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



Master's Thesis

Analysis of Financial Position & Performance of Apple Incorporation

Nishantkumar Girishbhai Padhiyar

©2022 CZU Prague

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

DIPLOMA THESIS ASSIGNMENT

Nishantkumar Girishbhai Padhiyar

Economics and Management Economics and Management

Thesis title

Analysis of financial position and performance of Apple Incorporation

Objectives of thesis

The aim of this diploma thesis is to assess the financial position and performance of chosen US Company by analyzing the company's financial statements with a focus on the reported assets, liabilities, expenses, and revenues for a chosen period and to identify the possible financial problems and the most significant factors influencing the profit.

- To evaluate the financial performance of Apple Incorporation.
- . To measure the position of companies by using Ratio Analysis.

Methodology

Methodology for the literature overview is based on data collected from the relevant legal framework, specialized publications, and other written or online sources. The practical part of the thesis will be based on the information gained from the published annual reports of the chosen company.

Vertical and horizontal analysis of the financial statements will be used to assess the financial position and performance of the company and to prepare the practical part of the thesis. Selected ratios of financial analysis will be calculated, which are liquidity analysis ratio, profitability analysis ratio, activity analysis ratio, capital structure analysis ratio, capital market analysis ratio. The methods of analysis, synthesis, comparison, and deduction will be used to formulate the conclusions of the thesis.

The Balance sheet of the company will be analyzed for the assessment of the financial position and the Income statement (Statement of profit and loss) for the assessment of the financial performance. The analysis covers the financial years 2017-2021. Data are obtained from the annual reports of the company. The results of the horizontal analysis will be in % and each item will be compared with the immediately preceding same item from the previous year (i.e. no base year). The definitions of the vertical and horizontal analysis as well as the formulas of the selected ratios of the financial analysis are included in the literary review of this thesis.

The proposed extent of the thesis

60 - 80

Keywords

Financial statements, financial analysis, financial position, balance sheet, assets, liabilities, equity, financial performance, Income statement, expenses, revenues, profit, IT industry, Apple Incorporation

Recommended information sources

Birgham, F. Eugene, Houston, F. Joel, Fundamentals of Financial Management, 12th edition, South-western Cengage Learning, Mason, 2009. ISBN: 9780324597714.

Martin Fridson and Fernando Alvarez, Financial statement analysis, Third Edition, John Wiley and Sons, New Jersey, 2002, ISBN: 0471409154

Peterson and Fabozzi, Analysis of financial statements, 3rd edition, New Jersey, 2012, ISBN: 9781119203513

Rao, P. M., New Delhi. Financial Statement Analysis and Reporting. 22p, 2011, ISBN-978-81-203-3949-1. Thomas Robinson and Elaine Henry, International Financial statement analysis, John Wiley and Sons, New Jersey, 2009, ISBN: 978047028766

Expected date of thesis defence 2021/22 SS – FEM

The Diploma Thesis Supervisor Ing. Karel Malec, Ph.D.

Supervising department Department of Economics

Electronic approval: 28. 2. 2022
prof. Ing. Miroslav Svatoš, CSc.
Head of department

Electronic approval: 2. 3. 2022 doc. Ing. Tomáš Šubrt, Ph.D.

Prague on 27. 03. 2022

Declaration

I declare that I have worked on my diploma thesis titled "Analysis of Financial Position & Performance of Apple Incorporation" by myself, and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that it does not break the copyrights of any person.

In Prague on date of submission

31.03.2022

Acknowledgment
I would like to thank Ing. Karel Malec for his help in preparing the thesis and whose expertise was invaluable. Ing. Karel Malec provided invaluable support from the beginning of the topic selection until the completion of the thesis. I want to thank all professors at the Czech University of Life Sciences for gaining knowledge in economics and management.

Analysis of Financial Position & Performance of Apple Incorporation

Abstract

This thesis is about the financial and performance evaluation of a selected US IT company, Apple Incorporation Limited. The review deals with selected aspects of selected financial analytics and industry information and expertise in the US. The practical component analyzes the financial position represented by the balance sheet and financial performance represented by the company's statement of profit or loss using a straightforward and horizontal analysis of these financial statements covering the 2017-2021 financial year. Representation and changes in reported assets, liabilities, costs, revenue, and dividends over time to identify potential financial problems and the most critical factors influencing profitability.

Keywords: Financial Analysis, Financial Position, Financial Performance, Financial Statements, IT Industry, Apple Incorporation

Analýza finanční pozice a výkonnosti společnosti Apple

Abstrakt

Tato práce se zabývá finančním a výkonnostním hodnocením vybrané americké IT společnosti Apple Incorporation Limited. Recenze se zabývá vybranými aspekty vybraných finančních analytiků a oborových informací a odborných znalostí v USA. Praktická část analyzuje finanční pozici reprezentovanou rozvahou a finanční výkonnost reprezentovanou výkazem zisku nebo ztráty společnosti pomocí jednoduché a horizontální analýzy těchto finančních výkazů pokrývajících finanční rok 2017-2021. Reprezentace a změny vykazovaných aktiv, závazků, nákladů, výnosů a dividend v průběhu času k identifikaci potenciálních finančních problémů a nejkritičtějších faktorů ovlivňujících ziskovost.

Klíčová slova: Finanční analýza, finanční pozice, finanční výkonnost, účetní závěrka, IT průmysl, Společnost Apple

Table of content

1	Introduction11				
2	Obj	jectives and Methodology	13		
	2.1	Objectives	13		
	2.2	Methodology	13		
	2.3	Financial Analysis Ratios	13		
3	Lite	erature Review	19		
	3.1	Financial Analysis Definition	19		
	3.2	Financial Statement Definition	20		
	3.3	Financial Analysis Sources	21		
	3.4	Financial Statement Methods	25		
	3.5	IT Sector Overview	28		
	3.6	IT Sector Companies	30		
4	Pra	nctical Part	32		
	4.1	Company Introduction	32		
	4.2	SWOT Analysis	34		
	4.3	Revenue Growth Analysis	39		
	4.4	Net Sales Analysis (Product)	40		
	4.5	Net Sales Analysis (Region)	42		
	4.6	Financial Position Analysis	43		
	4.7	Financial Performance Analysis	47		
	4.8	Financial Ratio Analysis	50		
5	Res	sults and Discussion	57		
	5.1	Financial Position Assessment	57		
	5.2	Financial Performance Assessment	58		
	5.3	Financial Ratio Assessment	59		
	5.4	Profit Influencing Factors			
	5.5	Major Problem Areas	60		
	5.6	Key Recommendations	61		
6	Co	nclusion	62		
7	References64				
		Appendix67			
J	, , , ,	P			

List of figures

Figure No.	Title	Page No.
1	Revenue of Apple Incorporation	39
2	Net Sales by Product	40
3	Net Sales by Region	42
4	Liquidity Ratios	50
5	Profitability Ratios	52
6	Leverage Ratios	53
7	Coverage Ratios	54
8	Activity Ratios	55

List of tables

Table No.	Title	Page No.
1	Analysis of Apple's revenue growth	39
2	Analysis of Net Sales by product	40
3	Analysis of Net Sales by region	42
4	Vertical analysis of Assets	44
5	Vertical analysis of Equity and Liabilities	45
6	Horizontal analysis of Assets	46
7	Horizontal analysis of Equity and Liabilities	47
8	Vertical analysis of Statement of Income	48
9	Horizontal analysis of Statement of Income	49
10	Liquidity Ratios in million	50
11	Profitability Ratios in million	51
12	Leverage Ratios in million	53
13	Coverage Ratios in million	54
14	Activity Ratios in million	55

1 Introduction

The information technology (IT) market consists of information technology (IT) services and related assets (organizations, sole vendors, and relationships) that use computers, computer equipment, and communication equipment to store, extract, transfer and direct data. The IT market includes computer communications, broadcasting, systems design services, information technologies such as televisions and telephones, and other equipment. The IT market also sells goods such as computers, computer equipment, and communication equipment used to provide IT services. The IT market comprises services, computer hardware, telecom, and software products (The Business Research Company, 2022).

