Czech University of Life Sciences Prague
Faculty of Economics and Management
Department of Economics

Master's Thesis

Financial Analysis of Amazon

Ayça Gizem Ballı

2023 CZU Prague

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

DIPLOMA THESIS ASSIGNMENT

MA. Ayça Gizem Ballı

Economics and Management

Thesis title

Financial Analysis of Amazon

Objectives of thesis

The main goal is to do a comprehensive financial study of Amazon utilizing the many financial instruments available. The second goal is to have a better grasp of the company's financial situation and the elements that influence its growth in the online business.
There is a theoretical and practical component to the diploma thesis. The theoretical part discusses the approaches, ratios, and formulate that will be used to evaluate the firm. In the practical section, the assessment will be based on the Amazon company's financial analysis, which will include the income statement, balance sheet, and cash flow statement, among other financial indicators.
Year by year, the thesis will assess how much progress and recession Amazon has made. Is Amazon a high-performing company in the online business? What is the annual performance of Amazon's financial statements?

Methodology

According to the thesis's goal, the literature review gives a basic explanation of financial analysis. The practical section of the course will focus on evaluating financial statements using major financial ratios. All of the methods of analysis proposed will be based on publicly available data on Amazon's annual reports.

The review will be conducted using secondary data. Amazon's annual reports, financial statements, general meetings, magazines, and publications will be used to gather and analyse data.

The proposed extent of the thesis

60 – 80 pages

Keywords

Financial analysis, Financial Indicators, Financial Statements, Ratios, Amazon, Annual Reports.

Recommended information sources

Al-Marzooqi, M. B. and Nobanee, H, (2020): “Financial Analysis of Amazon”. Available at SSRN: https://ssrn.com/abstract=3647442 or http://dx.doi.org/10.2139/ssrn.3647442

Amazon Annual Reports (2021): https://ir.aboutamazon.com/annual-reports-proxies-and-shareholder-letters/default.aspx, Last accessed on May,29 2022.

Edward and Lincoln. (2018): “Porter Analysis: A Business Strategy of Amazon.com Through a Value Chain and Comparative Advantage Analysis of Amazon’s Trademarks and Intangibles” https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3234380

Peterson D, Pamela and Frank J. F. (2012): “Analysis of financial statements”. 3. Hoboken, New Jersey. ISBN 978-1118299982.

Porter A., G., and Norton L.C. (2010): “Using financial accounting information: the alternative to debits and credits”. 6th ed. Mason: South-Western Cengage Learning. ISBN 9780324593747

Ronald Q., Shuang Lu, Chien-Chung H.(2012): “SWOT Analysis: Raising Capacity of Your Organization” Huamin Philanthropy Brochure Series.

Expected date of thesis defence

2022/23 SS – FEM

The Diploma Thesis Supervisor

Ing. Tomáš Maier, Ph.D.

Supervising department

Department of Economics

Electronic approval: 16. 6. 2022

prof. Ing. Miroslav Svatoš, CSc.

Head of department

Electronic approval: 27. 10. 2022

doc. Ing. Tomáš Šubrt, Ph.D.

Dean

Prague on 30. 03. 2023

Declaration

I declare that I have worked on my master's thesis titled "Financial Analysis of Amazon" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the master's thesis, I declare that the thesis does not break any copyrights.

In Prague on 31.03.2023 ______________________________

Ayça Gizem Ballı

Acknowledgment

I would like to thank my supervisor PhDr. Ing. Tomáš Maier, Ph.D. for his advice and support. I would like to thank my family for their suggestions and mental support.

Financial Analysis of Amazon

Abstract

In this study, financial analysis of Amazon from 2012 to 2021 was made. The data used in this financial analysis are taken from the reports that Amazon publishes annually to the SEC. In the analysis, horizontal, vertical and ratio analyzes of the company's financial statements were made. As a result of the analysis, it has been observed that the company has been operating at low profitability until 2018, but since 2018, there has been a significant increase in all income, assets and net profit of the company. It has been revealed that the company started to receive returns from its investments in this increase and that the changes in the online shopping habits of consumers with Covid 19 had an effect.

Keywords: Amazon, Retail, E-Commerce, Financial, Ratio

Finanční analýza společnosti Amazon

Abstrakt

V této studii byla provedena finanční analýza Amazonu od roku 2012 do roku 2021. Údaje použité v této finanční analýze jsou převzaty ze zpráv, které Amazon každoročně zveřejňuje pro SEC. V rámci analýzy byly provedeny horizontální, vertikální a poměrové analýzy účetní závěrky společnosti. Na základě analýzy bylo zjištěno, že společnost do roku 2018 hospodařila s nízkou ziskovostí, ale od roku 2018 došlo k výraznému nárůstu všech příjmů, aktiv a čistého zisku společnosti. Ukázalo se, že společnost začala získávat výnosy ze svých investic do tohoto zvýšení a že změny v online nákupních zvyklostech spotřebitelů s Covid 19 měly vliv.

Klíčová slova: Amazon, Retail, E-Commerce, Finance, Ratio

Table of content

Introduction 1

1 Objectives and Methodology 3

1.1 Objectives...3

1.2 Methodology 3

1.3 Financial Analysis Techniques...6

1.3.1 Horizontal Analysis 6

1.3.2 Vertical Analysis 7

1.3.3 Ratio Analysis 8

1.3.4 Liquidity Ratios 9

1.3.4.1 Current Ratio 9

1.3.4.2 Acid Test Ratio..9

1.3.4.3 Cash Ratio 10

1.3.5 Profitability Ratios..10

1.3.5.1 Gross Profit Margin 11

1.3.5.2 Operating Profit Margin...11

1.3.5.3 Net Profit Margin...11

1.3.6 Financial Structure Ratios...12

1.3.7 Efficiency Ratios 12

2 Literature Review 14

2.1 Financial Analysis 14

2.2 Users of Financial Information 15

2.3 Information about the Company and its Markets...18

2.3.1 Profile of Amazon Company..18

2.3.2 Retail Market...18

3 PRACTICAL PART...24

3.1 Horizontal Analysis 24

3.1.1 Current Assets 24

3.1.2 Total Assets...25

3.1.3 Short-Term Liabilities...25

3.1.4 Long Term Liabilities 26

3.1.5 Equities 27

3.1.6 Sales and Profit...28

3.2 Vertical Analysis 29
3.2.1 Vertical Analysis of Assets 30
3.2.2 Vertical Analysis of Liabilities 31
3.3 Ratio Analysis 31
3.3.1 Liquidity Analysis 32
3.3.1.1 Current ratio 32
3.3.1.2 Acid Test Ratio 33
3.3.1.3 Cash Ratio 34
3.3.2 Profitability Analysis 34
3.3.2.1 Gross Profit Margin 34
3.3.2.2 Operating Profit Margin 36
3.3.2.1 Net Profit Margin 37
3.3.2.2 Return on Equity 39
3.3.2.1 Return of Assets 39
3.3.3 Financial Structure Ratios 40
3.3.3.1 Financial Leverage Ratio 40
3.3.3.2 Equity Ratio 41
3.3.3.3 Debt Ratio 42
3.3.3.4 Short Term Liabilities/Total Assets 43
3.3.3.5 Long Term Liabilities/Total Assets 44
3.3.3.6 Ratio of Short-Term and Long Term Liabilities to Total Liabilities .. 45
3.3.3.7 Long Term Liabilities /Capitalization Ratio 46
3.3.3.8 Long Term Assets/ Capitalization Ratio 46
3.3.4 Efficiency Ratios 47
3.3.4.1 Active Turnover Ratio 47
3.3.4.2 Current Asset Turnover Rate 48
3.3.4.3 Stock Turnover Ratio 48
3.3.4.4 Receivable Turnover Rate 49
3.3.4.5 Non-Current Assets Turnover Rate 49
3.3.4.6 Equity Turnover Rate 50

4 RESULTS AND DISCUSSION 51

5 CONCLUSION 56

6 REFERENCES 58

List of tables

Table 1. The Formulas of The Financial Analysis 13

Table 2. 2020 Revenues of Top 10 Global Retailers 20

Table 3. The Data of Revenue and Net Income Growth of Top 10 Global Retailers...21

Table 4. Change in Current Assets (2012-2021) of Amazon..24

Table 5. Change in Total Assets (2012-2021) of Amazon 25

Table 6. Change in Short Term Liabilities (2012-2021) of Amazon.............................26

Table 7. Change in Long Term Liabilities (2012-2021) of Amazon 27

Table 8. Change in Shareholders Equities (2012-2021) of Amazon 28

Table 9. Change in Revenue and Incomes (2012-2021) of Amazon (Million USD)......29

Table 10. Vertical Analysis of Assets (2012-2021) of Amazon (%) 30

Table 11. Vertical Analysis of Liabilities (2012-2021) of Amazon (%) 31

Table 12. Current Ratios (2012-2021) of Amazon 33

Table 13. Acid Test Ratios (2012-2021) of Amazon...33

Table 14. Cash Ratios (2012-2021) of Amazon 34

Table 15. Revenues, Cost of Sales and Gross Profit (2012-2021) of Amazon...............35

Table 16. Gross Profit Margins (2012-2021) of Amazon 35

Table 17. Revenues, Operating Expenses and Operating Profit of Amazon................36

Table 18. Operating Profit Margins (2012-2021) of Amazon.......................................37

Table 19. Taxes, Non-Operating Expenses and Net Profit (2012-2016) of Amazon 38

Table 20. Net Profit Margins (2012-2021) of Amazon..38

Table 21. Net Income, Equity and ROE (2012-2021) of Amazon.................................39

Table 22. Net Income, Total Assets and ROA (2012-2021) of Amazon........................40

Table 23. Total Liabilities, Total Assets and Financial Leverage Ratios of Amazon...41

Table 24. Total Equities, Total Assets and Equity Ratios (2012-2021) of Amazon......42

Table 25. Total Equities, Total Assets and Debt Ratios (2012-2021) of Amazon.........43

Table 26. Short Term Liabilities / Total Assets (2012-2021) of Amazon......................43

Table 27. Long Term Liabilities / Total Assets (2012-2021) of Amazon......................44

Table 28. Long/Short Term Liabilities / Total Liabilities (2012-2021) of Amazon......45

Table 29. Long-term Liabilities / Capitalization Ratios (2012-2021) of Amazon 46

Table 30. Long-term Assets/ Capitalization Ratios (2012-2021) of Amazon................47

Table 31. Active Turnover Ratios (2012-2021) of Amazon 47

Table 32. Current Assets Turnover Ratios (2012-2021) of Amazon 48

Table 33. Stock Turnover Ratios (2012-2021) of Amazon..48

Table 34. Receivable Turnover Ratios (2012-2021) of Amazon 49

Table 35. Non-Current Assets Turnover Ratios (2012-2021) of Amazon 50

Table 36. Equity Turnover Ratios (2012-2021) of Amazon..50

Table 37. Liquidity Ratios of 5 Retail Industry Companies (2020)..............................53

List of Figures

Figure 1. Five-year growth and profitability of Top 250 retailers in Global Reports .19

Figure 2. Retail E-Commerce Sales Worldwide (Billion $)..22

Figure 3. Top 10 E-Commerce Companies by Revenue (Billion $)..............................23

Figure 4. Short term Liabilities and Current Asset(2012-2021) Amazon (Billion $)...32

Figure 5.Comparison of Revenue Growth Amazon and Walmart(Billion $) 51

Figure 6.Comparison of Net Income Growth of Amazon and Walmart(Billion $)......52

Figure 7. Digital Capability and Physcal Assets of Amazon...55

Introduction

Many of the investors, credit institutions and other creditors that will benefit from the financial statements do not have the opportunity to request information directly from the reporting enterprises. Therefore, they have to rely on general purpose financial reports (balance sheet, income statement, cash flow statement, etc.) for most of the financial information they need. Therefore, such users are the primary users to whom general purpose financial reports are directed. However, the financial reports and the tables included in the reports do not provide all the information needed by the primary users. Therefore, these users should also consider the information that can be obtained from other sources (e.g. general economic situation, political events, and the sector in which the business operates) (Chen & Shimerda, 1981).

Financial reports are the information that shows the tax payments, expenses, income and expenses of the companies in a certain period and the financial situation of that period in general. These reports are of vital importance, especially for investors, shareholders and financial professionals who are planning to invest in companies. By these reports, it is possible to make predictions about the future by creating comments from the company's past financial status and performance information. The transparency and reliability of these reports also contributes to the establishment of an environment of trust between the company and its stakeholders and contributes positively to the growth performance of the companies. With financial statement analysis, it becomes very easy to have information about the current situation of the company, the change in its financial situation from the past to the present, and its possible future performance (Laux, 2012).

There has been an accelerating change in the retail sector since the beginning of the 20th century. With this change, which started with the development of the internet, traditional retailing has started to leave its place to online retail stores. In this retailing system, people examine the products on the websites and do their shopping through these websites and complete their shopping and payments completely online. Amazon Company is one of the pioneers of this new retail system. The company has become the leader of the retail industry with a rapid growth trend since 1994, the year it was founded. Computer technologies and people who know and can develop these technologies have gradually gained special importance. Amazon is not the first company to start specializing in e-retailing. But Amazon has understood the secrets of successful internet commerce and has been able not only to survive profitably but also to reach unprecedented heights in e-commerce (Althafairi et al., 2019).

The aim of this study is to have information about the financial situation and performance of the company by analyzing the annual financial reports published by the Amazon company, and also to make predictions about the future of the company through these analyzes. For this purpose, in the second part of the thesis, a conceptual framework will be created on financial analysis methods and calculating, and information about the Amazon Company will be given at the same time. In the third part of the thesis, the financial analysis of the Amazon Company will be made. In the fourth and fifth sections of the paper, the inferences and results obtained as a result of the financial analysis will be included.

1 Objectives and Methodology

1.1 Objectives

The aim of this study is to examine of Amazon financial reports and analyze these reports by financial analysis techniques. It is aimed to determine the financial situation of the company and its financial performance, and to make predictions about the future of the company with the inferences obtained from the past data. For this purpose, the objectives of the thesis were determined as follows.

- To examine the effectiveness of ratio analysis, horizontal and vertical analysis methods in terms of understanding the financial performance of company.
- To examine the changes in the financial structures of Amazon year by year.
- To forecast company's future financial risks.

