,9)	(156,5)	(154,3)
Proceeds from disposal of short-term investments	80,2	84,9	69,0	78,0	77,3
Dividends received from associated and joint venture companies	37,6	39,5	40,4	39,1	39,7
Dividends received from investments	2,7	2,2	1,6	2,2	2,0
Interest received from investments and deposits	322,0	418,1	452,4	397,5	422,7
Proceeds from finance leases	6,8	6,1	5,0	6,0	5,7
Investments in associated companies	(70,2)	(42,7)	(38,6)	(50,5)	(43,9)
Other Investing Cash Flow	524,4	352,0	61,5	312,7	242,1
Cash from Investing Activities	(1.272,3)	(947,5)	(1.218,7)	(1.146,1)	(1.104,1)
Cash Flow-Financing Activities					
Dividends paid	(1.152,8)	(1.175,9)	(1.199,4)	(1.223,4)	(1.247,8)
Dividends paid by subsidiary companies to non-controlling interests	(21,1)	(21,5)	(22,0)	(22,4)	(22,9)
Interest paid	(298,3)	(305,4)	(296,3)	(300,0)	(300,6)

Proceeds from issuance of shares and mandatory convertible bonds	-	-	-	-	-
Payment/proceeds of bonds	(23,3)	(234,9)	(313,2)	(190,5)	(246,2)
Proceeds from borrowings	144,0	189,3	250,4	194,6	211,4
Repayment of borrowings	(984,3)	(1.079,8)	(1.110,4)	(1.058,2)	(1.082,8)
Repayment of lease liabilities	(719,0)	(732,9)	(730,4)	(727,5)	(730,3)
Payment of transaction costs related to borrowings	(0,7)	(0,6)	(0,8)	(0,7)	(0,7)
Redemption of mandatory convertible bonds	(1.547,5)	-	-	-	-
Other Financing Cash Flow	(3,1)	(3,6)	(4,8)	(3,9)	(4,1)
Cash from Financing Activities	(4.606,2)	(3.365,2)	(3.426,9)	(3.331,8)	(3.423,8)
Net Change in Cash	(136,3)	2.329,7	1.167,6	1.587,9	1.645,9
Net Cash - Beginning Balance (Inc. Overdraft)	11.268,8	11.102,1	13.382,9	14.558,0	16.122,0
Effect of foreign exchange rate changes	(30,4)	(48,9)	7,5	(23,9)	(21,8)
Net Cash - Ending Balance	11.102,1	13.382,9	14.558,0	16.122,0	17.746,1

Source: Data processed from Singapore Airlines' annual report period 2019-2024

Appendix 11. Garuda Indonesia and Singapore Airlines' Profitability Ratio

PT GARUDA INDONESIA TBK					
	2020	2021	2022	2023	2024
Operating profit margin	-147,6%	-296,4%	206,8%	23,2%	11,2%
Net profit margin	-166,0%	-312,3%	177,9%	8,6%	-2,0%
Return on asset	-23,0%	-58,0%	59,9%	3,7%	-1,1%
SINGAPORE AIRLINES LTD					
	2020	2021	2022	2023	2024
Operating profit margin	0,4%	-65,8%	-8,0%	15,1%	14,3%
Net profit margin	-1,1%	-112,3%	-12,5%	12,2%	14,2%
Return on asset	-0,5%	-11,4%	-1,9%	4,4%	6,1%

Source: Data processed from Garuda Indonesia and Singapore Airlines' annual report period 2019-2024

Appendix 12. Garuda Indonesia and Singapore Airlines' Liquidity Ratio

PT GARUDA INDONESIA TBK					
	2020	2021	2022	2023	2024
Current ratio	0,12	0,05	0,48	0,56	0,47
Cash ratio	0,05	0,01	0,31	0,25	0,19
SINGAPORE AIRLINES LTD					
	2020	2021	2022	2023	2024
Current ratio	0,44	1,69	2,25	1,41	1,23
Cash ratio	0,24	1,36	1,75	1,19	0,89

Source: Data processed from Garuda Indonesia and Singapore Airlines' annual report period 2019-2024

Appendix 13. Garuda Indonesia and Singapore Airlines' Activity Ratio

PT GARUDA INDONESIA TBK					
	2020	2021	2022	2023	2024
Receivable collection period	44	28	17	15	15
Payable payment period	76	84	96	53	22
Total asset turnover	0,20	0,15	0,31	0,45	0,51

SINGAPORE AIRLINES LTD					
	2020	2021	2022	2023	2024
Receivable collection period	27	84	60	28	25
Payable payment period	101	284	163	111	125
Total asset turnover	0,50	0,11	0,18	0,36	0,41

Source: Data processed from Garuda Indonesia and Singapore Airlines' annual report period 2019-2024

Appendix 14. Garuda Indonesia and Singapore Airlines' Solvency Ratio

PT GARUDA INDONESIA TBK					
	2020	2021	2022	2023	2024
Interest coverage ratio	-3,98	-6,93	10,52	1,49	0,80
Debt to asset ratio	118,0%	184,9%	124,6%	119,1%	120,4%
SINGAPORE AIRLINES LTD					
	2020	2021	2022	2023	2024
Interest coverage ratio	0,27	-9,38	-1,56	6,41	6,43
Debt to asset ratio	71,1%	56,7%	53,2%	58,8%	62,2%

Source: Data processed from Garuda Indonesia and Singapore Airlines' annual report period 2019-2024