The global information technology market is expected to grow from \$ 7850.57 billion by 2020 to \$ 8370.95 billion by 2021, with a combined annual growth rate (CAGR) of 6.6%. This growth is primarily due to companies reorganizing their operations and recovering from the impact of COVID-19, which has led to preventive measures, including social isolation, remoteness, and closure of commercial activities that have led to operational challenges. The information technology (IT) market is expected to reach \$ 11866.34 billion by 2025 at a CAGR of 9% (The Business Research Company, 2022).

North America was the most significant information technology market globally, accounting for 34% of the market by 2020. The Asia Pacific was the second largest region accounting for 32% of the global market. Africa has become the smallest global information technology market (The Business Research Company, 2022).

The demand for cloud computing services is expected further to advance the need for IT services during forecasting. Cloud computer model data is stored online by a computer provider, managing and using data storage as a service. Many companies now choose cloud-based apps for their daily activities. For example, according to statistics provided by hostingtribunal.com, 60% of computer load was operating on the public cloud by 2019. Similarly, 94% of business loads are expected to be processed by cloud data centers by 2021. Companies also like to use cloud-based data retention, thus increasing the demand for IT services (The Business Research Company, 2022).

The outbreak of Coronavirus (COVID-19) has been a significant obstacle to the information technology market by 2020 as procurement has been disrupted due to trade restrictions, and staff working at these facilities face difficulties related to infrastructure and

communication due to site closures by governments around the world, it is forcing them to work from home. COVID 19 is an infectious disease with flu-like symptoms, including fever, cough, and difficulty breathing. The virus first appeared in 2019 in Wuhan, Hubei province in the People's Republic of China and spread worldwide, including Western Europe, North America, and Asia. Measures by the national government to contain this broadcast have led to a decline in economic activity as countries enter a state of closure, and these outbreaks are expected to continue to hurt businesses by 2020 and 2021. However, the information technology market will likely recover from the shock during forecasting. It is a 'black duck' event unrelated to the ongoing or fundamental global market or economy (The Business Research Company, 2022).

Businesses face difficult economic conditions determined by ongoing uncertainty in a global market economy. They are exposed to continuous environmental changes and constant pressure from competitors, who daily strive to improve the quality of their products and services and move forward. This fact hurts the overall performance of business research. Business education must constantly monitor their financial and environmental status to maintain a stable and competitive position in the market, provide feedback to management, make strategic decisions, and achieve their economic goals. releases (Baran, Pastýr and Baranová, 2016).

2 Objectives and Methodology

2.1 Objectives

This diploma thesis examines a selected US company's financial position and performance by analyzing corporate financial statements by focusing on reported assets, liabilities, expenses, and revenue for the period chosen and identifying potential financial problems and critical factors influencing profits. Objectives can be divided into two parts, firstly, to evaluate the financial performance of Apple Incorporation, and secondly, to measure corporate position through the Measurement Analysis.

- To assess Apple Incorporation's financial performance.
- Ratio Analysis is used to assess a company's standing.

2.2 Methodology

The textual overview is based on data collected from the relevant legal framework, special publications, and other written or online sources. The active part of the thesis will be based on information obtained from the published annual reports of the selected company. An accurate and horizontal analysis of the financial statements will assess the company's financial position and performance and prepare a substantial portion of the thesis. Selected estimates of economic analysis will be calculated. Methods of research, aggregation, comparison, and reduction will be used to conclude the thesis.

The company's balance sheet will be assessed for financial performance and the statement of financial performance (profit and loss statement). The analysis covers the financial years 2017-2021. Data is available from the company's annual reports. The horizontal analysis results will be in%, and each item will be compared to the same previous article immediately from the previous year (i.e., no base year). Definitions of direct and horizontal analysis and formulas for selected financial analysis formulas are included in the review of the texts of this thesis.

2.3 Financial Analysis Ratios

Financial analysis is used to assess economic trends, set monetary policy, build longterm business plans, and identify investment projects or companies. This is done by combining financial numbers with data. One of the most common ways to analyze financial data is to calculate data amounts in financial statements to compare them with those of other companies or against their historical performance. Estimates are divided into three main categories: income, income, and profit (Sugumar, 2019). Several financial analysis metrics are related to asset performance measurements, performance estimates, etc. For purposes of the thesis, the following scales will be used: (A) Liquidity Ratios, (B) Profitability Ratios, (C) Leverage Ratios, & (D) Coverage Ratios.

1. Liquidity Ratios show how much money a company has to meet its short-term obligations.

Cash Ratio - The monetary value is the acquisition within its capital, especially its current companies' corporate economic value and financial equity. Metric lists a company's ability to pay off its short-term debt in cash or near financials as an easy-to-sell mortgage. This information is helpful for lenders when deciding how much they would like to lend to a company.

The formula for calculating cash ratio is mentioned below:

Cash Ratio = (Investments + Cash & Cash equivalents) / (Total Current Liabilities)

Current Ratio - The current rate is the amount of income that measures a company's ability to repay short-term obligations or those that must be repaid within one year. It tells investors and analysts how a company can increase current assets on its balance sheet to meet its existing debt and other payables. The current level corresponding to the sector level or slightly higher is generally acceptable. A current level below the sector average may indicate a higher risk of depression or an automatic onset. Similarly, managers may not use their assets effectively if a company has very high current values compared to a peer group. The current rate is called "current" because, unlike other loans, it covers all existing assets and current liabilities. The current level is sometimes called the operational level.

The formula for calculating the cash ratio is mentioned below:

Current Ratio = (Current Assets) / (Current Liabilities)

2. Profitability Ratios - Profitability helps to understand a company's ability to make a profit which is one of the objectives of this thesis.

Net Profit - All profits are derived from subtracting the business's total cost from operating income to obtain revenue, which is also divided by the amount of payment (Rosman, Wahab and Zainol, 2014). The total profit margin demonstrates the ability to manage sufficient profits per sale that cover all operating costs of the business income, borrowing costs, and sales service costs, and having enough funds to pay appropriate compensation to shareholders for their company contribution. This measure is an effective measure of business profitability.

Depending on the concept of total profit margins, the rate can be calculated as below: Net Profit = (Net Profit) / (Total Revenue)

Return on Assets (%) - Asset return is a measure that is calculated by comparing the total income with the existing assets used to generate that kind of revenue (Malik, 2011). Return of Assets (ROA) indicates how much a company is making a profit based on the value of its assets. ROA gives a manager, investor, or analyst an idea of how well a company's management can use its assets to make a profit. Refunds are shown as a percentage. ROA is calculated by dividing the company's revenue into total assets.

The formula for calculating return on assets is mentioned below:

Return on Assets (%) = (Net Income) / (Total Assets)

Return on Equity (%) - Another profit measure that describes the benefit of a company's capital in generating revenue (Mitra, 2011). Return on Equity is a two-part measure in its take because it combines a statement of income with a balance sheet, in which the revenue or profit is compared to the equity of shareholders. The number represents the total return on equity and indicates the company's ability to turn funds into profit. Alternatively, measure the profits made per dollar at shareholder rates.

The formula for calculating return on equity is mentioned below:

Return on Equity (%) = (Net Income) / (Total Equity)

Return on Capital Employed (%) - Return on Capital Employ is a profit-comparison index business. It also indicates the efficient use of capital expenditures to achieve the

desired profit. The rating is best suited to evaluate the effectiveness of internal management. A high rating is a better performance test, and a lower rating is the same performance indicator.

The formula for calculating return on Capital is employed as mentioned below: Return on Capital Employed (%) = EBIT / (Long-term Liabilities-Equity)

3. Leverage Ratios - Measurement ratings help analyze credit ratings and other estimates related to the company's payment capacity.

Debt to Equity - The financial activities associated with the operation of an entity related to the calculation of the ratio between the amount of the liability and the amount of the equity (Pandey, 2005). Equity loan assists business executives in designing their financial structure in a way that can support their debt recovery activities. The debt obtained will increase the cost of the business interest (Halpin and Senior, 2009).

The formula for calculating debt to equity ratio is mentioned below:

Debt to Equity = (Total Debt) / (Total Equity)

Debt to Assets - This ratio shows the total assets secured by the entire liability. A lower asset rate is better and vice versa.