1.2 Methodology

In this thesis, after giving necessary information about the definition, sources and preparation conditions of financial statements, analysis techniques of financial statements are explained theoretically. In this section, various books, articles, publications and academic studies on financial statements and analysis techniques were examined and data were collected and quotations were made from these sources where necessary. Later, the theoretical information given was put into practice over the financial data of the Amazon Company.

The sample of the study is Amazon and the data of the company between 2012 and 2021 were used in the analysis. The data used in the financial analysis of the company were obtained from the financial reports published by the company periodically. These reports are available from the company's website.

In today's conditions, where the pressure of competition and globalization on commercial companies has increased, it has become inevitable to analyze financial statements. This study is important in terms of understanding the definitions, preparation methods and sources of financial statements, as well as the application technique and importance of the analysis methods of the said statements.

The research questions of the thesis were determined as follows;

- Based on the indicators of financial analysis, how did the financial position of Amazon change between 2012 and 2021?
- How did the indicators of financial analysis change between 2012 and 2021 and how do they compare with the sector average?
- What are the factors affecting of the firm's financial structure?

Although the main objectives of financial analysis vary depending on the company's field of activity, these objectives generally can be listed as; Value maximization, profit maximization, revenue maximization, cost minimization, market share maximization, maintaining the company's existence and sustainable growth (Saldanli, 2020). The primary purpose of financial analysis is expressed as the highest level of market value of the company. For this purpose, financial managers take cash flow, risk and profitability into consideration in making and implementing decisions. Fundamental decisions of finance managers focus on the provision of the resources the company needs, the use of the resources provided to finance the assets, and the distribution of dividends. The effects of the decisions taken on the market value of the company should be evaluated and the results of these decisions should be analyzed. Evaluation of the results plays an important role in making plans for the future of the company and in making new decisions. In this direction, the results of company activities should be analyzed and company performance should be measured. This requirement is made possible by the analysis of the company's financial statements (Revsine et al., 1999).

Financial analysis has different purposes apart from its primary purpose. These purposes are listed as follows (Gibson, 2012).

- To be able to evaluate the assets or capital status of the company for an accounting period and the operating results of the company.
- To be able to determine the development direction of the company by analyzing the financial statements created for the previous accounting periods.

- To determine the position and situation of the company in the business by comparing the financial statements of the company with the average results of the financial statements of other companies in the same sector.
- To be able to determine the credit worthiness and loan repayment potential of a company in need of credit.
- Deciding on the company's new or expansion investment.

In the financial analysis, the techniques of the horizontal, vertical and ratio will be conducted. Short descriptions about these techniques are listed below.

Horizontal analysis is a dynamic analysis technique that allows comparing the data in the financial statements of a company for more than one consecutive operating period and Calculating the changes in amounts and percentages. In the horizontal analysis, revealing the activities and financial results of the company for more than one period makes this analysis more advantageous than the single-period financial statement analysis. With this analysis technique, it is easier to determine the amount and percentage of the increases and decreases in the financial statement items in the consecutive periods with the financial statements prepared in a comparative way horizontally. In this context, it is possible to compare the operating results of the company in different periods and to monitor the direction of the developments (Revsine et al., 1999).

Vertical analysis is the calculation of the percentage share of an item in the financial statements within the total or group. Vertical analysis shows the distribution of assets and liabilities of the company in the statement of financial position. This analysis, which also enables the detailed income statement to be examined, shows the distribution of the expenditures made to reach the net profit (Chen & Shimerda, 1981). Vertical analysis technique can be used as a static analysis tool or as a dynamic analysis. In the form of dynamic analysis, the financial position statement or detailed income and expense statements for consecutive periods are expressed in percentages, and then the positive or negative developments between the periods are determined and interpreted by making comparisons (Barnes, 1987).

The values calculated by dividing two absolute performance indicators are called ratios (Ohlson, 1980). Ratio analysis makes the data of the company suitable for processing by proportioning the account items in the financial statements and having a financially significant relationship to each other, and allows interpretation by determining the relative relationships between the items. These relationships help determine the financial performance of the company and contribute to future planning when compared over the years. Therefore, the ratio analysis, which the company uses while determining its long-term goals, provides a healthier information to all stakeholders (Faello, 2015).

In the ratio analysis, the data obtained from the financial reports of the company between the years 2012-2021 will be analyzed and interpreted through the formulas below.

1.3 Financial Analysis Techniques

There are some interest groups for companies such as shareholders, managers, employees, investors, credit institutions, government, buyers and sellers. Interest groups want to obtain information about the financial status and operating results of companies in line with their objectives. The financial status and operating results of the companies and the information emerge as a result of the analysis of the financial statements created by the companies. With the financial analyzes carried out, the data in the financial statements become more meaningful and easier to interpret. The information obtained as a result of the financial analysis is used to determine the current financial situation and operational performance of the company (Gibson, 2012).

1.3.1 Horizontal Analysis

Determining the changes in the items in the financial statements in the horizontal analysis is important in terms of determining the development direction of the company's financial situation and operating performance. It is expected that the development direction of the company will be in line with its past trends, unless there are significant changes in the conditions (Zager & Zager, 2006).

In horizontal analysis, additional financial statements can be analyzed apart from the basic financial statements. Accordingly, the effects of the changes on the company can be interpreted. Measures are taken to continue the positive developments in the company and to correct the negative ones. There are some elements to be considered in this analysis technique. The financial statements for the current and previous periods to be compared should be prepared to cover the same periods. When comparing quarterly or semi-annual financial statements, either the previous three or six-month financial statements or the financial statements created in the same period of the previous year should be used. In addition, it is important that the compared financial statements are independent from the effect of inflation. Financial statements prepared according to the current period are compared with the budget figures of the period. The financial statements of a company created in the current period can also be compared with the financial statements of other companies created in the same period. This situation also allows to measure the success of the company compared to other companies (Anggraini, 2022).

1.3.2 Vertical Analysis

The difference of the vertical analysis technique from other financial analysis techniques is to determine the relative value of the account items in the financial statements within the main total or group. In addition, average values for the sector can be calculated with this method (Shala et al., 2021). With vertical analysis, various account items in the financial statements are compared with each other. These account items can be listed as current assets-short-term liabilities, current assets-fixed assets, liabilities-equities, fixed assets-equities. In addition, inventories, trade receivables, trade payables and tangible assets can also be evaluated. In addition, certain variables are used in the analysis of percentage amounts. These variables are; comparative historical data, planned data and data of competitor companies. The most important of these variables is considered the past period data. Therefore, vertical percentage analysis is useful in determining the development direction of companies (Güvemli, 2006).

Expressing the amounts of the main items or subgroups in the statement of financial position and statement of comprehensive income and expense in vertical analysis provides a simpler and easier interpretation of the financial statements. The analysis of the statement of financial position reveals the distribution of the company's assets and liabilities. With the analysis made in this direction, the asset and liability structure of the company at the end of the accounting period can be analyzed. By analyzing the comprehensive income and expense statement with vertical analysis, the distribution of the company's activities can be determined. In this direction, at the same time, the relations between the sales of the company and the profit items that show the other operating results can be determined and profitability analysis can be carried out on the sales of the company (Shala et al., 2021).

1.3.3 Ratio Analysis

The purpose of the ratio analysis is to analyze the solvency, asset efficiency, capital structure, profitability, stock market performance and growth rate of companies, by the relationship calculated between financial statement items. The ratios calculated by the ratio analysis have no meaning on their own. For this reason, the ratios should be interpreted by comparing them with the generally accepted standard values in the finance literature, the averages of the companies in the sector in which the company is located, the ratios of the company in the past periods and the targets set by the company. By showing areas of good and bad performance, the ratios also help identify the strengths and weaknesses of company management and where more effort should be made. It helps to determine the successful and unsuccessful activities of the company by comparing the ratios before and after the activity (Al Karim & Alam, 2013).

A large number of financial ratios can be calculated between various items in the financial statements. The important thing in the ratio analysis is to calculate the ratios that will give meaningful answers to the questions that the company's stakeholders seek answers regarding the company's financial status and operating results. On the other hand, while evaluating the ratios, it should be taken into account that seasonal and cyclical movements, development and recession periods in the economy affect the ratios of the company. A change in a ratio may result from an increase or decrease in the numbers in the numerator or denominator in different directions, or a difference in velocity. Accordingly, the change in the value of a ratio should be investigated by the financial analyst to determine whether it is the result of a change in the numerator or denominator used in the calculation of the ratio, or both. While evaluating the ratios, the effects of changes in the general level of prices on financial statement items should also be taken into account. In addition, the ratios of companies operating in the same industry should be used in the interpretation of the calculated financial ratios and attention should be paid to the trends in the industry. In comparisons made between companies regarding ratios, it should be taken into account that company policies may differ from each other. Financial ratios calculated in financial analysis are divided into different classes according to their intended use and meaning. The classification of these ratios has been developed in accordance with the purpose and is in the form of liquidity, financial structure, activity, profitability and stock market performance ratios (Faello, 2015).

1.3.4 Liquidity Ratios

Liquidity refers to the ability of an asset owned by the company to turn into cash with low cost in order to fulfill its short-term liabilities quickly. Liquidity ratios are calculated to measure the short-term liabilities and operating capital adequacy of companies by determining the proportional relationships between current assets and short-term liabilities (Hiran, 2016). With the liquidity ratios, the liquidity risk of the companies can be evaluated. While the operating capital elements of the company and short-term liabilities are associated, the liquidity ratios can be divided into three according to the characteristics of the items to be considered from the current asset group (Izzalqurny et al., 2019).

1.3.4.1 Current Ratio

The current ratio shows how much current assets the company has for each currency unit of short-term debt. Although this ratio differs in each sector, it is generally considered sufficient to be 2 in developed countries and 1.5 in developing countries. A very high current ratio indicates that the company has a high solvency. However, the fact that this ratio is too high can also mean that there are idle funds within the company and that the resources are not used effectively (Andrijasevic & Pasic, 2014).

1.3.4.2 Acid Test Ratio

The acid test ratio is considered a more sensitive ratio than the current ratio and is always lower than the current ratio, except when the company has no stocks (Mayes, 2020). The purpose of calculating the ratio is to determine the solvency by eliminating the risk of inventories not being converted into cash due to sales uncertainty. An acid test ratio of 1 indicates that the company can pay all its short-term debts in cash and in a short time, with its current assets other than its stocks. If this ratio is less than 1, it means that the company is dependent on stocks to pay its short-term debts. In this case, the company should not be interpreted negatively by this ratio alone. Because the company's short-term debt solvency increases with the liquidity provided in line with the high receivables and inventory turnover. Especially companies with low inventory turnover may have difficulty meeting their short-term debts (Izzalqurny et al., 2019).

1.3.4.3 Cash Ratio

Cash ratio is the most sensitive ratio among liquidity ratios. The cash ratio shows how much of the cash and cash equivalents and securities and short-term debts that the company has when its sales are stopped and it cannot collect its receivables. Although what the cash ratio should be varies from sector to sector, it is generally accepted to be around 0.50 (50%). The fact that the ratio is lower than this value indicates that the company may be in a difficult situation in terms of liquidity in the short term if it cannot convert its stocks into sales and collect its trade receivables (Anggraini, 2022).

1.3.5 Profitability Ratios

The main purpose of the establishment of enterprises is to make profit. The most important issue that business owners, employees, investors and credit institutions expect from businesses is that they can make a profit. Although analyzes measure the ability of businesses to pay their debts, their continuity, and their growth tendencies, if profits cannot be obtained as a result of the activities, it is inevitable that the analyzes will reveal negative results in the short or long term. Profit must be at a level that satisfies the factors of production and ensures growth. Therefore, the most classical method in the performance analysis of enterprises is profitability analysis. Two important issues in profitability analysis are the amount of profit and the sources from which it is provided (Barnes, 1987).

It measures the adequacy of profit and hence the efficiency of management, by showing profitability ratios, sales and earnings on investment. While evaluating the profit figures, the general profitability indicators of the sector, the firm's activity volume, equity-debt status should be taken into consideration. Because, it is thought that companies that declare profits (proportionately) above the profit figures of the sector in which they operate show a positive performance.

The profit figures, which are generally important in the income statement, are as follows, in order:

- Gross Profit,
- Operating Profit,
- Net Profit for the Period.

1.3.5.1 Gross Profit Margin

Profit from a firm's sales after the discounts, returns, and cost of sales (products, merchandise, services, and other costs). Gross sales profit is an important indicator in terms of understanding whether the firm is selling at a loss, cost or profit. There is an impression that companies with very low gross sales profits or reporting gross sales losses experience sales pressure. While Calculations the Gross Profit Margin, the profitability figure obtained as a result of the ratio made by comparing the gross profit with the net sales in the income statement is considered (Fabozzi et al., 2021).

1.3.5.2 Operating Profit Margin

After deducting operating expenses from gross sales profit, the remaining profit appears as "operating profit". The items that make up the operating expenses are as follows:

- Research and Development Expenses(-)
- Marketing, Sales and Distribution Expenses(-)
- General and administrative expenses(-)

Firms monitor depreciation expenses that do not require a fund outflow from time to time under selling costs and from time to time under operating expenses. The difference only affects the gross sales profit and does not have any effect on the operating profit.

Operating profit Margin is an important indicator in terms of expressing an opinion on whether a business can create funds from its activities, as it is the profit after deducting the expenses related to the activities from the revenue, apart from the sales costs (Barth & Schipper, 2008).

1.3.5.3 Net Profit Margin

At the end of the period, the profit remaining after all income and expense items of the firm are taken into account is the net profit for the period. It is the remaining balance after deducting financing expenses, ordinary and extraordinary expenses from operating profit, adding ordinary and extraordinary income and finally deducting current tax, if any (Ryan, 2012).

The net profit margin, as in other ratios, the relationship between net sales and net profit for the period is tried to be determined.

1.3.6 Financial Structure Ratios

The ratios used to measure the resource structure and long-term debt solvency of the enterprise are collected in this group. In other words, they are the ratios used to measure whether the equity capital of the enterprise is sufficient, the balance of debt and equity within the resource structure, and what type of current assets or fixed assets the funds created as equity are used. These ratios are used both in the analysis of whether the principal and interests of the long-term debts of the enterprise will be paid, and in determining the degree of utilization from the resources. In order to reach a full judgment about the structure of the business, analysis of its resource structure and capital adequacy is necessary.

Ratios collected under the heading of financial structure analysis give important clues about whether the business in question will fulfill its obligations in the event that the business incurs a loss as a result of normal operations, the value of its assets decreases or the cash flow estimated for the coming years is not realized.

Financial structure ratios can be multiplied according to needs and can be used depending on which data is desired to be learned. It is a type of analysis that is generally made by proportioning the general totals of active and passive accounts and sub-accounts with each other.

The company can finance its assets from two sources that are equity and liabilities. When the business finances its assets with high level of equity, its risk decreases and its financial structure is strengthened.

1.3.7 Efficiency Ratios

Efficiency ratios are the ratios that measure how effectively companies use their assets in their activities (Besley & Brigham, 2014). In the light of the information provided by the efficiency ratios, the efficiency and productivity of the company's activities can be measured. While interpreting this group of ratios, they are compared with industry averages or companies in the same industry. By the efficiency ratios, when the current and planned sales are examined, it is determined whether the amount of assets is sufficient or not. A company needs capital from banks or other sources to become an asset, and capital has a cost. Accordingly, if the company has a very high amount of assets, the cost of capital will be high and this will negatively affect profitability. On the other hand, if the company has a very low amount of assets, this can lead to a decrease in profitable sales. In this direction, the company should establish a balance when determining the amount of assets to be owned and benefit from efficiency ratios while establishing this balance (Sanz Lara et al., 2022).

Table 1. The Formulas of The Financial Analysis

RATIO	FORMULA
Liquidity Analysis	
Current Ratio	Current Assets/Current Liabilities
Acid Test Ratio	(Current Assets − Invenories)/Current Liabilities
Cash Ratio	Cash + Cash Equivalents/Current Liabilities
Profitability Analysis	
Gross Profit Margin	Gross Profit/Net Sales
Operating Profit Margin	Operating Profit/Net Sales
Net Profit Margin	Net Profit/Net Sales
Return on Assets	Net Income/Total Assets
Return on Equity	Net Income/Total Equities
Financial Structure Ratios	
Financial Leverage Ratio	Total Liabilities/Total Assets
Equity Ratio	Total Equity/Total Assets
Debt Ratio	Total Liabilities/Total Equity
Short Term Liabilities/Total Assets	Short Term Liabilities/Total Assets
Long Term Liabilities/Total Assets	Long Term Liabilities/Total Assets
Ratio of Short-Term Liabilities to Total Liabilities	Short Term Liabilities/Total Liabilities
Ratio of Long-Term Liabilities to Total Liabilities	Long Term Liabilities/Total Liabilities
Long Term Liabilities / Capitalization	$\frac{\text{Long Term Liabilities}}{\text{Long Term Liabilities + Total Equity}}$
Non-Current Assets/ Capitalization	$\frac{\text{NonCurrent Assets}}{\text{Long Term Liabilities + Total Equity}}$
Financial Leverage Ratio	Total Liabilities/Total Assets
Equity Ratio	Total Equity/Total Assets
Efficiency Ratios	
Active Turnover Ratio	Total Assets/Revenue
Current Asset Turnover Rate	Current Assets/Revenue
Stock Turnover Ratio	Inventory Average/Cost of Goods
Receivable Turnover Rate	Receivables Average/Revenue
Non-Current Assets Turnover Rate	NonCurrent Assets Average/Revenue
Equity Turnover Rate	Total Equity Average/Revenue

Source: Fabozzi et al., 2021

2 Literature Review

In this section, firstly, the conceptual framework of financial analysis techniques to be used in the thesis will be drawn and the usage of these techniques will be given. Then, information about the sectors in which Amazon operates and the profile and history of the company in general will be given.

2.1 Financial Analysis

Financial analysis can be defined as the determination of the relationships between the items in the financial statements and the examination of the trends of these items over time in order to determine the financial status of a company, its operating results, and the direction of financial development and to make assumptions about the future of the company (Kelley et al., 2010). In other words, financial analysis is also defined as the calculation and interpretation of the connections of the items in the financial statements with each other or with the sector in order to inform the interest groups with which the company has a relationship (Herath & Albarqi, 2017).

Financial statements used in financial analysis provide information about companies' assets, liabilities, equity, income and expenses, profit and loss, changes in equity and cash flows. A set of general purpose financial statements consists of a statement of financial position, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes that summarize important accounting policies and other explanatory notes. With financial analysis, in the light of the information provided on assets, liabilities, income-expenses, cash flows and profit-loss, information about the past or current financial situation of the company is provided, and the strengths and weaknesses of the company in terms of its financial situation and its activities, as well as opportunities and threats for the future are determined (Fabozzi et al., 2021).

Financial analysis techniques are used in the analysis process of financial statements. The data in the financial statements, which are ready for the analysis to be carried out, appear as a numerical crowd for the people who make the analysis. The data in the financial statements become simpler and more understandable by using financial analysis techniques. After determining the relationships between items and the changes between periods through financial analysis techniques, it is possible to interpret the information in the financial statements (Ryan, 2012).

Financial analysis results can be interpreted in four different ways. The first type of interpretation is the interpretation of the company's current financial analysis results by comparing them with the financial analysis results of previous years. In this way, it can be evaluated whether the change in the financial situation of the company over time is in a good direction. The second type of interpretation is the interpretation of the company's current financial analysis results by comparing them with the financial analysis results averages of similar companies or the sector in which they are located. With the data obtained as a result of this comparison, it can be determined whether the company has any significant deviations from its competitors or the industry average. However, the sector average should be used as a guide, not as a target or goal (Andrijasevic & Pasic, 2014). The third type of interpretation is the evaluation of financial performance indicators by comparing the targeted and actual levels. With the data obtained as a result of this comparison, the extent to which the company performs with its current resources will affect the distribution of budget resources in the next period. With this situation, which is called performance-based budgeting, it is aimed to distribute the resources of the company on the basis of performance and in a way that reflects the priorities of the company. The fourth type of interpretation is the evaluation of the results obtained by financial analysis by comparing them with the standard values accepted in the literature. Thus, it can be determined that the result obtained is above or below the expected by comparison (Kelley et al., 2010).

2.2 Users of Financial Information

Many stakeholders about the company benefit from the financial analysis results in terms of the financial information they want to reach. These segments related to the company are defined as financial information users, decision makers or interest groups. Financial information users in terms of relationship with the company; It is divided into two groups as internal and external financial information users. Internal users of financial information; consists of partners, managers and employees. External users of financial information; potential investors, the government, credit institutions, buyers, sellers, competitor companies, researchers, non-governmental organizations, the public and consumers (Laux, 2012)

Partners are defined as real or legal persons who contribute to the capital of the company. Partners provide capital to the company by taking a certain risk for profit. By using the financial statements of the company, the partners understand whether the mentioned profit expectations can be met, whether the financial situation of the company is successful, whether the company can achieve its goals. On the other hand, the partners also benefit from the financial statements in order to evaluate the dividend distribution policy and solvency of the company, and to make decisions about holding, increasing or decreasing their capital shares (Barth & Schipper, 2008).

Managers manage the company's tangible assets and human resources so that the company can achieve its goals. While preparing the budget and plan in order to continue the company's activities, the managers make significant use of the company's past data prepared by the accounting information system. In addition, they evaluate the extent to which the planned targets of the company have been achieved by using the data in the financial statements (Al-Marzooqi & Nobanee, 2020).

Employees receive a certain amount of wages for the time they give to the company. Wages mean income for employees and costs for the company. Accordingly, there may be disagreements between the company and the employees. Employees; they expect the company they will provide services to have the economic power to meet their wages and social rights. Therefore, they use the information in the financial statements in order to decide that the company has a balanced and profitable financial performance that will meet this expectation (Revsine et al., 1999).

Potential investors, the company they will invest in; they learn about earning power, continuity, market value of stocks, status of current assets and profit distribution policy by using the data in financial statements. Investors examine how management provides resources and manages its resources in order to make the right investment decision. The company's historical financial data is generally the most important source of information for investors in deciding whether to invest in securities (Gibson, 2012).

Credit institutions; banks, participation banks, investment banks, financial leasing companies and factoring companies. While continuing their activities, companies benefit not only from own resources but also from foreign resources. Companies need foreign resources to be provided by credit institutions in order to expand their business volumes, meet their capital needs and finance their new investments. Credit institutions examine the financial structures of companies in order to understand whether the loan they provide will be returned. For this reason, credit institutions benefit from the past financial information created by the companies' accounting information system. Credit institutions need the company's financial information during the loan allocation phase and the credit risk continues mostly (Gibson, 2012).

The government uses the data in the financial statements in order to reach the tax-related information of the company. The government analyzes the financial statements in order to audit the accuracy of the tax returns and evaluate the appropriateness of the reported amounts (Gibson, 2012).

Buyers who demand to buy large-scale goods from companies use financial statement data to understand whether the company has the volume of goods that can meet their demand. Sellers, on the other hand, benefit from the data in the financial statements of the companies in question in order to understand whether the companies to which they will sell large-scale goods or services have the ability to pay (Revsine et al., 1999).

Consumers are an environment that companies attach importance to because they are the segment addressed by companies. Consumer satisfaction and brand loyalty are very important for companies. Consumers may want to examine companies that meet their demands in order to understand the production and delivery of goods or services. Researchers, on the other hand, may need to examine the data in the financial statements of the companies in the country or in the researched sector in order to analyze the data in the field of macroeconomics or on a sectoral basis (Revsine et al., 1999).

Competitors examine the financial situation of other companies in the sector while determining their own sales and marketing policies according to their competition policies. For this reason, companies benefit from the data in the financial statements of rival companies. Society, on the other hand, may need financial statement data of important companies in order to obtain information. The financial situation, profitability, taxes paid, the number of employees and the wages paid to the employees of the companies can significantly affect the economy and society of the country (Faello, 2015).

2.3 Information about the Company and its Markets

2.3.1 Profile of Amazon Company

Amazon, Inc. (Incorporated), as one of the e-retail companies operating in the United States, that is, companies that sell their products and services via the internet, is the largest e-retailer in the world by sales volume. Amazon was founded in 1994 in Seattle, USA, and entered the market in July 1995. Today, Jeff Bezos is recognized as "the most brilliant reformer of modern commerce “and as a man and businessman who “methodically and resolutely came up with a new business model for the Internet Age" (Spector, 2008). Amazon started its book selling business in a garage in 1995. A few years after its founding, in 1999, Amazon had become "a huge supermarket offering the widest range of products in the world" and "the name Amazon became a popular culture brand recognized by 55 percent of the population (USA)” (Wang, 2021). Amazon has grown at a very fast pace. Today Amazon continues to grow at a truly "geometric progression" pace. The number of employees at Amazon, which employed 306,800 people in 2016, reached 382,400 people in June 2017 and 541,900 people in August 2017, just three months later. This number has exceeded 1.5 million by 2021. Sales volume of 147 million dollars in 1997 reached 469 billion dollars by 2021 (Wang, 2021).

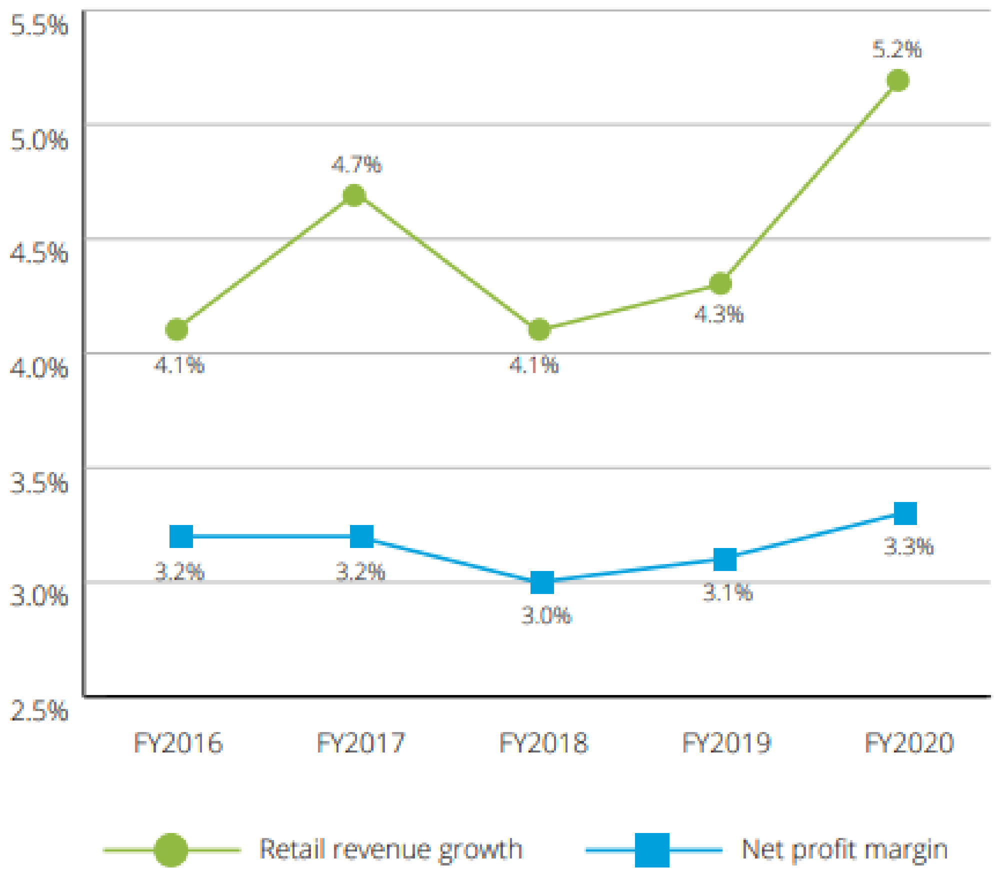
Amazon Company is in competition with its competitors in many sectors. Among these sectors, retail, distribution, logistics, informatics and e-commerce sectors are the main ones. Amazon is a sector leader both among the giants of the retail industry and in the field of e-commerce. In this respect, the retail industry, which constitutes a large part of its turnover, will be discussed while making the financial analysis of Amazon.

2.3.2 Retail Market

The retail sector has made a significant progress in the last 20 years due to the shift of marketing approach from product to consumer and the developments in technology and competition in the sector has gradually increased. Conceptually, retailing is defined as the whole of activities for the sale of goods and services directly to the final consumer for personal and family use (Dahana et al., 2019).

Looking at the global retail industry, according to Deloitte's 2022 report, the total turnover of the largest 250 retail companies is $5.1 trillion. The figure showing the percentage of change in the growth and net profit margins of these companies between the years 2016-2020 is presented below. In 2020, the revenue growth rate is 5.2%, and the net profit margin growth rate is 3.3% (Deloitte, 2023).