The formula for calculating the debt to assets ratio is mentioned below:

Debt to Assets = (Total Debt) / (Total Assets)

Debt to Capital - This ratio is slightly different from the previous rate because it looks at the amount of debt in the calculations. It shows how much risk is involved and how weak the solvency is.

The formula for calculating debt to capital ratio is mentioned below:

Debt to Capital = (Total Debt) / (Total Debt + Shareholder's Equity)

4. Coverage Ratios - Consolidation estimates help determine how the company's revenue can cover interest costs and rental payments. Interest costs and lease payments are part of the company's liability.

Interest Coverage - This rate reflects the company's ability to cover its interest rate interest rates before tax. Rate higher indicates muscular strength in terms of rental payments.

The formula for calculating debt to capital ratio is mentioned below:

Interest coverage = EBIT / (Total Interest Payments)

5. Activity Ratios - Performance measures determine a company's efficiency in using its assets to generate cash and profit.

Asset Turnover Ratio - The asset exchange rate assesses the value of a company's revenue concerning the value of its assets. It can be used as an indicator of efficiency by suggesting how a company uses its assets to make money.

The formula for calculating the activity ratio is mentioned below:

Asset Turnover Ratio = (Net Sales) / (Total Assets)

Inventory Turnover Ratio - An inventory turnover rate is an efficiency measure that tests how well the inventory is managed. Indicates how many times a stock is sold over a while.

The formula for calculating the inventory turnover ratio is mentioned below:

Inventory Turnover Ratio = (Cost of Sales) / (Inventory Cost)

Receivables Turnover Ratio - Profitability measures a company's efficiency in collecting receivables for its account or the amount owed to customers.

The formula for calculating receivables turnover ratio is mentioned below:

Receivables Turnover Ratio = (Net Sales) / (Total Account Receivables + Vendor Non-trade Receivables)

Vertical Analysis - The balance of the financial statements is used to do direct analysis. Each item in the financial information is calculated as a percentage of the other entity. Everything on the income statement's line is expressed as a percentage of total revenues, whereas everything on the balance sheet's line is defined as a percentage of total assets. The most common application of direct analysis is during a one-time reporting period to see the account balance's estimated estimates. The direct analysis also aids trend analysis, detecting account-related changes over time, such as five-year comparisons. The use of total assets, total debt, or shareholder equity as fundamental component figures is a direct analysis (Sakevych and Kobyletskii, 2005).

Horizontal Analysis - A method of examining a financial statement that displays changes in the carrying amounts of associated financial assets over time is a horizontal analysis (also known as trend analysis). It's a helpful tool for determining trends. Horizontal Analysis continuously reviews and compares similar indicators to develop conclusions about a company's performance throughout time (Sakevych and Kobyletskii, 2005). The horizontal analysis employs statements that are repeated two or more times. The past tense is frequently used as a foundation, and items in all recent comments are contrasted with items in statements from the period. In most cases, changes are reported in both dollars and percentages.

3 Literature Review

The literature study serves as a theoretical foundation for the thesis, focusing on the peculiarities of the chosen financial statements. The literature study also discusses selected financial analysis methods as a foundation for the thesis' practical section and the exceptions of the IT industry in the United States.

3.1 Financial Analysis Definition

Financial analysis is essential for researching a company and making critical financial decisions. Financial accounting helps determine whether a business is profitable enough to invest in, whether it can pay off all its debts, and many other important facts. Proper research to proceed with company financial information is required. It helps to make significant investment decisions. Financial analysis is done by management. Other groups include investors, business partners, government institutions, workers, auditors, unions, and professionals.

On the other hand, investors interested in repaying debtors interested in it will be particularly interested in the finances of their trading partners, whether they are strong enough to pay off their debts. Government is interested in the company's ability to levy taxes, and company employees are interested in the company's stability to have regular salaries. Financial analysis includes all performance forecasts and potential threats (Robinson *et al.*, 2008).

Financial analysis is about preparing information, building materials, and high-quality decision-making documents about a company's operations. After successful examination, the summary can be formed by analysis. One can therefore determine whether performance complies with impressive standards. This applies to all data points separately and the general status of the company. The basic premise is the organization's past, determining whether performance improves or strengthens.

Generally, the last three years of execution are sufficient, but if the opportunity for long-term information is available, one should use that as well. Most of the time, looking at the performance related to money also encourages the analyst to see patterns. If, for example, money laundering decreases reliably, you can make changes. The next foundation is to assess the competitive landscape. This can provide a reliable and essential understanding of the company's operations. A 10 percent annual salary increase may sound good, but it produces

less performance when competitors grow 25 percent. The ultimate foundation includes guaranteed promises. Lending specialists, speculators, and critical clients often need financial-related estimates. Maintaining important financial-related values and in-depth information within pre-determined detention centers can enable these outsiders to protect their interests. Accounting and management are related to accounting in which one can obtain accurate, one-time financial data rather than analyze and gain business insight. Financial analysis is essential for managers, shareholders (owners), lenders, and external users. Banks can use it to arrange for other insecure service providers and shareholders to have their concerns about return on investment. Providers will be interested in the ability to pay invoices on time and the opportunity for long-term cooperation. Employees can benefit from job savings and payroll (Rhyne and Brigham, 1979).

3.2 Financial Statement Definition

One of the most critical and technical foundations in financial management, where solid decisions are made swiftly and quickly. Analyzing the financial statements is a safe bet. According to Drake (2010), financial statement analysis is a process of selecting, testing, and interpreting financial data. He added that it displays specific crucial data that aid in investment and financial decision-making. Furthermore, it is a financial identification procedure that efficiently establishes the relationship between balance and revenue statement components to determine a company's strengths and weaknesses.

Applying something to the purpose of someone in the firm might be defined as financial statement analysis. It can be studied in several different ways. A financial statement, such as a balance sheet, may show the current economic situation (position statement). Financial information may also indicate a series of operations over time, such as an account's profit and loss (e.g., Income statement). The financial report summarises a company's performance throughout time.

"A financial statement is data set according to solid and consistent accounting standards," says Robinson *et al.* (2008). Its goal is to help people comprehend the financial aspects of a company. It might show the current condition of time, as in the balance sheet, or it can produce a sequence of tasks in a certain period, as in the income statement. (Mohana, 2011).

There are four key categories in the financial statement. First, there's the balance sheet, which shows the company's financial situation. The file for owners' organizational assets,

liabilities, and equity and the balance sheet date is displayed. The income between the two balance periods is reported in the second phase income statement. The third section of the income statement reveals how much profit there is for this time and how the money received by the company has changed. The cash flow statement displays how money was received and spent over time.

3.3 Financial Analysis Sources

Financial statements are the primary and most reliable source of analysis. Information about the company's financial position can be found in the financial statements. Financial statements are an essential and fundamental source of information, especially in the in-depth and detailed financial analysis. However, the economic study aims to provide valuable information used by the company's executives, almost all managers, and managers or an analyst to make major strategic decisions. It is always good to take data directly from the financial statements because they are the first information used with internal or external company features. Analyzing information correctly can identify specific events, causes, or patterns. These patterns may vary over time as the financial statements may be quarterly or annual. For an in-depth analysis of the situation, one can also take a data binding statement for more than one year.

Financial statements summarize the entity's financial statements, a balance sheet representing assets, liabilities, capital gains such as individual data, and an income statement showing the transactions' results over time. The financial statements usually include critical comments (T Subramaniam, 2009).

The mandatory financial statements are:

- Income statement
- Balance sheet
- Cash Flow statement
- Statement of changes in equity

The statement of financial performance – the Income statement - The income statement helps analyze the company's performance over time. The most critical statement in accounting is probably the income statement because it tells you about the monthly income or total business loss. By reading this statement carefully, a business owner can determine if

his business is performing better than last month and the reasons for continuing or declining (Peterson and Fabozzi, 2012).

It assesses a company's performance through a comprehensive analysis of its revenue and expenditure. It has a few essential factors such as salary, expenses, benefits, and losses. No company can survive long in the market without the proper profit, income. Demonstrates how a company can use its investments effectively (Fridson and Alvarez, 2011).

The income statement structure can be described below, containing the most commonly used financial terms in the income statement.

Operating Revenue - Operating revenue means the revenue generated from initial activities, such as the revenue generated from the sale of a company's product or services.