Figure 1. Five-year growth and profitability of Top 250 retailers in Global Powers of Retailing reports



Source: Deloitte, 2023

Amazon is in the second place in the retail sector after Wallmart and is the fastest growing retail company in the last 5 years.

E-commerce, which has developed rapidly in the world in recent years, has brought about changes in the way people shop and the business and service style of businesses. Retail e-commerce transaction volume reached $5.2 trillion in 2020 (Statista, 2023). Investment bank Goldman Sachs predicts that this rapidly growing volume of growth will continue exponentially in the coming years. eBay, Amazon and Alibaba, which are the leading sites in the e-retail field, have achieved a constantly improving performance chart by doing very successful works in this sector, and have achieved great income in the retail sector with more than a thousand suppliers and more than millions of customers (Wang, 2021).

According to the Deloitte 2022 retail report, the 10 companies with the highest turnover from retail sales globally and the turnover information of these companies are presented below.

Table 2. 2020 Revenues of Top 10 Global Retailers

2020 Retail Revenue Rank	Name of Company	2020 Retail Revenue (US$M)	Parent Company/ Group Revenue (US$M)		Countries of Operation
1	Walmart Inc.	559,151	559,151	Hypermarket/ supercenter	26
2	Amazon	213,573	386,064	Non-Store	21
3	Costco Wholesale Corporation	166,761	166,761	Cash & carry/ Warehouse club	12
4	Schwarz Group	144,254	145,064	Discount store	33
S	The Home Depot, inc.	132,110	132,110	Home Improvement	3
4	The Kroger Co.	121,620	132,498	Supermarket	1
7	Walgreens Boots Alliance. Inch.	117,705	139,537	Drug store/pharmacy	9
8	Aldi Einkauf GmBH & Co.	117,047	117,047	Discount store	19
9	jo.com, Inc.	94,423	108,028	Non-store	1
10	Target Corporation	92,400	93,561	Discount Department Store	1

Source: Deloitte, 2023

The revenue and net income and revenue growth data of the top 10 retail companies are shown below.

Table 3. The Data of Revenue and Net Income Growth of Top 10 Global Retailers

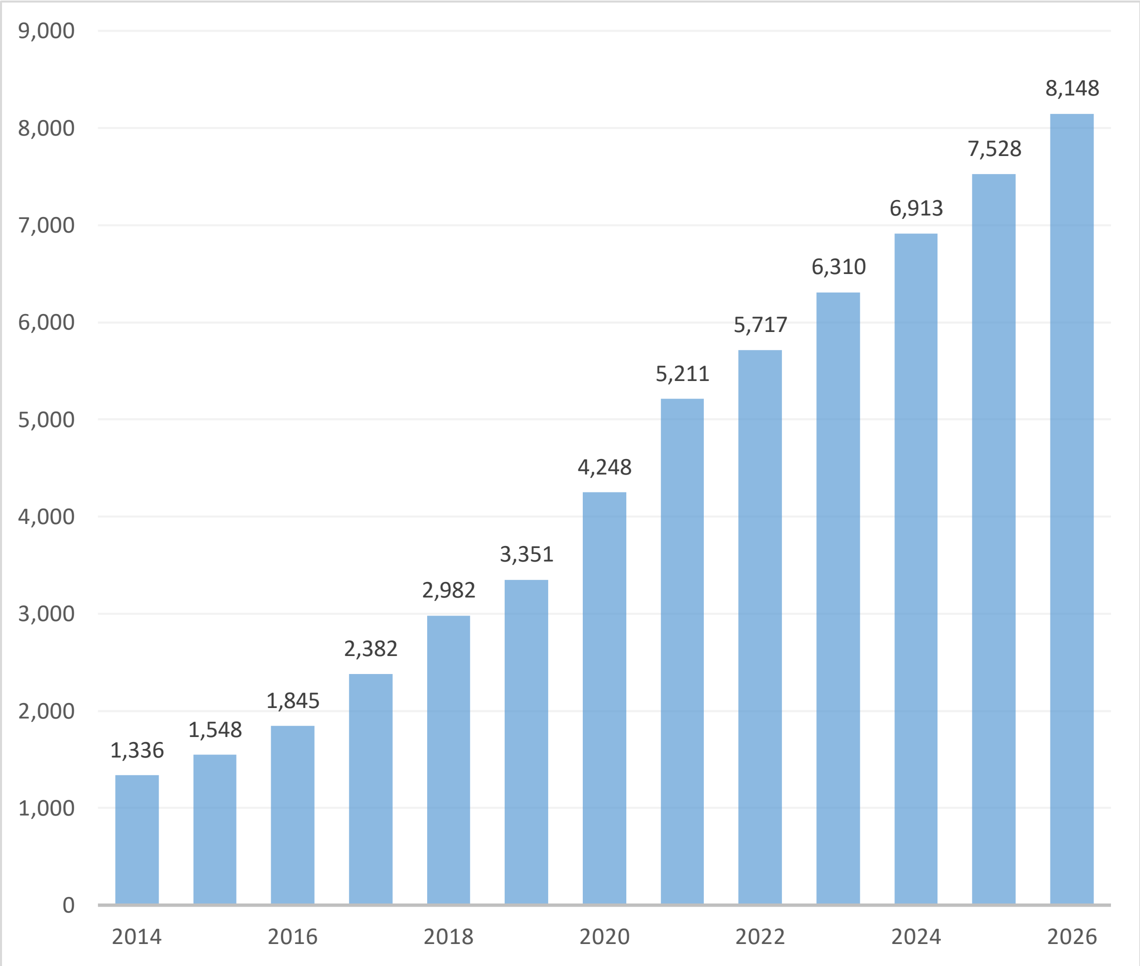
	Name of company	2015-2020 Retail Revenue Growth'	2020 retail revenue growth	2020 net profit margin'
1	Walmart Inc.	30%	6.7%	2.5%
2	Amazon	21.9%	34.8%	5.5%
3	Costco Wholesale Corporation	75%	9.2%	2.4%
4	Schwarz Group	7.8%	10.0%	n /a
S	The Home Depot, inc.	33%	19.9%	97%
4	The Kroger Co.	3.7%	82%	20%
7	Walgreens Boots Alliance. Inch.	5.6%	1.5%	0.3%
8	Aldi Einkauf GmBH & Co.	58%	8.1%	n /a
9	jo.com, Inc.	312%	27.6%	6.6%
10	Target Corporation	4.6%	198%	4.7%

Source: Deloitte, 2023

On the other hand, Amazon's retail operation only on the internet has made Amazon a leader in the e-commerce sector as well. Amazon, which makes online sales to 21 countries globally, also has an enormous distribution network with its Fulfillment centers and warehouses in the countries where it operates. Although internet commerce has been a fast-growing industry for the last 10 years, it has started to get ahead of traditional retailing after the Covid 19 pandemic. The size of the e-commerce sector, which was 1,336 billion dollars in 2104, showed a fourfold growth and reached 5,211 billion dollars in 2021. It is predicted that this growth will continue and reach 8,148 billion dollars in 2026 (Statista, 2023).

The change in the market size of the e-commerce part of the retail sector by years and the market growth predicted until 2026 are shown below.

Figure 2. Retail E-Commerce Sales Worldwide (Billion US Dollars)



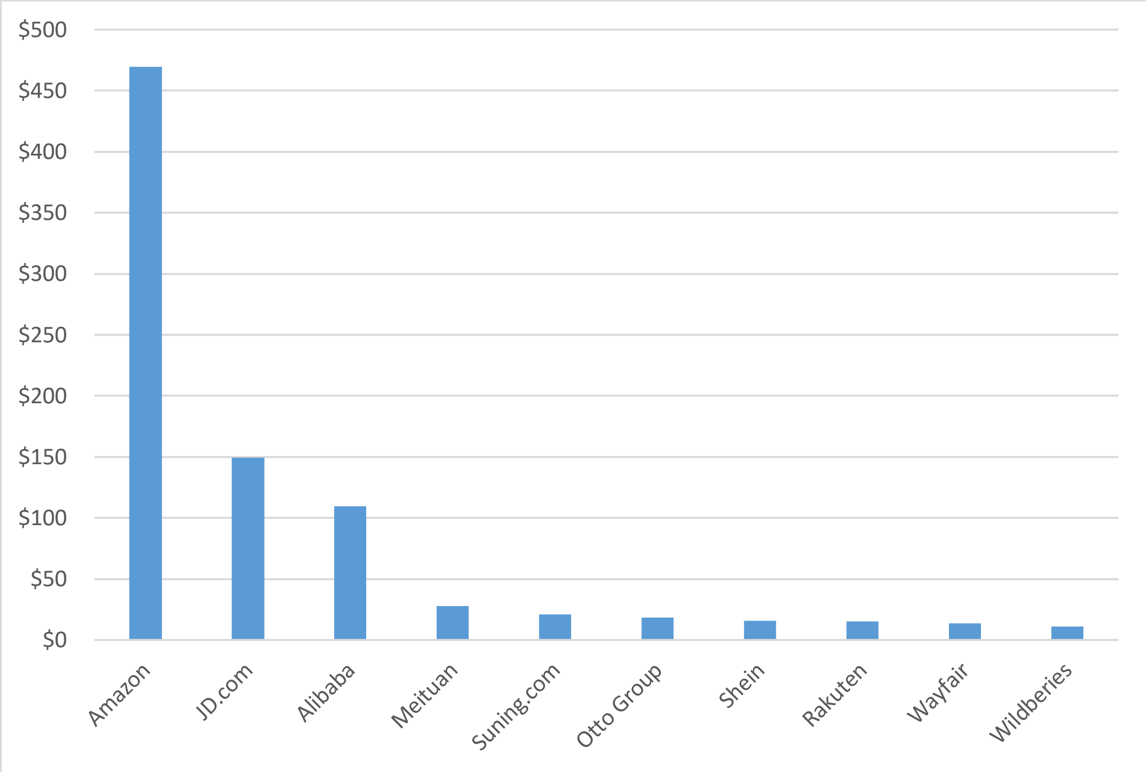
Source: Statista, 2023

Amazon is the world leader in e-commerce. In terms of company size, it has more than four times the size of its closest global competitor, Alibaba.com. Alibaba's 2021 turnover was $109 billion, while Amazon's e-commerce turnover was $468 billion.

In addition to its online storefronts, Amazon also earns profit from its retail stores, third-party merchant services, subscription services, and AWS. 51 percent of Amazon's total revenue derives from its online shops, which account for the majority of its net sales. The company's third-party seller services represent the second major source of revenue after that. This covers commissions, shipping costs, and other fulfillment costs.

The 10 companies with the highest market share in e-commerce according to 2021 data are shown below.

Figure 3. Top 10 E-Commerce Companies by Revenue (billion dollars)



Source: Statista, 2023

In terms of revenue, Amazon is currently by far the biggest e-commerce firm in the world. In terms of sales, it's even competing with Walmart for the title of largest corporation in the world and is set to overtake the retail behemoth shortly. Amazon came in second to Walmart in terms of sales in 2021 with $470 billion, but historically, Amazon has seen far higher growth.

Amazon outperforms Walmart in terms of gross merchandise volume (GMV) thanks to its 3rd marketplace, which now accounts for the bulk of site sales, but it behind Chinese e-commerce major Alibaba in that area.AWS, cloud computing, database, storage, and other services account for 10-15% of the remaining income, followed by 5% from advertising services. The firm obtains around 80% of its overall revenue from its physical and digital retail activities.

3 PRACTICAL PART

3.1 Horizontal Analysis

In the evaluation of horizontal analysis, a method in the form of horizontal analysis of current and fixed assets, short-term and long-term liabilities, shareholders' equity and income statement, respectively, has been followed, starting from the top of the balance sheet.

3.1.1 Current Assets

The change in the current assets of the company between 2012 and 2021 is shown in the table below.

Table 4. Change in Current Assets (2012-2021) of Amazon

Annual Data Millions of US$	Cash On Hand	Receivables	Inventory	Total Current Assets
2012	$11,448	$3,817	$6,031	$21,296
2013	$12,447	$4,767	$7,411	$24,625
2014	$17,416	$5,612	$8,299	$31,327
2015	$19,808	$5,654	$10,243	$35,705
2016	$25,981	$8,339	$11,461	$45,781
2017	$30,986	$13,164	$16,047	$60,197
2018	$41,250	$16,677	$17,174	$75,101
2019	$55,021	$20.816	$20.497	$96,334
2020	$84,396	$24,542	$23,795	$132,733
2021	$96,049	$32,891	$32,640	$161,580

Source: SEC, 2023

When we look at the current assets of Amazon between 2012 and 2021, it is seen that there is an increase of about 8 times. Its current assets, which were 21 billion US$ in 2012, reached 161 billion dollars in 2021. Despite a 5-fold increase in inventory, cash volume increased approximately 9 times and receivables increased approximately 10 times.

It is seen that there has been a significant increase in the current assets of the company within 10 years. It is seen that the current assets, which have been in a regular increasing trend in 10 years, have experienced a rapid increase since 2019. While the increase in receivables and inventory are close to each other, it is understood that the company's cash on hand assets have increased by almost two times in the last two years.

3.1.2 Total Assets

When the table given below is examined, it is seen that there has been an increasing trend in Amazon's total assets since 2012, and a total asset of 420 billion dollars have occurred by 2021. The figure showing the total asset change over the last 10 years is shown below.

Table 5. Change in Total Assets (2012-2021) of Amazon

Annual Data Millions of US$	Total Assets
2012	$32,555
2013	$40,159
2014	$54,505
2015	$64,747
2016	$83,402
2017	$131,310
2018	$162,648
2019	$225,248
2020	$321,195
2021	$420,549

Source: SEC, 2023

When the change in the total assets of the company is analyzed, a significant increase is observed in the last 10 years. It is seen that the total assets, which were 32 billion dollars in 2012, reached the level of 420 billion dollars by 2021. Again, as in current assets, it is seen that there has been a nearly two-fold increase after 2019.

3.1.3 Short-Term Liabilities

The data of the company's short-term liabilities between 2012 and 2021 and the change are shown in the table below. Amazon's short-time assets also rose in line with the company's growth. It is seen that the increase especially in the last 3 years is quite high. The short-term liabilities of the Amazon Company were around 19 billion dollars in 2012, and by 2021, this number has reached the level of 142 billion dollars. The figure showing the change in the company's short-term liabilities in the last 10 years is shown below.