Non-operating revenues - Revenue from illicit business activities such as income from outside the purchase and sale of goods and services, interest earned on business income from banks, rental properties, royalty payments, etc. (Rhyne and Brigham, 1979).

Gains - Gains include profits made from selling other long-term assets that are non-commercial and non-commercial. It may also involve severe legal cases outside the company's core business. Profit occurs in the income statement when the income from work is higher than the book's (Fridson and Alvarez, 2011).

Expenses and losses have the costs incurred to produce a product or provide services, such as the cost of goods sold, depreciation, and general and administrative costs. Daily activities such as electricity, transportation, staff salaries, etc. It may also include certain interest payments on bank loans etc. Other losses incurred on long-term assets, one-time or uncommon expenses such as liability, etc., are lost (Fridson and Alvarez, 2011).

The Balance Sheet - The balance sheet shows a complete picture of how the company is operating in a particular financial year. Includes company assets, liabilities, and equity of shareholders. It has two fundamental flaws. First, although it is helpful to summarize the prices of all business assets from a practical point of view, these values often seem unlikely to work. Second, the analyst may misinterpret some information (Robinson *et al.*, 2008). The balance sheet can be explained using the following formula:

Total assets: Total Liabilities + Total Equity

Assets - There are different types of goods or services that can be added. Current assets change separately during the financial year and are used simultaneously. These assets are part of assets that are quickly converted into cash, bulk liquids and remain in the business for a short period, such as cash, securities for sale, salary accounts, and assets. It includes

land, minerals, buildings, tools, machinery, and vehicles, all of which have been used for a long time. The primary sources of income are current debts, which are obligations to retailers, tax authorities, employees, and lenders who must repay within one year or less; long-term loans, which can be repaid later in the year, such as bonds and loans, and mortgages.

Equity - Equity is also known as capital owned. Its share in absolute assets is an indicator of Equity is not a fixed amount but varies depending on the profit over time. When a company gains a profit, equity grows. When a company makes a loss, equity decreases. Equity is also regarded as the equity of shareholders and requires a commitment to them in the event of a liquidation process. Below is the related content.

Stocks - Shares that represent the interest rate on a company can be stocks sold publicly or a few funds donated to the owners. It can also be called capital. Other major currencies can be included in this.

Retained earnings - These benefits are residual after deducting dividends paid to investors. Often, a highly profitable business unit is kept as a healthy organization. A company's reserve profits depend on many factors such as profit, dividend policy, the number of years the company is in that particular business.

Reserves - In a company where excess profits are retained for some reason can be withheld, the company's funds may include statutory savings and other created funds generating interest rates from the proceeds.

Liabilities - They are legally binding obligations to pay to any other person or entity. Its purpose is sometimes to fulfill an old obligation if the borrowing conditions are affordable. The liability section is also divided into two parts such as short-term and long-term liabilities.

Short-term liabilities - The organization can pay short-term liabilities less than one year (Vikas and Kumar, 2018). Short-term liabilities include debts such as overpayments, taxes, interest payments, and other short-term penalties.

Long-term liabilities - Long-term liabilities of an organization can be paid in more than a year. It may include deferred tax debts, pensions, loans, etc. (Vikas and Kumar, 2018).

Cash Flow Statement - The improved financial flow statement for organizations reflects information about two key factors. The first factor in revenue is related to the amount of money that organizations receive through operations and other investments made by investors. The second factor is the outflow of cash that records the financial costs incurred

in additional expenses and business expenses (Mohana, 2011; Mitra, 2011). The cash flow statement should indicate that the entity makes cash and cash equivalents (Cash Flow) at certain times (usually quarterly and yearly). It is essential to analyze the liquidity and long-term solubility of the organization. A cash flow statement uses cash-based accounting instead of accounting based on most companies' balance sheets and income statements. This is important because the company can raise money for accounting but does not get cash. It can pay benefits and taxes but does not provide services to keep it resolved. (Belli, 2001). The cash flow statement is one of the most accurate reports of all financial statements because it combines the revenue generated by the business in three main ways - performance, investment, and financing. The sum of these three phases is called net cash flow. It is structured in three parts as follows:

Cash flow from operating activities - Functional tasks contain all the critical functions in the accounting unit business activities and all activities considered under this section. It is related to the production, sale, delivery of a product or service, and in respect of weather, payments for purchase are either cash or credit. Demonstrates cash flow through ongoing business activity.

Cash flow from investment activities - As the name suggests, it comes from the profits and losses of the investment and the change in fixed assets acquired or borrowed loans. Investment activities also include long-term investments, such as purchasing or selling long-term assets such as land, land, machinery, etc. Some significant financial or material position changes may be included in the investment activities.

Cash flow from financial activities- It contains a set of funds used to finance the business, cash flows between companies and their owners and creditors. Usually, it comes from debt or equity. It helps to determine the efficiency of a company to pay dividends or share purchases. The cash flow of financial services also provides insight into the company's financial strength and financial management. That's why cash flow is an important statement to understand a company's economic structure.

Statement of changes in equity - The reconciliation between the opening and closing balances of shareholder's equity is called a statement of changes in equity. A financial statement summarises the shareholder's equity transactions over a fiscal year.

3.4 Financial Statement Methods

Financial analysis is used to assess economic trends, set monetary policy, build long-term business plans, and identify projects or companies to invest in. This is done by combining financial numbers with data. One of the most common ways of analyzing financial data is to calculate estimates in the data in the financial statements to compare with those of other companies or against the company's historical performance. Financial calculations are divided into three categories: liquidity ratio, available revenue, and profitability (Sugumar, 2019).

Financial statements can be analyzed in two different ways. First, there's the use of horizontal and vertical financial statement analysis, and then there's the method of calculating various financial ratios (Sakevych and Kobyletskii, 2005).

Vertical analysis: Vertical analysis determines the significance of particular elements in financial statements by separating them from the total amount. It's helpful to compare the balance of the budget and pricing variations from one year to the next (Kourtis, Kourtis and Curtis, 2019).

Horizontal analysis: Horizontal analysis is horizontal analysis, often known as practice analysis. This technique shows historical and delivery data, giving you the option to compare them. In this way, it can be utilized as a foundation for the chosen year, or it can be used as the preceding fundamental year to compare every two years and watch how things progress (Kourtis, Kourtis and Curtis, 2019).

Ratio analysis: Ratio analysis is an essential tool of financial analysis, according to (Manish Roy Tirkey & Shaban. E. A. Salem, 2013). This symbol shows the relationship between two or more items. The economic measurement rates are usually chosen from the organization's financial accounts. A few metrics are used to examine a company's or other entity's financial status. Financial analysts utilize financial estimations to re-evaluate and compare different firms' strengths and flaws. (R. Glenn Rhyne and Brigham (1979) compared the performance of two or more resilient funds in the same industry and testing trends in financial position over time. The calculation and study of financial ratios that incorporate data from one, two, or more financial statements are referred to as financial ratio analysis (Kim and Ayoun, 2005).

There are many ratios used to analyze financial statements:

- Liquidity Analysis Ratio
- Profitability Analysis Ratio
- Activity Analysis Ratio
- Capital Structure Analysis Ratio
- Capital Market Analysis Ratio

The information in the company financial statements can be used to calculate most of these metrics. This implies they can be used to compare the firm's financial status to the past or other firms' financial situations. In general, financial projections can anticipate the likelihood of a company's bankruptcy or liquidation.

The financial analysis examines economic trends, creates monetary policy, constructs long-term business plans, and finds projects or firms to invest in. This is accomplished by merging financial and statistical data. Calculating estimations in the data in the financial statements to compare with those of other companies or against the company's past performance is one of the most popular techniques for assessing financial data. Liquidity ratio, available revenue rate, and profitability are the three primary areas of monetary estimates. (Sugumar, 2019).

Vertical analysis is a proportionate examination of financial accounts to evaluate the relative value of various elements. It's useful for comparing proportions and year-to-year fluctuations in balances.

Horizontal analysis is also known as trend analysis. This approach compares and presents historical data. One of the chosen years, or the prior year, can be used as a base year in this procedure, and you must always compare two years to discover how a particular item changes from year to year.