Table 6. Change in Short Term Liabilities (2012-2021) of Amazon

Annual Data Millions of US$	Short Term Liabilities
2012	$19.002
2013	$22,980
2014	$42,948
2015	$33,887
2016	$43,816
2017	$57,885
2018	$68,391
2019	$87,810
2020	$126,385
2021	$142,266

Source: SEC, 2023

It is observed that the company's short-term liabilities are directly proportional to the growth rate of its assets, and there is a growth trend here as well.

3.1.4 Long Term Liabilities

A long-term liability is a debt incurred as a result of a past occurrence that is not payable within a year of the balance sheet's date. It is seen that the long-term liabilities of the company have showed a significant increase in the last 10 years. When the table above is examined, it is seen that the company has entered into a long-term liability of approximately 100 billion dollars in the last 4 years. This situation also shows that the company has made a big increase in its long-term investments in the last 4 years. The figure below is showing the change of long term liabilities within last 10 years.

When the long-term liabilities of the company are analyzed, it is seen that there has been a great increase especially since 2016, and from 2019 to 2021, as in other metrics, there has been a tremendous increase in long-term liabilities.

The data on the long-term liabilities of the company are shown below.

Table 7. Change in Long Term Liabilities (2012-2021) of Amazon

Annual Data Millions of US$	Long Term Debt	Other Non-Current Liabilities	Total Long Term Liabilities
2012	$3,064	$2,277	$5,361
2013	$3,191	$4,242	$7,433
2014	$8,265	$7,410	$15,675
2015	$8,227	$9,249	$17,476
2016	$7,694	$12,607	$20,301
2017	$24,743	$20.975	$45,716
2018	$23,495	$17,563	$50,708
2019	$23,414	$12,171	$75,376
2020	$31,616	$17,017	$101,406
2021	$48,744	$23,643	$140,038

Source: SEC, 2023

3.1.5 Equities

As in other financial indicators of Amazon company, there has been a rapid increase in equity values in the last 10 years. The company's equity, which was 8 billion dollars in 2012, increased tremendously to 138 billion dollars in 2021. The rapid rise, especially since 2019, has increased the company's equity more than doubled in two years. The company's equity data between 2012 and 2021 are shown below.

When the table below is examined, it is seen that the equities of the company have increased from 8 billion dollars to 138 billion in the last 10 years. Equity has increased by 130 billion in 10 years. The 10-year equity's change graph is shown below. In the last 10 years, Amazon has greatly increased its revenues with its investments in products and services such as cloud communication services (AWS), digital advertising and Amazon Prime, resulting in a significant increase in the company's equity. In addition, we see that the company has expanded globally in these years. Amazon's expansion activities as well as strategic acquisitions have also been effective in the growth of the company. It is a fact that besides the growth caused by the return of investments made by Amazon, the Covid 19 process also has a significant benefit in the development of e-commerce sites. Due to the restrictions applied in this period, consumers' orientation to online shopping was effective in Amazon's rapid growth in this period.

Table 8. Change in Shareholders Equities (2012-2021) of Amazon

Annual Data Millions of US$	Shareholder Equity
2012	$8,192
2013	$9,746
2014	$10,741
2015	$13,384
2016	$19,285
2017	$27,709
2018	$43,549
2019	$62,060
2020	$93,404
2021	$138,245

Source: SEC, 2023

There is a serious increase in the company's 10-year equity data, as in the values of assets and liabilities. It is seen that the equity value, which was 8 billion dollars in 2012, reached 138 billion dollars by 2021 with an increase of almost 15 times. As can be seen from the figure above, the equity value of the company has increased exponentially, especially since 2019.

3.1.6 Sales and Profit

When the revenue and profit rates of the Amazon Company are examined, it is seen that the company has very low net profits from 2012 to 2021. The rise in revenues, particularly in 2020 when interest in online shopping grew as a result of more stringent regulations throughout the world, may be credited to the company's higher net income.

Also, the rise in net income can be attributed to Amazon's foreign business now making a profit as opposed to previous years when it was only losing money. This situation resulted from both the profit margin applied by the company and the operating expenditures. However, it is seen that significant increases in both the turnover and net profit of the company have occurred since 2018. The change in the sales and profit values of the company is presented below in table.

When the table below, which shows the turnover, cost of goods and profit of the company, is examined, it is seen that there has been an 8-fold increase in revenue, a 6-fold increase in costs, a 40-fold increase in operating profit, and net profit from negative to 33 billion dollars.

Table 9. Change in Revenue and Incomes (2012-2021) of Amazon (Million USD)

Annual Data Millions of US$	Revenue	Cost Of Goods Sold	Gross Profit	Operating Income	Net Income
2012	$61,093	$45,971	$15,122	$676	-$39
2013	$74,452	$54,181	$20.271	$745	$274
2014	$88,988	$62,752	$26,236	$178	-$241
2015	$107,006	$71,651	$35,355	$2,233	$596
2016	$135,987	$86,265	$47,722	$4,186	$2,371
2017	$177,866	$111,934	$65,932	$4,106	$3,033
2018	$232,887	$139,156	$93,731	$12,421	$10,073
2019	$280,522	$165,536	$114,986	$14,541	$11,588
2020	$386,064	$233,307	$152,757	$22,899	$21,331
2021	$469,822	$272,344	$197,478	$24,879	$33,364

Source: SEC, 2023

While the net profit of the company was negative in 2012, it is seen that it reached 33 billion dollars in 2021. The enormous increase in all the values of the company, especially in the last 3 years, draws attention.

3.2 Vertical Analysis

While performing the vertical analysis of the Amazon company, firstly, the proportional changes of all asset data according to the total assets will be included, and then the change in the place occupied by the company's liabilities within the total liabilities will be examined.

3.2.1 Vertical Analysis of Assets

Information on the proportional change in the total assets of the company's asset values between 2012 and 2021 is presented below.

Table 10. Vertical Analysis of Assets (2012-2021) of Amazon (%)

Annual Data	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash On Hand	35.2	31.0	32.0	30.6	31.2	23.6	25.4	24.4	26.3	22.8
Receivables	11.7	11.9	10.3	8.7	10.0	10.0	10.3	9.2	7.6	7.8
Inventory	18.5	18.5	15.2	15.8	13.7	12.2	10.6	9.1	7.4	7.8
Total Current Assets	65.4	61.3	57.5	55.2	54.9	45.8	46.2	42.8	41.3	38.4
Property, Plant, And Equipment	21.7	27.3	31.1	33.7	34.9	35.7	38.0	32.3	35.2	38.1
Goodwill And Intangible	7.8	6.6	6.1	5.8	4.5	10.2	8.9	6.6	4.7	3.7
Other Long-Term Assets	5.1	4.8	5.3	5.3	5.7	6.8	6.9	7.2	7.1	6.5
Total Long-Term Assets	34.6	38.7	42.5	44.9	45.1	54.2	53.8	57.2	58.1	61.6
Total Assets	100	100	100	100	100	100	100	100	100	100

Source: Own Calculations

The company's assets within its total assets are examined, it is seen that there has been a regular decrease in its current assets since 2012, while an increase in its long-term assets. The ratio, which was approximately 35-65 percent in favor of current assets in 2012, changed completely in favor of long-term assets at a rate of 62-38 percent in 2021.

3.2.2 Vertical Analysis of Liabilities

Information on the proportional change in the total liabilities of the company between 2012 and 2021 is presented below.

Table 11. Vertical Analysis of Liabilities (2012-2021) of Amazon (%)

Annual Data Millions of US$	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Current Liabilities	78.00	75.56	64.18	65.98	68.34	55.87	57.42	41.56	55.48	50.39
Long Term Debt	12.58	10.49	18.89	16.02	12.00	23.88	19.73	14.35	13.88	17.27
Other Non-Current Liabilities	9.35	13.95	16.93	18.01	19.66	20.25	14.75	7.46	7.47	8.38
Total Long Term Liabilities	22.00	24.44	1.86	34.02	31.66	44.13	42.58	46.19	44.52	49.61
Total Liabilities	100	100	100	100	100	100	100	100	100	100

Source: Own Calculations

When the company's liabilities are analyzed proportionally, it is seen that there is a similar picture to its assets. It is observed that the company gradually reduced its short-term liabilities by taking on more long-term liabilities within 10 years. While there was a ratio of 78-22 percent in favor of short-term liabilities in 2012, this ratio increased to approximately 50-50 in 2021.

3.3 Ratio Analysis

As mentioned before, ratio analysis makes it possible to make evaluations on various issues by comparing the financial data of the firm with each other. Ratio analysis is the most used analysis type in terms of both the number of analyzes and the importance of the results.

Ratio analysis of Amazon financial statements and balance sheets will be carried out in accordance with this classification;

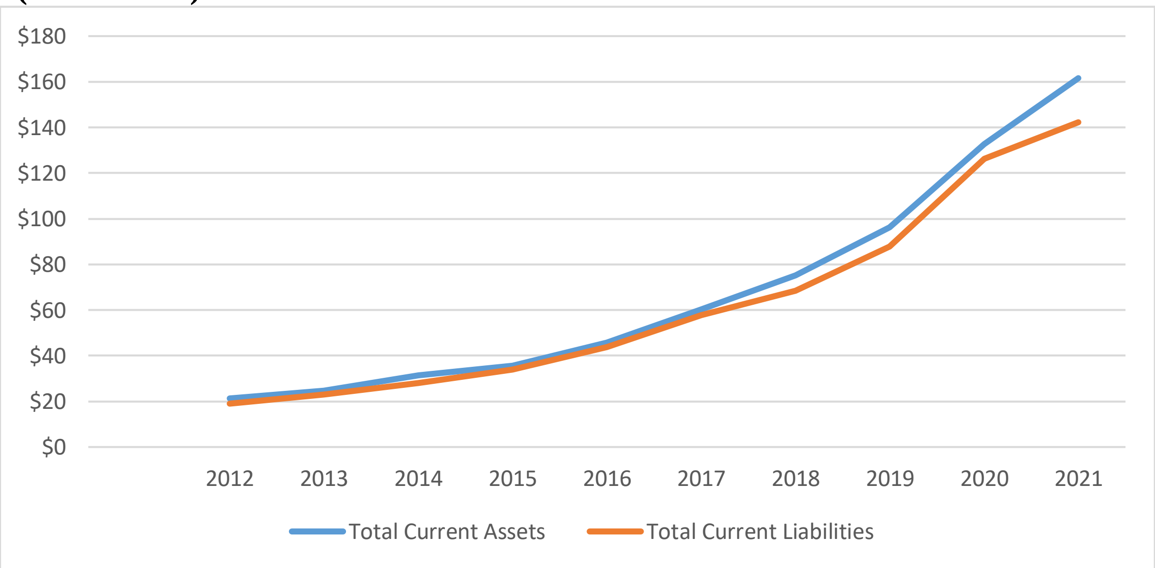
- Liquidity Analysis,
- Profitability Analysis,
- Financial Structure Analysis,
- Efficiency Analysis.

3.3.1 Liquidity Analysis

3.3.1.1 Current ratio

As explained in detail in other sections, a firm's current ratio is obtained from the ratio between its short-term liabilities and current assets. In this way, it is understood to what extent the company can meet its short-term liabilities with its current assets. The short-term liabilities and current assets of Amazon between 2012 and 2021 are shown below.

Figure 4. Short term Liabilities and Current Assets (2012-2021) of Amazon (Billion USD)



Source: Own Calculations

When the figure above is examined, it is seen that the total current assets and total current liabilities, which were close to each other until 2017, started to diverge in favor of current assets in the last 5 years. This shows the positive development in the financial performance of the company in the last 5 years.

Table 12. Current Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Current Ratio	1.12	1.07	1.12	1.05	1.04	1.04	1.10	1.10	1.05	1.14

Source: Own Calculations

It is seen that the current ratios of Amazon has been in the range of 1.04-1.14 between 2012 and 2021. It is seen that it is the lowest in 2015 and 2016, and the highest in 2021. These values show that the company is able to meet its short-term liabilities with its current assets. Although the current ratio value is very close to 1 in 2016 and 2017, the company has not faced any risk in terms of current ratio in the last year.

3.3.1.2 Acid Test Ratio

The Acid Test Ratio, which is calculated by subtracting inventory from current assets and proportioning them with short-term liabilities, is a clearer indicator as current assets become liquid and eliminate the risk of inventories turning into cash.

The calculated acid test ratio information of Amazon is presented below.

Table 13. Acid Test Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Acid Test Ratio	0.80	0.75	0.82	0.75	0.78	0.76	0.85	0.86	0.86	0.91

Source: Own Calculations

In general, it is desired that the acid test ratio is 1 or above 1. However, it is seen that the acid test ratio ratios of the Amazon company are below 1 over a 10-year period. This shows that the company cannot meet its short-term liabilities without converting the products in its inventory into cash.

3.3.1.3 Cash Ratio

Cash Ratio is a ratio that shows the extent to which companies can meet their short-term liabilities with the cash they have. The cash ratios calculated for the last 10 years of the Amazon Company are presented below.

Table 14. Cash Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash Ratio	0.54	0.51	0.56	0.55	0.57	0.51	0.55	0.57	0.64	0.59

Source: Own Calculations

Ideally, the cash ratio should be in the range of 0.5-1. It is seen that Amazon's cash rates for the last 10 years are generally above 0.5. It is also noteworthy that in the last 3 years, it has increased compared to other years.

3.3.2 Profitability Analysis

3.3.2.1 Gross Profit Margin

Gross Profit Margin shows the amount remaining after the company's product costs are subtracted. Since the margin that the company puts on the products it sells affects all other profits, it provides convenience in terms of understanding the investment and budget of the company in future years.

When an organization has paid for its goods and services, the gross profit margin calculates the percentage of sales per dollar that is left over. If the cost of sales is minimal, the bigger the ratio, the better it is for the form.

In addition, the remaining burden revenues also cover expenses such as R&D and operating expenses after the product costs. The table showing total revenue and product costs of Amazon between 2012 and 2021 are shown below.