Several financial analysis ratios relate to asset utilization, operating performance, etc. The following are the ratios that will be used in the thesis:

- ROE (Return on equity)
- ROA (Return on assets)
- Current ratio
- Quick ratio
- Cash ratio

Return on Equity (ROE) - The annual profit margin (total revenue) divided by the entire share capital, given as a percentage, is the return on equity (ROE) of a company (e.g., 12 percent). Alternatively, the ROE can be calculated by dividing the dividend growth rate by the salary retention rate of the company (1 - share pay ratio).

Because it contains a statement of income and a balance sheet, where the revenue or profit is compared to shareholders' equity, the Return on Equity is a two-part measure in its acquisition. The figure measures the total return on equity and indicates the company's potential to benefit from its investments. Alternatively, it calculates earnings per dollar based on shareholder predictions (CFI, 2019).

Return on Assets (ROA) - Return on Assets (ROA) measures a company's profitability in terms of total assets. The ROA informs a manager, investor, or analyst about a company's management's ability to profit from its assets. The percentage of refunds is shown. The return on investment (ROI) is computed by dividing the company's revenue by its total assets (n.d.).

Current Ratio - The current ratio is a liquidity ratio that assesses a company's capacity to meet short-term obligations, such as those due within a year. It explains to investors and analysts how a firm might use current assets on its balance sheet to pay off existing debt and other obligations.

A current ratio equal to or slightly higher than the industry average is generally appropriate. A present level that is lower than the sector average could suggest a greater risk of depression or spontaneous start. Similarly, if a company's current rating is very high compared to its peer group, managers are not efficiently utilizing their assets.

The current rate is called "current" because it covers all existing assets and liabilities, unlike other loan rates. The effective rate is another name for the current rate.

Quick ratio - The accrual rate measures a company's capacity to satisfy short-term obligations with its many liquid assets and indicates its short-term financial position.

The Quick Ratio, also known as the Acid-Test or Liquidity ratio, assesses a company's ability to quickly repay short-term debts by identifying assets that may be converted into cash. Cash, securities for sale, and accounts receivable are examples of these assets. These assets are referred to as "fast" assets since they can be converted into cash quickly.

Cash ratio - The cash ratio is the average acquisition of a company's capital, particularly its monetary rate and equity in its existing companies. The statistic determines a company's ability to repay short-term debt in cash or close to finance, such as easy-to-sell security. Lenders can use this information to determine how much money they should lend to a company.

In the worst-case situation, where the corporation is about to depart the business, the inflation rate is practically identical to the company's value index. It informs leaders and analysts of the number of current assets that can be converted quickly and the percentage of the company's current payments made up of these assets and assets near cash (Kenton, 2021).

3.5 IT Sector Overview

The United States has a world-class software and information technology (IT) sector. More than 40 percent of the \$ 5 trillion global IT market is in North America, mainly in the United States. The industry makes \$ 1.8 billion of U.S. GDP. (more than 10 percent of the national economy) and 11.8 million jobs. According to CompTIA, more than 525,000 IT software and services companies in the United States (approximately 40,500 technology launches launched in 2018 alone). This includes software publishers, custom computer programming providers, computer system design firms, and service management companies. The industry attracts well-educated and highly skilled US employees of nearly two million people, which has continued to grow over the past decade (Select USA)

U.S. software companies use a mature, coordinated market and have a reputation for producing reliable and efficient solutions that quickly accelerate the market. International companies in the industry have shown a deep interest in the U.S. market due to the strict rules of intellectual property rights and their use. U.S. companies lead global packaged and customized markets and compete in almost every market segment with a stable overseas market share (Select USA).

Future of IT Industry - The size of the IT Services Market is expected to reach \$ 1123.57 billion by 2026, growing to a CAGR of 8.02% between 2021-2026. The growing popularity of cloud-based software and the increasing concern for automation of business processes increases the need for IT services worldwide. The cloud-based IT services market has been multiplying among SMEs since 2018 and is expected to hold a market share of more than 80% by 2026. Similarly, significant emerging data technologies and many connected devices across all businesses increase IT service demand: information management and security forum (PR Newswire, 2021).

North America dominates the IT services market due to rising corporate demand for cloud-based services. The growing growth of IoT-based devices and large data production in businesses creates a new need for IT services. Cloud-based IT services are expected to accelerate the market faster due to lower-cost delivery. Lack of configuration will lead end users to spend on IT services with an uncertain ROI, which could hinder the growth of the IT services sector (PR Newswire, 2021).

The IT infrastructure services market is likely to rise to a CAGR of 9.76% between 2021-2026. Many companies these days face challenges in keeping their IT infrastructure operational and affordable. Therefore, many vendors are entering this market to provide managed IT services. Similarly, managed infrastructure is gaining popularity as it helps companies focus only on their core business activities. Emerging technology such as big data has boosted the growth of the IT Infrastructure Services Market. Big Data Market is expected to reach approximately \$ 318 billion by 2026. Similarly, with the growing amount of data, an enterprise IT infrastructure needs to ensure sustainable information management to protect business data from hackers. This demand also accelerates the IT services market from the IT infrastructure service application (PR Newswire, 2021).

Cloud-based IT services are gaining popularity due to their low shipping costs. Similarly, businesses can grow and be quickly depleted with cloud-based IT services. Therefore, cloud-based IT services are considered the most successful deployment platform for small and medium-sized enterprises. Cloud-based IT Services are expected to grow at a CAGR of 9.98% between 2021-2026. By 2019, about 80% of companies worldwide have been using cloud-based services, while 15% -20% of companies may choose to acquire 100% cloud-based services over the next five years. It is also expected that by 2021, 60% of business software will be fully cloud-based (PR Newswire, 2021).

The success of business IT services depends on many factors and often varies with companies. Similarly, each business is different so use some technology to meet the specific business solution. Therefore, due to a lack of scalability, it is difficult for companies to measure the performance of IT services based on the success of similar technologies in another company. Regular IT service delivery may cost between \$ 75 and \$ 300 per user. Therefore, a lack of inefficient IT services can cost a significant financial burden on businesses (PR Newswire, 2021).

3.6 IT Sector Companies

Apple - Apple Inc., an American technology company, based in Cupertino, is the world's most lucrative company and the most successful product, with a turnover of \$ 260 billion by 2020. They were founded in 1976 by three professional magicians - Steve Wozniak, Ronald Wayne, and Steve Jobs. Apple initially participated in the personal computer segment, which increased after its vast success entering the mobile part. Apple Inc, which started with Laptops and iPhones, has now changed into various products such as Smartwatch, iPod tablets, TVs, accessories, etc. Apple has a large following of millions of users worldwide who stand for hours together outside Apple stores to pick up its products at launch. Apple is one of the most popular brands in the history of Corporate America (Kabra, 2021).

Samsung - Samsung in Seoul is a South Korean-based electronics company that is the world's largest mobile phone maker. It is a large conglomerate that does not only make electronic items such as batteries, IC chips, hard disks, image sensors, cameras, etc., but also ships, aircraft engines, wind turbines, and life insurance. Samsung competes heavily with Apple Inc in the mobile segment with its flagship products, such as the Galaxy S, Z, note Series, etc., offering 40% off its top line (Kabra, 2021).

Foxconn - Foxconn is a Taiwanese electricity contractor company headquartered in New Taipei City. Foxconn is one of the world's largest employers providing 1.29 million employees worldwide, and is China's largest private-sector employer. Foxconn, founded in 1974, caters to almost every primary product and manufactures customized electronic products as per the seller's requirement. Some of the most amazing creations made by the company are the iPad, iPhone, Kindle, Nintendo, BlackBerry, Google Pixel, Redmi phones, PlayStation, etc. (Kabra, 2021).

Alphabet - People who use the Internet may have heard of Google. Alphabet Inc, an American international company, is the parent company of Google LLC and a few other subsidiaries. Google Inc., based in California, is the undisputed leader in the global search engine segment, with a market share of 92.47% from June 2021. The characters invest in exciting and re-branded projects such as self-driving cars, lifetime R&D company Calico, the intelligent home project Nest, etc. Google, one of the most reliable technology companies, was founded by Larry Page and Sergey Brin in 1998 while studying at Stanford University (Kabra, 2021).

Microsoft - Microsoft is one of the most expensive products in the technology industry and is the second-largest company globally. Microsoft, founded in 1975 by Bill Gates and Paul Allen, is a global leader in personal software. The Microsoft Windows operating system was a successful platform that generated enormous profits for the company. Microsoft, now owned by Satya Nadella, focuses on new technologies such as blockchain, machine learning, artificial intelligence, and cloud computing (Kabra, 2021).

4 Practical Part

The practical section of this thesis examines the financial position (represented by the Balance sheet) and financial performance (represented by the Statement of profit or loss) of a selected US company, Apple Incorporation, using vertical and horizontal analysis of the company's financial statements and financial ratio calculations.

4.1 Company Introduction

Apple Inc. is an American technology company focused on purchasing electronics, software, and online services. Apple is a major for-profit technology company (reaching US \$ 365.8 billion by 2021). As of January 2021, it is the world's most important company, the fourth largest computer vendor in unit sales, and the second-largest mobile phone manufacturer. It is one of the largest US technology companies in the United States, alongside Alphabet, Amazon, Meta, and Microsoft.

Apple was founded as Apple Computer Company on April 1, 1976, by Steve Jobs, Steve Wozniak, and Ronald Wayne to develop and sell Wozniak's Apple I personal computer. Compiled by Jobs and Wozniak as Apple Computer, Inc. in 1977 with the company's next computer, the Apple II became a best-seller. Apple went public in 1980 for immediate financial success. The company has developed new computers with new user-friendly graphics, including the original Macintosh, announced in the notorious ad, "1984", directed by Ridley Scott. In 1985, the high cost of its products and the power struggles among management created problems. Wozniak retreated to Apple peacefully, while Jobs resigned to acquire NeXT and other Apple employees.

As the personal computer market grew and developed in the 1990s, Apple lost a significant market share in the dual-core Microsoft Windows program for Intel-powered PC clones (also known as "Wintel"). In 1997, just weeks before the collapse, the company purchased NEXT to deal with Apple's failed operating system and lured Jobs back into the company. Over the next decade, Jobs led Apple back to profit by using several strategies, including launching the iMac, iPod, iPhone, and iPad to gain momentum, launching unforgettable advertising campaigns, opening a series of Apple Store stores, and discovering more companies to expand the company's product portfolio. Jobs resigned in 2011 due to ill health and died two months later. CEO Tim Cook followed him.

Apple became the first US company to be publicly traded to exceed \$ 1 trillion in August 2018, then \$ 2 trillion in August 2020, and the latest \$ 3 trillion in January 2022. and its contractor operating procedures, its practices of nature. And its business principles, which include anti-competitive and buying patterns. The company enjoys a high level of product reliability and is regarded as one of the essential products in the world.

History of the company - In 1976, Steve Jobs and Steve Wozniak built a store in the garage of the Jobs family in Los Altos, California. With great pleasure and a little money, the two friends began building a computer. They named their small company Apple Computer and their first machine called Apple I. There are various issues with how they named Apple. His proposed activities as an alternative to the "hard" technical "options, which young colleagues discussed. One story is that Steve Jobs loved the Beatles and named his company after the Beatles' Apple Records label. Also, Jobs spent so much time picking apples while living in Oregon that he wanted to honor his favorite fruit. Most importantly, Jobs wanted a company name that would sound friendly and easy (Brashares, 2001).

Wozniak (or Woz, as he was called Friend) was four years older than Steve Jobs in 1983 when the Apple Company entered the list of the top 500 US companies, was only 27 years old. Although Wozniak was impressed with the clean design of the computer, Jobs was very interested in finding a way to sell more. Steve Wozniak continued his work on constructing the first personal computer in 1976. Production was 200 units and sold for \$ 666. These days, about 50 samples of Apple's first computers are stored in public and private collections worldwide.

Apple II was launched in April 1977 - the first personal computer with color graphics and a keyboard. The easy-to-use Apple II has become a massive success for beginners entering the personal computer era. Sales for the first year reached \$ 3 million. Two years later, sales increased to \$ 200 million. On January 22, 1984, Apple officially launched the world's first Macintosh computer for TV commercials during Super Bowl XLVIII. Its price was \$ 2495. The Macintosh was the first computer with a new conversion interface.

In 1985, volume dropped significantly at the company's research facilities, there was a financial loss, and Apple CEO John Sculley took the solution to cut down on 20% of staff and employees. When Macintosh computers failed to sell, company leaders blamed Jobs and decided to leave the company (Honders, 2015).

Between 1986 and 1996, Apple released various batch hardware products, but they did not bring much success to the company. Trying to do its best, the company has achieved

nothing. Apple has spent millions on research and technology but has not been able to bring most of it to market.

Steve Jobs returned to Apple, in 1997, as interim CEO. Jobs took over as interim CEO and began Apple's recovery phase. He created an iMac that sold over 800,000 units in the first five months. Steve Jobs managed to save the company, just a few steps away from the collection (O'Grady, 2009).

Apple is moving from PCs to consumer electronics. In 2003, Apple's stock began to rise at an unprecedented rate. From 2003-to 2006, the price of Apple shares increased tenfold, from \$ 6 per share to \$ 80 per share. On January 9, 2007, Apple introduced the iPhone, featuring three flexible mobile phone products, an iPod, and an effective online communication service with email, web browsing, search, and mapping a handy, portable, and specific device (O'Grady, 2009).

Over the past 20 years, Apple has changed a lot. Apple has become the most critical company globally and has developed many products, including a "smart software assistant" named Siri and data available through the cloud via iCloud. Today Apple continues to create and innovate. Bringing new technologies to the market has made the company a benchmark in information technology.

4.2 SWOT Analysis

Strengths

- 1. The Most Important Character Apple ranks first for the ninth year in a row by Interbrand with a product value of \$ 408 billion. Amazon is ranked second with a product value of \$ 249 Billion, and Microsoft ranks third with a product value of \$ 210 Billion (Gupta, 2021).
- 2. International iconic Apple is one of the most reliable companies for personalized computers and smart technology devices. It has millions of loyal customers with continuous growth (Gupta, 2021).
- 3. High technology Apple was the first to introduce some of the world's most innovative products (iPhones, iPods, AirPods). Apple is still committed to building and developing better, more sophisticated technology devices (Gupta, 2021).
- 4. Brand Of Choice It is no big deal that Apple is a good sign in corporate offices, especially among creative professionals. Apple provides state-of-the-art technology

solutions to all company needs. Experts select the most effective technologies such as Mac Pro or iMacs for visual design, animation, video production, and other creative work.

- 5. Research and Skilled Development Apple put its commitment to its product designs. Careful study and extensive research help understand customer needs and market trends. Apple invests heavily in research and development for future growth and competitiveness. For example, Apple spends \$ 21.9 Billion (approximately 6%) of its R&D revenue (Gupta, 2021).
- 6. The Stabilization Made Happened by Liam -Liam is a reusable iPhone robot that breaks and separates the iPhone. Strips up to one bolt. Many parts of the iPhone can be reused. Liam is designed to produce as many reusable parts as possible. These recyclable parts are then separated and stored securely for use in new production.
- 7. Expansion of services Apple has expanded its service portfolio for many years. For example, about 19% of Apple's annual revenue (\$ 68 B to \$ 365 B in FY 21) comes from its services, which is the second-largest revenue earner behind the iPhone (52% of revenue) (Gupta, 2021). Apple Services includes digital content stores, streaming services, Cloud, AppleCare, payment services, etc. Recently, Apple introduced many new services, such as Apple TV +, Apple news +, Apple Card (credit card services), Apple Arcade (game registration), Apple Fitness +, etc. (Gupta, 2021).

Weaknesses

- 1. High Priced Products Apple's products can be considered a luxury due to their premium prices. The products are priced for middle and high-income consumers. Low-Income consumers can't simply afford Apple products. Due to their premium pricing, only moderate or high-earning individuals can afford their products (Gupta, 2021).
- 2. Limited ad and promotions Apple has strengthened its cause by establishing loyal customers, even limited marketing resources. Apple's marketing relies heavily on its famous and popular stores. Because of its success, Apple does not see the need to spend excessive money on advertising compared to other major brands such as P&G, Pepsi, Verizon, Coca-Cola, etc. (Gupta, 2021).
- 3. Getting Into a Lack of Inability Apple is rapidly expanding into new services such as video content streaming, game streaming, payment services (credit cards) competing with top players like Netflix, Disney, Citi, Chase, Paypal, etc. They may enter areas where they are skilled; remember the failure of Apple maps (Gupta, 2021).