Table 15. Revenues, Cost of Sales and Gross Profit (2012-2021) of Amazon

	Revenue	Cost Of Goods Sold	Gross Profit
2012	$61,093	$45,971	$15,122
2013	$74,452	$54,181	$20.271
2014	$88,988	$62,752	$26,236
2015	$107,006	$71,651	$35,355
2016	$135,987	$86,265	$47,722
2017	$177,866	$111,934	$65,932
2018	$232,887	$139,156	$93,731
2019	$280,522	$165,536	$114,986
2020	$386,064	$233,307	$152,757
2021	$469,822	$272,344	$197,478

Source: SEC, 2023

Looking at the company's revenue, cost of goods and Gross Profit values since 2012, it is seen that revenue has increased 7.7 times, cost of goods 5.9 times and gross profit 13 times in 9 years. Looking at these values, it is seen that the company has made a significant increase in its profit margin in the last 9 years. The Gross Profit Margin ratios applied by the company between 2012 and 2021 are given in the table below.

Table 16. Gross Profit Margins (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Gross Profit Margin	0.24	0.26	0.29	0.31	0.32	0.35	0.35	0.36	0.34	0.37

Source: Own Calculations

Gross Profit Margin shows how much profit the company puts on the product costs and the profit rates it derives from the products it sells. It is seen that the company's gross profit margin ratios have been in an increasing trend since 2012. The company, which had a profit margin of 24% in 2012, increased this rate to 37% in 2021.

3.3.2.2 Operating Profit Margin

Operating Profit Margin is the ratio obtained by deducting the operating expenses of the company. By this ratio, which is obtained by dividing the operating profit by the total revenue, it can be observed to what extent the expenses incurred by the company during its activities, excluding product expenses, are effective. Amazon's Revenues and operating expenses for the last 10 years are shown below.

Table 17. Revenues, Operating Expenses and Operating Profit (2012-2016) of Amazon

	Revenue	CoG Sold	R & D Expenses	SG&A Expenses	Other Income or Expenses	Operating Expenses	Operating Income
2012	$61,093	$45,971	$4,564	$9,723	-$159	$14,446	$676
2013	$74,452	$54,181	$6,565	$12,847	-$114	$19,526	$745
2014	$88,988	$62,752	$9,275	$16,650	-$133	$26,058	$178
2015	$107,006	$71,651	$12,540	$20.411	-$171	$33,122	$2,233
2016	$135,987	$86,265	$16,065	$27,264	-$167	$43,536	$4,186
2017	$177,866	$111,934	$22,620	$38,992	-$214	$61,826	$4,106
2018	$232,887	$139,156	$28,837	$52,177	-$296	$81,310	$12,421
2019	$280,522	$165,536	$35,931	$64,313	-$201	$100,445	$14,541
2020	$386,064	$233,307	$42,740	$87,193	$75	$129,858	$22,899
2021	$469,822	$272,344	$56,052	$116,485	-$62	$172,599	$24,879

Source: SEC, 2023

When the table is examined, it is seen that although the turnover of the company has increased 7.6 times in the last 9 years, there has been an increase of 12 times in R&D expenditures and 11 times in SG&A expenditures. However, it is seen that the company's operating profit has increased tremendously, especially since 2018. The operating Profit Margin values of the company are calculated and shown in the table below.

Table 18. Operating Profit Margins (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Operating Profit Margin	0.01	0.01	0.02	0.02	0.03	0.02	0.05	0.05	0.06	0.05

Source: Own Calculations

When the operating profit margin of Amazon examined, it is observed that the profitability after operating expenses remained quite low, especially in the 2012-2015 period due to SG&A and R&D expenses. However, it is seen that it has increased to the level of 5% in the last 4 years.

3.3.2.1 Net Profit Margin

The company after all expenditures knows the income left as net profit. The net profit of the company is an important indicator of the company's growth rate, tax payments and non-operating expenses, and ultimately what the company's income can be used in the coming years. Net profit is also the amount that the company can give to its stakeholders or add to its capital.

The outcomes are always better the higher the net profit margin of the organization. A company's performance in terms of its earnings from sales is often measured by its net profit margin. For this reason, the primary values that the stakeholders who want to get information about the company look at are the net profits of the companies. The net profit margin is the profit rate that the company ultimately obtains after all its income and expenses. The table showing the revenue, non-operating expenses and net income of the Amazon between 2012 and 2021 is presented below.

Table 19. Taxes, Non-Operating Expenses and Net Profit (2012-2016) of Amazon

	Revenue	Total Non-Operating Income	Pre-Tax Income	Income Taxes	Income After Taxes	Cont. Opr. Income	Net Income
2012	$61,093	-$132	$544	$428	$116	-$39	-$39
2013	$74,452	-$239	$506	$161	$345	$274	$274
2014	$88,988	- $289	$.111	$167	- $278	-$241	-$241
2015	$107,006	-$665	$1,568	$950	$618	$596	$596
2016	$135,987	-$294	$3,892	$1,425	$2,467	$2,371	$2,371
2017	$177,866	-$300	$3,806	$769	$3,037	$3,033	$3,033
2018	$232,887	$1,160	$11,261	$1,197	$10.064	$10,073	$10,073
2019	$280,522	-$565	$13,976	$2,374	$11,602	$11,588	$11,588
2020	$386,064	$1,279	$24,178	$2,863	$21,315	$21,331	$21,331
2021	$469,822	$13,272	$38,151	$4,791	$33,360	$33,364	$33,364

Source: SEC, 2023

When we look at the table above, it is seen that the increase in the net profit of the company was at a remarkable rate especially in 2016 and 2018. The net profit of the company increased approximately 4 times in 2016 and 3 times in 2018. In addition to this, it is seen that there is a regular increase in net profit, which will be approximately 10 billion dollars every year between 2018-2021. The calculated net profit margin values of the company are shown below.

Table 20. Net Profit Margins (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Net Profit Margin	-0.0006	0.0037	-0.0027	0.01	0.02	0.02	0.04	0.04	0.06	0.07

Source: Own Calculations

It is seen that Amazon's net profit values were also negative until 2015, but increased from 2015. It is reached 7% in 2021. In particular, it is observed that the company's non-operating income and income from its ongoing operations increased during these dates, and thus, the net income value of the company exceeded the operating income value in the last 3 years.

3.3.2.2 Return on Equity

This ratio, which expresses how efficiently the company's equity is used, shows how many units of profit are obtained with 1 unit of equity. The table of ROE between 2012 and 2021 with the capital values and income values of the Amazon Company is shown below.

Table 21. Net Income, Equity and ROE (2012-2021) of Amazon

	Net Income	Equities	ROE
2012	-$39	$8,192	-0.0048
2013	$274	$9,746	0.03
2014	-$241	$10,741	-0.02
2015	$596	$13,384	0.04
2016	$2,371	$19,285	0.12
2017	$3,033	$27,709	0.11
2018	$10,073	$43,549	0.23
2019	$11,588	$62,060	0.19
2020	$21,331	$93,404	0.23
2021	$33,364	$138,245	0.24

Source: Own Calculations

It is seen that the ROE values of the company were at a negative level until 2015, as in other profitability ratios, but increased from 2015 to 24% in 2021.

3.3.2.1 Return of Assets

ROA value is a value that shows the success of the company in using its assets. This value, which is obtained by dividing the net profit obtained by the total assets, shows the ratio of the net profit to the assets. Amazon's net profit and total assets and ROA for the years 2012-2021 are shown below.

Table 22. Net Income, Total Assets and ROA (2012-2021) of Amazon

	Net Income	Total Assets	ROA
2012	-$39	$32,555	-0.0012
2013	$274	$40,159	0.01
2014	-$241	$54,505	0
2015	$596	$64,747	0.01
2016	$2,371	$83,402	0.03
2017	$3,033	$131,310	0.02
2018	$10,073	$162,648	0.06
2019	$11,588	$225,248	0.05
2020	$21,331	$321,195	0.07
2021	$33,364	$420,549	0.08

Source: Own Calculations

It is seen that the ROA values of the Amazon Company have been negative until 2015, and have been on the rise since 2015. As of 2021, it is at the level of 0.24.

3.3.3 Financial Structure Ratios

3.3.3.1 Financial Leverage Ratio

Financial leverage ratio is found from the ratio between the total liabilities of the company and the total assets. In general, the low financial leverage ratio is considered as an indicator that the firm's financial structure is reliable.

The financial leverage ratios of Amazon Company calculated between 2012 and 2021 are shown below.

Table 23. Total Liabilities, Total Assets and Financial Leverage Ratios (2012-2021) of Amazon

	Total liabilities	Total Assets	Financial Leverage Ratio
2012	$24,363	$32,555	0.75
2013	$30,413	$40,159	0.76
2014	$43,764	$54,505	0.8
2015	$51,363	$64,747	0.79
2016	$64,117	$83,402	0.77
2017	$103,601	$131,310	0.79
2018	$119,099	$162,648	0.73
2019	$163,186	$225,248	0.72
2020	$227,791	$321,195	0.71
2021	$282,304	$420,549	0.67

Source: Own Calculations

It is observed that the financial leverage ratio of the company has been at a high rate in the last 10 years, but has decreased in the last 4 years compared to other years. As of 2021, it is seen that the ratio of the total liabilities to its total assets is around 67%.

3.3.3.2 Equity Ratio

Equity is the second source after foreign resources in funding the assets of companies. For this reason, knowing at what rate the assets are covered from equity is also important in terms of understanding the financial structure of the companies. The equity ratio, which indicates the proportion of capital used that is entirely funded by shareholders' equity, is a complement to the total debt ratio. The ratios of debt to equity add up to one. The equity ratio is determined by dividing the company's equity by its assets.

The equity ratios of the Amazon Company were realized as follows between 2012 and 2021. The equity ratio is the exact opposite of the financial leverage ratio as a percentage. Therefore, it is seen that the shareholders' equity in the total assets of the company has been in the range of 20%-33% in the last 10 years and has increased in the last 4 years compared to other years.

Table 24. Total Equities, Total Assets and Equity Ratios (2012-2021) of Amazon

	Total Equities	Total Assets	Equity Ratio
2012	$8,192	$32,555	0.25
2013	$9,746	$40,159	0.24
2014	$10,741	$54,505	0.2
2015	$13,384	$64,747	0.21
2016	$19,285	$83,402	0.23
2017	$27,709	$131,310	0.21
2018	$43,549	$162,648	0.27
2019	$62,060	$225,248	0.28
2020	$93,404	$321,195	0.29
2021	$138,245	$420,549	0.33

Source: Own Calculations

3.3.3.3 Debt Ratio

The ratio of resources in the company's assets was examined in the financial leverage ratio and equity ratio. The relationship between these resources is also considered in the debt ratio. The relationship between liabilities and equity is calculated in the debt ratio. A statistic called the debt ratio calculates a company's overall debt as a proportion of its asset value. The solvency of the business may be determined by looking at the debt-to-total-assets ratio, interest income, and the coverage of cash debt.

A high ratio of debt suggests that a business is heavily leveraged and may have taken on more debt than it can comfortably repay.

The indebtedness rates of the Amazon Company in the last 10 years are shown below. As can be seen from the table given above, it is seen that the Amazon Company mostly provides its resources from foreign sources. However, in the last 4 years, this rate shows that there has been a slight shift to the equity side.

Table 25. Total Equities, Total Assets and Debt Ratios (2012-2021) of Amazon

	Total Equities	Total Liabilities	Dept Ratio
2012	$8,192	$24,363	2.97
2013	$9,746	$30,413	3.12
2014	$10,741	$43,764	4.07
2015	$13,384	$51,363	3.84
2016	$19,285	$64,117	3.32
2017	$27,709	$103,601	3.74
2018	$43,549	$119,099	2.73
2019	$62,060	$163,186	2.63
2020	$93,404	$227,791	2.44
2021	$138,245	$282,304	2.04

Source: Own Calculations

3.3.3.4 Short Term Liabilities/Total Assets

This ratio shows us how much space short-term liabilities take up in total assets. The ratio of short-term debt to total assets indicates the proportion of the company's total assets that are funded by loans and financial obligations with maturities of one year or less. The ratio of Amazon's short-term liabilities to total assets in the last 10 years is shown below.

Table 26. Short Term Liabilities / Total Assets (2012-2021) of Amazon

	Short Term Liabilities	Total Assets	Short Term Liabilities ./ Total Assets
2012	$19.002	$32,555	0.58
2013	$22,980	$40,159	0.57
2014	$28,089	$54,505	0.52
2015	$33,887	$64,747	0.52
2016	$43,816	$83,402	0.53
2017	$57,883	$131,310	0.44
2018	$68,391	$162,648	0.42
2019	$87,812	$225,248	0.39
2020	$126,385	$321,195	0.39
2021	$142,266	$420,549	0.34

Source: Own Calculations

It is seen that the company's short-term liabilities occupy an important place in its total assets, but this ratio is on a regular basis from 2012 to 2021. It is seen that the rate, which was 58% in 2012, decreased to 34% in 2021.

3.3.3.5 Long Term Liabilities/Total Assets

This ratio is used to understand how much of a company's total long-term liabilities take up in their total assets. A measure of the proportion of a company's assets funded by long-term debt, which includes loans and other financial commitments lasting longer than one year, is the long-term debt-to-total-assets ratio. The table showing the situation of Amazon's total liabilities between 2012 and 2021 in its total assets is shown below.

Table 27. Long Term Liabilities / Total Assets (2012-2021) of Amazon

	Long Term Liabilities	Total Assets	Short Term Liabilities ./ Total Assets
2012	$5,361	$32,555	0.16
2013	$7,433	$40,159	0.19
2014	$15,675	$54,505	0.29
2015	$17,476	$64,747	0.27
2016	$20,301	$83,402	0.24
2017	$45,716	$131,310	0.35
2018	$50,708	$162,648	0.31
2019	$75,376	$225,248	0.33
2020	$101,406	$321,195	0.32
2021	$140,038	$420,549	0.33

Source: Own Calculations

It is observed that the ratio of the company's long-term resources to its total assets occupies less space than short-term liabilities, but this ratio has been in an increasing trend since 2012. It is seen that the rate increased from 16% in 2012 to 33% in 2021.

3.3.3.6 Ratio of Short-Term and Long Term Liabilities to Total Liabilities

This ratio shows us the borrowing structure of companies. The ratio of short-term debts to long-term debts is very important in terms of showing the company's payment obligations.

The ratios of Amazon's short-term and long-term liabilities to total liabilities between 2012 and 2021 are shown below.