- 4. Incompatibility With Other Software When customers buy an apple product, they go into Apple's entire space. Apple products do not support other software or technologies that make them compatible with other devices. Customers should only purchase Apple apps or accessories to continue using their Apple products (Gupta, 2021).
- 5. Allegations of Tracking Tracking users lower trust. Apple has been accused of using tracking apps on its phones, revealing users' exact location. Although the latest version of Apple phones gives users the right to refuse to track, trust is hard to repeat once lost (Gupta, 2021).
- 6. Bad Business Practices Apple is still being investigated for incorrect business practices after receiving payments for making Google search engine the default search engine for its Safari web browser. The interaction of these two giants makes it difficult for competitors to enter and expand the search engine market (Gupta, 2021).
- 7. Integrate Strong Parental Control Software Parents suspect that Apple's parental control software is not good enough. And that is true because popular apps like Instagram, YouTube, TikTok, etc., are integrated with standalone control systems, making it a nightmare for technology to monitor and track children's activity on social media. Although Apple and Google are both proud of their parental controls, children easily find many ways beyond those controls (Gupta, 2021).

Opportunities

- 1. Consistent Customer Growth Apple has dominated the technology industry for years now. They provide high-quality and advanced technology that delivers success to customer information. Their 92% customer retention rate is astounding. Apple can always rely on the power of the internet for future opportunities to find new customers and build new alliances (Gupta, 2021).
- 2. Qualified Professionals Apple researchers, developers, and product experts are a team of highly trained professionals with years of experience in branding consumer products. With the growth of its team, Apple can continue to create new opportunities. (Gupta, 2021).
- 3. Extended Distribution Network Apple Inc. has the potential to expand its distribution network. Currently, Apple's distribution network is limited and leaves little room for growth. Apple can generate more revenue and sales if it focuses on creating an expanded distribution network. In addition, the company can benefit from active advertising and promotions. (Gupta, 2021).

- 4. Lack of green technology Apple will continue to launch products created using raw technology. The company has not yet started implementing or participating in developing environmentally sustainable technology. (Gupta, 2021).
- 5. Smart Wearable Technology Smart fashion technology will soon rule the world. According to Forbes, wearable technology device sales will double in 2022. It will be a 27+ billion market with sales of 233 million units. Apple has the potential to continue to grow beyond the Apple Watch and AirPods in other wearable categories (Gupta, 2021).
- 6. Use artificial intelligence To increase profit margins and have a stronger market position, Apple must use artificial intelligence. Recently, the company extended its AI portfolio. In 2017, Apple acquired Regard, a French AI launcher, and DeskConnect, an AI tool. Pre-purchase helps Apple integrate intelligent search into the photo app on the iPhone. At the same time, the latest acquisition automatically performs tasks by assisting consumers in organizing apps and features through a series of commands (Gupta, 2021). The company should focus on expanding its AI portfolio to have a strong future.
- 7. Expand Music Broadcast Services The number of young people and the rapid growth of emerging economies provide excellent growth opportunities. Apple is already planning to expand its music streaming services to 52 emerging markets in Africa and the Middle East (Gupta, 2021).
- 8. Deliver Automotive Software Technology The need for independence is multiplying. Apple has the necessary technology to deliver self-driving car technology rather than fully automatic or electric vehicles. Apple has the opportunity to focus on introducing self-driving software technology instead of building a real car as Tesla did.
- 9. Kia Motors will build Apple-free cars Apple has partnered with Kia Motors (parent company Hyundai) to integrate non-driving electric vehicles in Georgia. According to the Wall Street Journal, Kia will start production in 2024 and produce about 100,000 cars in its first year (Gupta, 2021).
- 10. Expansion Made by Chips Apple announced that it would start producing its chips and semi-conductors, competing with Intel, Broadcom, etc. The tech giant is already a ride engineer in a new area of Southern California. Apple team continues to develop silicone to make next-generation silicone wireless. The company's manufacturing chip has increased its total market value, bringing it closer to \$ 3 trillion (Gupta, 2021).

- 11. Dominance of the Smart Speakers Apple owns a market for smart speakers. The HomePod mini tech giant has been an enormous success. According to Strategy Analytics, Apple now has a market share of 10.2% after selling 4 million smart speakers (Gupta, 2021).
- 12. Fitness Feature on Apple Watch While the Apple Watch work rings are a great feature that allows you to monitor your workout routine and frequency, users say it's time for Apple to incorporate a school-ready feature like Oura and Fitbit (Gupta, 2021).

Threats

- 1. After the Coronavirus outbreak Apple relies heavily on China for its production and supply chain. Recent events have greatly affected and disrupted its operation. In addition, about 18 percent of the \$ 365 billion in revenue comes from China (Apple's largest market). The outbreak has had a profound effect and could continue to disrupt Apple's business in the years to come (Gupta, 2021).
- 2. There Is No Active Opposition Mechanism For Air Conditioning While Apple AirTags are intended to help people find lost objects using Bluetooth, technology is also used for malicious purposes. There have been many cases where criminals have used AirTags to steal cars, at worst, to trap people. Apple noted that the Find My app will notify users immediately if an anonymous device follows them. However, a lasting solution is still needed. (Gupta, 2021).
- 3. The Apple Exploited Fake Items Apple is at risk in third-world countries that use the product image illegally to sell counterfeit products. Illegal sellers sell counterfeit Apple products for the same price as Apple's original products. Counterfeit products may lead potential customers to believe that a product made by Apple is of low-quality big news can lead to negative reviews and lousy company information. (Gupta, 2021).
- 4. Increase Competition Although Apple as a product has strengthened itself, it still faces threats from competitors. With advancements in technology, brands like Samsung, Google, and Dell offer Apple tough competition. (Gupta, 2021).
- 5. Market Entry There has been a significant shift in market penetration with some smartphone market brands. Companies like Samsung, HTC, and Lenovo use Android software to make new smartphones. Currently, Android has 72.23% of the market share, while Apple has only 24.55% of the global market share (Gupta, 2021).
- 6. China prices The US government has imposed a high tax on importing goods from China, increasing the total production cost. Therefore, it negatively affects the overall

margins of the products and may make the product more expensive for consumers. (Gupta, 2021).

- 7. Cases 60 cases have been filed against Apple. Consumers were outraged and frustrated when Apple announced that it deliberately suppressed CPU performance on iPhone models with old and damaged batteries. The tech giant said it did so to prevent an unexpected closure. Despite the clarification, consumers feel betrayed because Apple does not believe openly. This has led to several people filing lawsuits against the company. The first class-action lawsuit was filed on December 21, 2017, and it is alleged that Apple's actions affect the resale value of its products and force its users to upgrade to new versions ahead of time (Gupta, 2021).
- 8. Backdoor Mechanism Apple has been under constant pressure from government agencies to unlock the iPhone with a backdoor, opening the iPhone encryption and providing access to its data. In many cases, Apple has denied providing a backup device because it could be exploited by bad people, which ultimately exposes millions of iPhone users (Gupta, 2021).

4.3 Revenue Growth Analysis

Table 1 Analysis of Apple's revenue growth

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Revenue	215639	229234	265595	260174	274515	365817

Source: Author's work from annual report 2021

Figure 1: Revenue of Apple Incorporation



Source: Own processing

The revenue of Apple Incorporation has been continuously increasing for the past five years. The payment of Apple was \$215639 million in 2016, which is further increased to \$229234 million in 2017. In 2018, the company recorded a revenue of \$265595 million. In 2019, the company's revenue decreased by \$260174 million due to the Covid-19 pandemic. However, the company has recovered from the pandemic as its revenue increased by \$274515 million, and its income increased by \$365817 million.