Table 28. Long/Short Term Liabilities / Total Liabilities (2012-2021) of Amazon

	Long Term Liabilities	Short Term Liabilities	Short Term Liabilities ./ Total Liabilities	Long Term Liabilities ./ Total Liabilities
2012	$5,361	$19.002	0.78	0.22
2013	$7,433	$22,980	0.76	0.24
2014	$15,675	$28,089	0.64	0.36
2015	$17,476	$33,887	0.66	0.34
2016	$20,301	$43,816	0.68	0.32
2017	$45,716	$57,883	0.56	0.44
2018	$50,708	$68,391	0.57	0.43
2019	$75,376	$87,812	0.54	0.46
2020	$101,406	$126,385	0.55	0.45
2021	$140,038	$142,266	0.5	0.5

Source: Own Calculations

It is observed that the liabilities of the company have increased in favor of long-term liabilities since 2012. By 2021, this ratio has been equalized as 50-50.

3.3.3.7 Long Term Liabilities /Capitalization Ratio

This ratio shows us how much long-term liabilities occupy in the capital structure of the firm (the sum of long-term liabilities and equity). In this way, we can understand to what extent the capital structure of the firm consists of debt. We can determine how much of the firm's capital structure is made up of debt.

Amazon's long-term debt and capitalization ratios over the last 10 years are shown below.

Table 29. Long-term Liabilities / Capitalization Ratios (2012-2021) of Amazon

Years	Long Term Liabilities/ Capitalization
2012	0.4
2013	0.43
2014	0.59
2015	0.57
2016	0.51
2017	0.62
2018	0.54
2019	0.55
2020	0.52
2021	0.5

Source: Own Calculations

When the table above is examined, it is seen that the ratio of the company's long-term liabilities in its capital structure increased until 2017 but decreased since 2017. However, this rate, which was 50% as of 2021, is still higher than in 2012.

3.3.3.8 Long Term Assets/ Capitalization Ratio

This ratio shows us the status of fixed assets according to the capital structure of the company. The capital structure of Amazon's fixed assets in the 2012-2021 range is shown below.

Table 30. Long-term Assets/ Capitalization Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Long Term Assets/ Capitalization	0.83	0.90	0.88	0.94	0.95	0.97	0.93	0.94	0.96	0.93

Source: Own Calculations

The total assets of the Amazon Company and its capital structure are close to each other. This rate has increased from 2012 to 2021 and is at the level of 93% as of 2021. It is seen that the highest level in the last 10 years was 97% in 2017.

3.3.4 Efficiency Ratios

With the efficiency ratios, an idea can be obtained whether the companies are using their assets and liabilities effectively or not. With the help of this analysis, it will be understood better whether the Amazon Company uses its resources effectively.

3.3.4.1 Active Turnover Ratio

Active Turnover Ratio will show us how effectively the company uses its assets. This result, which is obtained by dividing the net turnover of the company with its assets, calculates the rate at which the sales of the company are converted into assets and thus the turnover rate. The table showing the asset turnover rates of the Amazon Company between 2012 and 2021 is presented below.

Table 31. Active Turnover Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Active Turnover Ratios	1.88	1.85	1.63	1.65	1.63	1.35	1.43	1.25	1.20	1.12

Source: Own Calculations

It is seen that the active ratios of Amazon are in the decrease trend since 2012. However, it is seen that the average asset turnover rate of the company is high.

3.3.4.2 Current Asset Turnover Rate

The turnover rate of the company's current assets is also calculated by the ratio of current assets to net sales. The table showing the turnover rates of Amazon's current assets between 2012 and 2021 is presented below.

Table 32. Current Assets Turnover Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Current Assets Turnover Ratios	2.87	3.02	2.84	3.00	2.97	2.95	3.10	2.91	2.91	2.91

Source: Own Calculations

Although there is no certain base value in the current asset turnover rate, and it may differ according to the operating policies of each sector or, more specifically, each company. When we look at the ratios of Amazon Company, we can say that it has three times as much sales revenue as its current assets, in other words, it makes 3 units of sales for 1 unit of current assets.

3.3.4.3 Stock Turnover Ratio

Unlike other calculations, companies' inventory turnover rates are compared with cost of sales, not net sales. This ratio, which is obtained by dividing the cost of sales of the companies by the two-year inventory average, gives us the turnover rate of the company's cost of sales.

The table showing the stock turnover rates of Amazon between 2012 and 2021 is presented below.

Table 33. Stock Turnover Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Stock Turnover Ratios	8.34	8.06	7.99	7.73	7.95	8.14	8.38	8.79	10.53	9.65

Source: Own Calculations

It is seen that the stock turnover rate of the company was at a certain average between 2012 and 2018, but started to rise seriously since 2019. It is seen that the highest level occurred in 2020.

3.3.4.4 Receivable Turnover Rate

One of the most important cash sources of businesses is the receivables. The problems experienced in the returning of receivables force businesses to use financial loans, and may even result in their liquidation in larger returning problems. Therefore, the collecting ability of receivables should be well analyzed.

The table showing the receivable turnover rates of Amazon between 2012 and 2021 is presented below.

Table 34. Receivable Turnover Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Receivable Turnover Ratios	19.13	17.35	17.15	19.00	19.44	16.54	15.61	14.96	17.02	16.36

Source: Own Calculations

Although the receivables turnover rate of the company has decreased in the last 4 years, it is observed that it is generally high. It is at the level of 16.36 as of 2021, which shows us that the company can collect its receivables within 22 days in 2021.

3.3.4.5 Non-Current Assets Turnover Rate

It is a ratio used to obtain clues, not as a determinant of the effectiveness of fixed assets. The reason why it is not deterministic is that the fixed assets differ from company to company in terms of their field of activity and the depreciation amounts are variable. As mentioned before, the ratio will be low in companies that need high level of fixed assets (usually producing) in their asset structuring due to their field of activity.

The table showing the non-current asset turnover ratios of Amazon between 2012 and 2021 is presented below. Although the turnover rate of the non-current assets of the

Amazon Company was very high in 2012, it is observed that it decreases regularly every year and falls to the level of 2.11 by 2021.

Table 35. Non-Current Assets Turnover Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Non-Current Assets Turnover Ratios	6.41	5.56	4.60	4.10	4.08	3.27	2.94	2.59	2.45	2.11

Source: Own Calculations

3.3.4.6 Equity Turnover Rate

Equity turnover rate is also an indicator that shows us at what rate the company's equity has turned into sales. The table showing the equity turnover rates of Amazon between 2012 and 2021 is presented below.

Table 36. Equity Turnover Ratios (2012-2021) of Amazon

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Equity Turnover Ratios	7.66	8.30	8.69	8.87	8.33	7.57	6.54	5.31	4.97	4.06

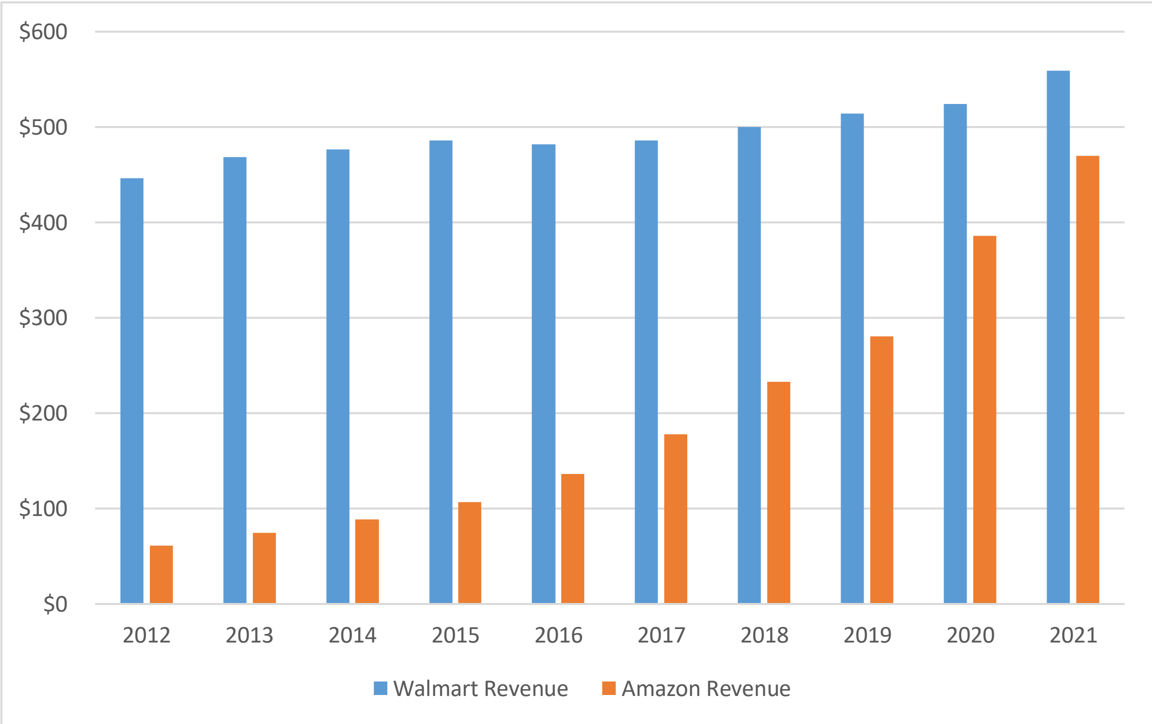
Source: Own Calculations

It is seen that the return of the equity of the Amazon Company to sales, that is, the speed of the equity turnover, has decreased in the last 4 years compared to other years. The equity turnover rate, which was 7.66 in 2012, reached 4.06 in 2021.

4 RESULTS AND DISCUSSION

In the financial analysis, it has been seen that Amazon's turnover has increased nearly 8 times in the last 10 years and its net profit has grown nearly 6 times since 2015, although it was negative between 2012 and 2014. When we compare the turnovers of Walmart, which is Amazon's closest competitor in the retail sector, and Amazon, we see a figure like the one below.

Figure 5. Comparison of Revenue Growth of Amazon and Walmart (Billion USD)

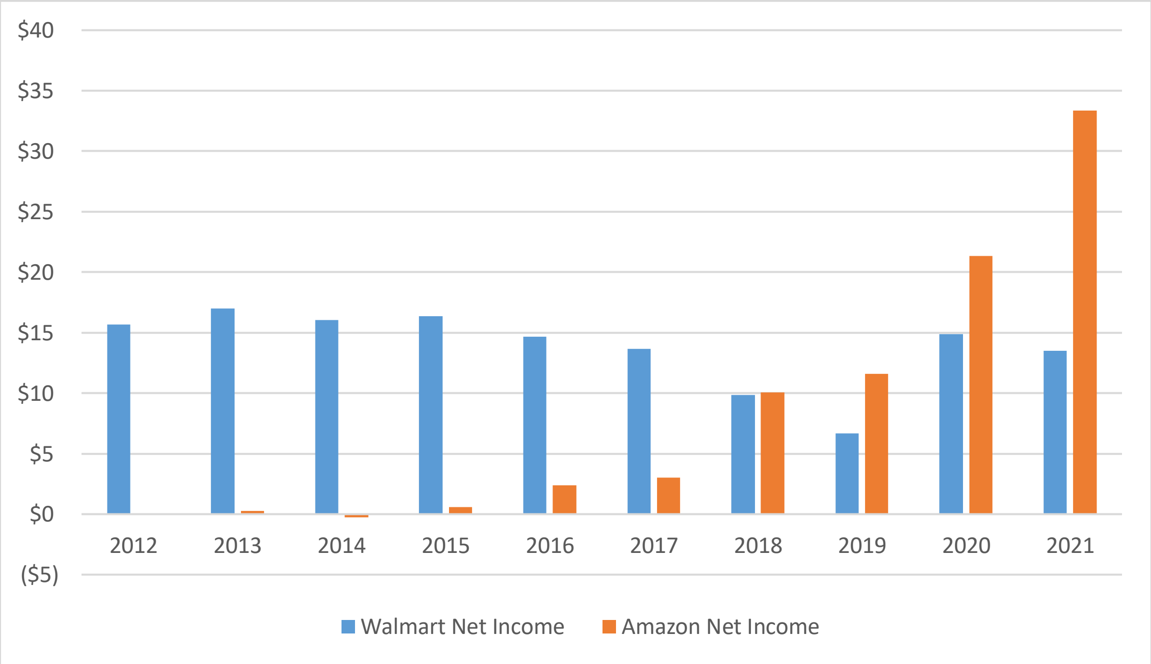


Source: Yahoo Finance, 2023

As can be seen from the figure shown above, Amazon's growth adventure in the market has taken place very quickly in the last 10 years.

When we compare the net profits of both companies, it is seen that Amazon has surpassed Walmart in the last 4 years. The change in the net profits of both companies in the last 10 years is shown below. As seen in the figure above, Amazon is below Walmart with a net profit of close to 20 billion as of 2021. Looking at the calculated liquidity ratios of the Amazon Company, it is seen that the current assets of the company can meet its short-term liabilities. However, as can be seen from the acid test ratio found by removing the inventory from current assets, the company is able to meet its short-term liabilities with non-inventory current assets. This is because the company has a large amount of inventory, as it is a retail company. In companies operating in developed countries, it is desired that the Current Ration is close to 2 in general, and the Acid Test Ratio is above 1. It is seen that Amazon is not in the desired situation in both ratios. However, there has been an increase in both rates in the last 4 years. The cash ratio being in the range of 0.5-1 is generally accepted in terms of the cash situation of the company. Amazon seems to meet this situation.

Figure 6. Comparison of Net Income Growth of Amazon and Walmart (Billion USD)



Source: Yahoo Finance, 2023; Own Calculations

When we compare the liquidity ratios of the company with the sectoral averages of the retail sector, it is seen that the current ratio of the sector is in the range of 1.10-1.35 between 2012-2021, therefore, the current ratio of Amazon is below the average. However, the company's acid test ratio and cash ratios are above the industry average. As of 2021, the industry average of acid test ratio is 0.69, and the average of cash ratio is 0.30. This shows that the company works with a lower inventory compared to the industry in general. In the analysis made by the CFA Journal according to the companies' 2020 annual reports, the industry average was calculated as 1.186 for current ratio and 0.831 for acid test ratio. Amazon's current ratio is 1.05 and acid test ratio is 0.862 (Cfajournal, 2023). As can be seen from the CFA Journal's 2020 calculations, Amazon is below average in terms of current ratio and above average in terms of acid test ratio according to industry averages. The Readyratios website also revealed that, according to the retail sector averages published for the years 2016-2021, Amazon Company was below the sector average in terms of current ratio and above the sector average in terms of cash ratio and acid test ratio (Readyratios, 2023).

The calculations of the liquidity ratios of Amazon's competitors in the retail sector by CFA Journal based on their 2020 annual reports are shown below. According to these calculations, Amazon's current ratio is low compared to the sector, and its quick ratio (acid test ratio) is higher than the sector.

Table 37. Liquidity Ratios of 5 Retail Industry Companies (2020)

	Current assets	Current liability	Current ratio	Inventory	Quick ratio
Walmart Inc.	61,806	77,790	0.795	44,435	0.223
Amazon	132,733	126,385	1.050	23,795	0.862
Tesco plc	10,807	5,190	2.082	2,069	1.684
The Kroger company	12,503	15,366	0.814	8,436	0.265
Ali-baba group plc	643,360	377,358	1.705	27,858	1.631
Industry average	146,547	104,860	1.186	19,341	0.831

Source: CFA Journal, 2023

When the profitability ratios of the company are analyzed, it is seen that there has been an increasing trend since 2012, the Operating profit margin has increased to 5% since 2018, although it was 2% in 2017, and the net profit margin has doubled in the last 2 years. It is also seen that there has been a serious increase in ROE and ROA values in the last 4 years. The ROE value is a value that shows at what rate a company's equity capital is converted into profit. It is considered good if this value is in the range of 0.15-0.2. It is seen that Amazon has reached these values since 2018 and achieved an ROE above these values with 0.23 and 0.24 in 2020 and 2021. It is seen that the company reached its highest level in

ROA with 8% in 2021. The retail sector average is in the range of 31-34% for the gross margin, 2.5-4% for the operating margin, and 1.5-2.7% for the profit margin, in the made by the Readyratios website. As of 2021, the average gross margin of the sector is 33.9%, the average operating margin is 4% and the average net profit margin is 2%. It is seen that Amazon has a profitability above the industry average in terms of profitability ratios.

Looking at the relationship between the company's total assets and equity values with its total assets, it is seen that there has been a transformation in favor of equity in the last 3 years. As of 2021, this rate is 33% equity and 67% assets.

When the dept structure of the company is examined, it is seen that the company has increased its long-term assets rate while decreasing its short-term assets rate in the last year, and by 2021, it has reached rate of 50- 50%.

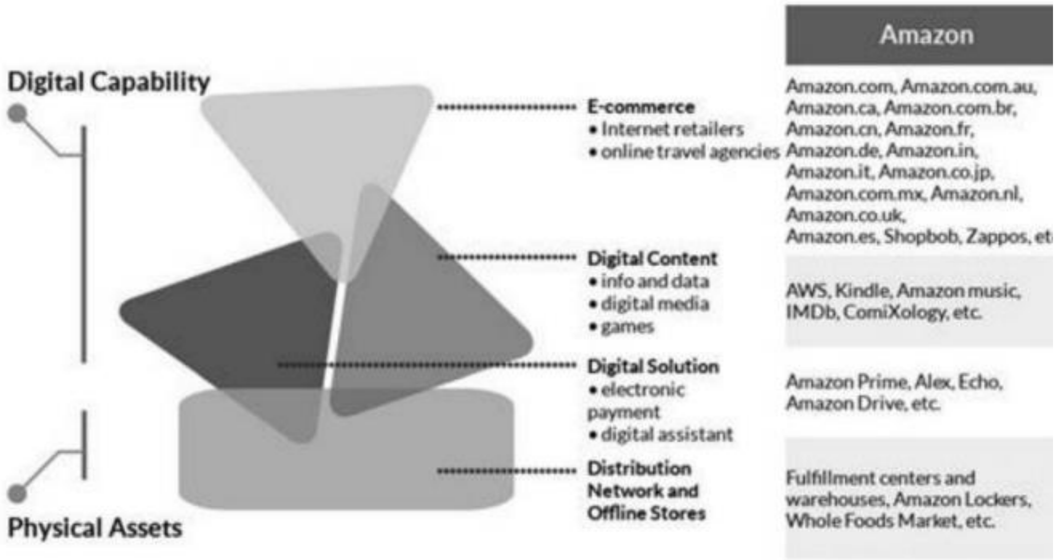
When the efficiency ratios of Amazon company are analyzed, it is seen that the receivable turnover ratio is fluctuating in the range of 16-19. This shows us that on average, the company collects its receivables within 18-22 days. This rate is a high time for a retail company. Actually, the average time to collect receivables of Walmart, the company's biggest competitor, is around 4 days. The average of the receivable turnover days of the retail sector is in the range of 8-10 days, and it is seen that Amazon is above the sector average in this respect.

In their study, Sungoro and Wangata (2020) compared the financial performances of Amazon and e-Bay companies with the data between 2016-2019. As a result of their studies, the researchers concluded that Amazon is in better shape than e-Bay in terms of financial performance. They stated that the reason for this is that Amazon is very successful in reinvesting its profits, and that the investments they have made in technology and productivity-enhancing robots have provided a very successful return.

In Marzooqi (2020), in his study of Amazon's financial analysis between the years 2016-2019, he states that Amazon carries out its strategies quite efficiently and therefore is in a consistent growth trend. In addition, he emphasizes that the increase in Amazon's liabilities and the decrease in its net income are due to its investments in long-term projects, so you should not worry, as Amazon's liabilities will play a growth-enhancing role in the future (Al-Marzooqi, 2020).

Wu & Gereffi (2019) states that the main factor in Amazon's growth and becoming a leading retailer in the world is that Amazon is not just a retailer or e-commerce site. At the same time, it is emphasized that having a cloud computing service provider such as AWS, using e-commerce sites and AWS infrastructure, bringing Amazon to a platform company provides a significant return for Amazon. Combining Amazon's digital capabilities and physical assets is what sets Amazon apart. The integration of Amazon's physical assets and digital capabilities is illustrated below.

Figure 7. Digital Capability and Physcal Assets of Amazon



Source: Wu & Gereffi, 2019

In addition, Amazon has had a great advantage over its competitors with its Fulfillment Centers (FC) and logistics network, which started in the USA and later expanded to other fields of activity in the world. Starting with two FC centers in Seattle and Delaware, Amazon established 51 FC and sorting centers in the United States by 2017, and more than 140 centers worldwide (Houde et al., 2017). Although the expansion of the FC network from 2006 to 2018 resulted in approximately $9.6 billion in lost revenue, it greatly reduced the average FC-to-consumer shipping distance in subsequent years. This has resulted in Amazon saving many logistics costs and increasing profit margins (Wu & Gerrefi, 2019).

5 CONCLUSION

Amazon, Inc. is one of the leading names in the e-commerce and technology revolution worldwide. Founded by Jeff Bezos in 1994, Amazon initially started its business by selling only books, and has grown to its current position by expanding its product range over time. Behind Amazon's success lies a customer-focused approach and a constant pursuit of innovation. In addition to offering consumers a wide range of products, the company is constantly improving its platform and services to provide a user-friendly shopping experience. Products and services such as Amazon Prime, Amazon Web Services (AWS), Kindle and Echo reflect Amazon's strategy of focusing on customer satisfaction and loyalty.

In this study, the financial performance of the company between these years was analyzed by using the financial reports of the company between 2012 and 2021. In the analysis, it has been seen that the company has achieved a very good financial performance by catching an exponential growth rate in the last 10 years. It is seen that the acceleration of the internet and artificial intelligence technologies that the company has invested in in the last 10 years has been used quite efficiently by the company. There has been a parallelism between the development of internet technologies and the development of the company globally, and the company has shown a great improvement thanks to the proactive attitude it has taken with the investments it has made.

In the analysis of the company's assets and liabilities, it has been seen that the company constantly borrows for R&D investments, and these investments get their return very quickly. Especially since the last period of 2019, when Covid 19 emerged, the company has turned the consumers' use of the internet for shopping into a good opportunity and has managed to increase its profitability immensely in this period. In the analysis, it has been observed that the long-term liabilities of the company have increased compared to its short-term liabilities in recent years, and the company allocates more budget to strategic investments. It has also been seen in the analysis that the company has achieved a significant growth momentum in this 10-year period compared to its competitors.

Amazon's rapid growth and influence in the industry has caused other players in the retail industry to reevaluate their strategies and business models. Many retailers have accelerated digital transformation and expanded their e-commerce operations to match Amazon's success and better serve consumers. The fact that Amazon is a major player not only in e-commerce but also in cloud computing and artificial intelligence shows that the company has the potential for continuous growth and development. AWS is a major cloud computing service provider for many companies around the world, and with advances in artificial intelligence, Amazon's influence in technology will grow.

6 REFERENCES

Al Karim, R., & Alam, T. (2013). An evaluation of financial performance of private commercial banks in Bangladesh: Ratio analysis. *Journal of Business Studies Quarterly*, *5*(2), 65.

Al-Marzooqi, M. B., & Nobanee, H. (2020). Financial Analysis of Amazon. *Available at SSRN 3647442*.

Althafairi, B., Alhoumaida, N., Saxena, M., & Almsri, Z. (2019). Case study-AMAZON. *Journal of the Community Development in Asia (JCDA)*, *2*(2).

Andrijasevic, M., & Pasic, V. (2014). A blueprint of ratio analysis as information basis of corporation financial management. *Problems of Management in the 21st Century*, *9*(2), 117.

Anggraini, N. T. (2022). Analysis of Financial Statements Based on Financial Ratio and Vertical-Horizontal Method in PT Unilever, Tbk, 2016-2017 Period. *Journal of Social Science*, *3*(1), 171–176.

Barnes, P. (1987). The analysis and use of financial ratios. *Journal of Business Finance Dan Accounting*, *14*(4), 449.

Barth, M. E., & Schipper, K. (2008). Financial reporting transparency. *Journal of Accounting, Auditing & Finance*, *23*(2), 173–190.

Besley, S., & Brigham, E. F. (2014). *Principles of finance*. Cengage Learning.

Cfajournal. (2023). *The Average Current Ratio for Retail Industry: Explanation, Calculation, and Example from Real Data for Benchmark - CFAJournal*. https://www.cfajournal.org/average-current-ratio-retail-industry/

Chen, K. H., & Shimerda, T. A. (1981). An empirical analysis of useful financial ratios. *Financial Management*, 51–60.

Dahana, W. D., Miwa, Y., & Morisada, M. (2019). Linking lifestyle to customer lifetime value: An exploratory study in an online fashion retail market. *Journal of Business Research*, *99*, 319–331.

Deloitte. (2023). *Global Powers of Retailing 2022 Resilience despite challenges*. https://www2.deloitte.com/content/dam/Deloitte/at/Documents/consumer-business/at-global-powers-retailing-2022.pdf

Fabozzi, F. J., Fabozzi, F. A., & Drake, P. P. (2021). *Introduction To Finance: Financial Management And Investment Management*. World Scientific.

Faello, J. (2015). Understanding the limitations of financial ratios. *Academy of Accounting and Financial Studies Journal*, *19*(3), 75.

Gibson, C. H. (2012). *Financial reporting and analysis*. Cengage Learning.

Güvemli, O. (2006). The Appearance and Development Of The Vertical Income Statement And Its Effect On Managerial Accounting. *International Conference on Accounting and Management Information Systems*.

Herath, S. K., & Albarqi, N. (2017). Financial reporting quality: A literature review. *International Journal of Business Management and Commerce*, *2*(2), 1–14.

Hiran, S. (2016). Financial Performance Analysis of Indian Companies Belongs to Automobile Industry with Special Reference to Liquidity & Leverage. *International Journal of Multidisciplinary and Current Research*, *4*, 39–51.

Houde, JF, Newberry, P., & Seim, K. (2017). Economies of density in E-commerce: A study of Amazon's fulfillment center network (No. w23361). Cambridge, MA: National Bureau of Economic Research.

Izzalqurny, T. R., Subroto, B., & Ghofar, A. (2019). Relationship between financial ratio and financial statement fraud risk moderated by auditor quality. *International Journal of Research in Business and Social Science (2147-4478)*, *8*(4), 34–43.

Kelley, T., Hora, J. A., & Margheim, L. (2010). A financial analysis case of Amazon. com and Barnes & Noble with emphasis on the impact of ROE versus EPS: accounting case and instructor notes. *Journal of Business Case Studies (JBCS)*, *6*(3).

Laux, C. (2012). Financial instruments, financial reporting, and financial stability. *Accounting and Business Research*, *42*(3), 239–260.

Ohlson, J. A. (1980). Financial ratios and the probabilistic prediction of bankruptcy. *Journal of Accounting Research*, 109–131.

Readyratios. (2023). *Retail Trade: industry financial ratios benchmarking*. https://www.readyratios.com/sec/industry/G/

Revsine, L., Collins, D. W., Johnson, W. B., Mittelstaedt, H. F., & Soffer, L. C. (1999). *Financial reporting & analysis*. Prentice Hall Upper Saddle River^ eNew Jersey New Jersey.

Ryan, S. G. (2012). Financial reporting for financial instruments. *Foundations and Trends® in Accounting*, *6*(3–4), 187–354.

Sanz Lara, J. Á., Bedate Centeno, A., Devesa, M., & Báez-Montenegro, A. (2022). Economic analysis of firms in the European film industry through their financial ratios. *The Social Science Journal*, 1–15.

SEC. (2023). *EDGAR Entity Landing Page*. https://www.sec.gov/edgar/browse/?CIK=1018724&owner=exclude

Shala, B., Prebreza, A., & Ramosaj, B. (2021). Horizontal and Vertical Analysis of SAMSUNG Enterprise for the Years 2015-2016 and 2017-2018. *Journal of Economics and Management Sciences*, *4*(1), p50–p50.

Statista. (2023). *E-Commerce | Statista*. E-Commerce. https://www.statista.com/markets/413/e-commerce/

Wang, T. (2021). Discussion on business models of Alibaba and Amazon in three operating directions. Frontiers in Economics and Management, 2(4), 15–21.

Wu, X., & Gereffi, G. (2018). Amazon and Alibaba: Internet governance, business models, and internationalization strategies. In International business in the information and digital, age (Vol. 13, pp. 327-356). Emerald Publishing Limited.

Yahoo Finance. (2023). *Amazon, Inc. (AMZN) Stock Price, News, Quote & History - Yahoo Finance*. https://finance.yahoo.com/quote/AMZN/

Zager, K., & Zager, L. (2006). The role of financial information in decision-making process. *Innovative Marketing*, *2*(3), 35–40.