4.4 Net Sales Analysis (Product)

Table 2 Analysis of Net Sales by product

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
iPhone	136700	141319	164888	142381	137781	191973
iPad	20628	19222	25198	25740	28622	35190
Mac	22831	25850	18380	21280	23724	31862
Services	24348	29980	17381	24482	30620	38367
Other Product	11132	12863	39748	46291	53768	68425
Total net sale	215639	229234	265595	260174	274515	365817

Source: Author's work from annual report 2021

Net Sales by Product (2021)

19%

iPhone
iPad

Mac
Services
Other Products

Figure 2: Net Sales by Product

Source: Own processing

iPhone net sales increased during 2017 compared to 2016 due to higher iPhone unit sales and a different mix of iPhones with higher average selling prices. The weakness in foreign currencies relative to the U.S. dollar had an unfavorable impact on iPhone net sales during 2017 compared to 2016. iPhone sales increased in 2018 compared to 2017 due to the unique combination of iPhones leading to moderate sales costs. iPhone sales declined in 2019 compared to 2018 due to declining iPhone unit sales. Sales of the iPhone dropped in 2020 compared to 2019 due to the absence of new iPhone models in the fourth quarter of 2020. By 2021, sales of the iPhone will be \$ 191973 million, which is a very high number compared to the last five years.

Sales of the remainder of the iPad dropped in 2017 compared to 2016 due to the sale of the lower iPad unit and a different mix of iPads with lower average retail prices. The weakness of foreign currencies compared to the U.S. dollar hurt sales of the iPad remnant during 2017 compared to 2016. Sales of the remainder of the iPad dropped in 2018 compared to 2017 due to the different integration of iPads resulting in lower sales prices. IPad net sales increased in 2019 compared to 2018 due to the higher sales of the iPad Pro. Net sales of the iPad increased in 2020 compared to 2019 due to the increased sales of 10-inch versions of the iPad, iPad Air, and iPad Pro. The iPad will gain the highest sales by 2021.

Mac residual sales increased in 2017 compared to 2016 due to the unique combination of Macs with higher sales prices and higher sales of Mac units. Weakness of foreign currencies compared to the U.S. dollar harmed sales of Mac remainder during 2017 compared to 2016. Mac retail sales declined in 2018 compared to 2017 due to lower Mac unit sales. Total Mac sales increased in 2019 compared to 2018 due to the high sales of MacBook Air, which was slightly lower than the low net sales of MacBook and MacBook Pro. Total Mac sales increased by 2020 compared to 2019 due to the high sales of the MacBook Pro. Mac reported record sales of \$ 3186 million by 2021.

The annual growth in the surplus of Service Services in 2017 was mainly due to the increase in App Store and licensing sales. Sales of surplus services increased in 2019 compared to 2018 due to higher sales of the App Store, licenses, and AppleCare. Sales of residual services have increased by 2020 compared to 2019 due to the higher sales of the App Store, advertising, and cloud services. In 2021, sales of services increased by \$38367 million.

Other products include Clothing, Home, and Accessories for. Sale of all items increased in 2019 compared to 2018 due to the high sales of AirPods and Apple Watch. Total

sales of clothing, household items, and accessories increased by 2020 compared to 2019 due to the increased sales of AirPods and Apple Watch. Sales of other products also increased in 2021.

Net Sales Analysis (Region)

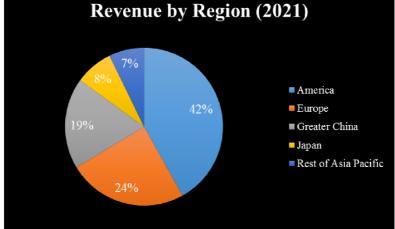
Figure 3: Net Sales by Region

Table 3 Analysis of Net Sales by region

Particulars	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
America	86613	96600	112093	116914	124556	153306
Europe	49952	54938	62420	60288	68640	89307
Greater China	48492	44764	51942	43678	40308	68366
Japan	16928	17733	21733	21506	21418	28482
Rest of Asia Pacific	13654	15199	17407	17788	19593	26356
Total net sales	215639	229234	265595	260174	274515	365817

Source: Author's work from annual report 2021

Revenue by Region (2021)



Source: Own processing

Total U.S. sales increased in 2017 compared to 2016 due to higher iPhone, Services, and Mac sales. U.S. total sales increased in 2018 compared to 2017 due to the total sales of iPhone, Services, and Other Products. U.S. total sales increased in 2019 compared to 2018 due mainly to the high sales of Services and Clothing, Home, and Accessories, which has slightly reduced sales of low-end iPhones. Net sales of Net of America increased by 2020 by \$ 124556 million. It also increased to \$ 153306 million by 2020.

Total European sales increased in 2017 compared to 2016 due to higher iPhone sales and Services. Total European sales increased in 2018 compared to 2017 due to higher iPhone sales and Services. Total European sales dropped in 2019 compared to 2018 due to declining iPhone sales. By 2020, total sales in Europe were \$ 68640 million and \$ 89307 million by 2021, the highest sales acquired by Apple in the European region.

Sales of Greater China Net declined in 2017 compared to 2016 due to a decline in the retail sales of the iPhone, which was slightly offset by sales of high-end devices. Total world sales increased in 2018 compared to 2017 due to higher iPhone sales and Services. The total sales of Greater China declined in 2019 compared to 2018. Sales volume decreased by 2020 but increased by 2021.

The annual increase in sales of Japanese residuals in 2017 and 2016 was mainly due to the sale of the surplus residual Service and the strength of the Japanese yen concerning the U.S. dollar. Sales increased in Japan during 2018 and declined in 2019. Sales volume will be low in Japan by 2020. Sales increased by \$ 28482 million by 2021.

Asia Pacific's total sales increased in 2017 compared to 2016 due to the high sales of iPhone, Services, and Mac. Total Asia Pacific sales increased in 2018 compared to 2017 due mainly to the increased sales of iPhones and Services. The total sales of the Rest of Asia pacific increased in 2019 compared to 2018 due primarily to the high sales of Clothing, Home, and Accessories and Services, which have slightly reduced sales for the remainder of the iPhone. Sales of fossils have risen for two years across the Asia Pacific.

4.6 Financial Position Analysis

The vertical and horizontal analysis of items on the balance sheet: assets, liabilities, and equity, to identify the most critical things (by vertical analysis) and changes over time, is part of the financial position analysis of the company (by horizontal analysis).

Vertical analysis of the elements on the balance sheet - Vertical analysis is a proportionate study of financial statements to determine the importance of specific items relative to the overall. It's handy for comparing proportions and variations in proportions from year to year. It clearly illustrates if a given item is increasing or decreasing in the ratio of the total and how it impacts the total. However, a decrease in the percentage of one thing does not necessarily imply a loss of money worth in terms of the whole; it could indicate a more significant change in the total of other items.

Table 4 Vertical analysis of Assets (Apple Incorporation)

	Consolidated Statement of Financial Position (in US\$ millions)												
Particulars	2016-17	%	2017-18	%	2018-19	%	2019-2020	%	2020-2021	%			
ASSETS													
Current assets													
Cash and cash equivalents	20289	5.41%	25913	7.09%	48844	14.43%	38016	11.74%	34940	9.95%			
Short-term marketable securities	53892	14.36%	40388	11.04%	51713	15.28%	52927	16.34%	27699	7.89%			
Accounts receivable	17874	4.76%	23186	6.34%	22926	6.77%	16120	4.98%	26278	7.49%			
Inventories	4855	1.29%	3956	1.08%	4106	1.21%	4061	1.25%	6580	1.87%			
Vendor non-trade receivables	17799	4.74%	25809	7.06%	22878	6.76%	21325	6.58%	25228	7.19%			
Other current assets	13936	3.71%	12087	3.30%	12352	3.65%	11264	3.48%	14111	4.02%			
Total Current Assets	128645	34.28%	131339	35.91%	162819	48.10%	143713	44.37%	134836	38.41%			
Non-current assets													
Long-term marketable securities	194714	51.88%	170799	46.70%	105341	31.12%	100887	31.15%	127877	36.43%			
Property, plant and equipment, net	33783	9.00%	41304	11.29%	37378	11.04%	36766	11.35%	39440	11.24%			
Goodwill	5717	1.52%	-	0.00%	-	0.00%	-	0.00%	-	0.00%			
Acquired intangible assets, net	2298	0.61%	-	0.00%	-	0.00%	-	0.00%	-	0.00%			
Other non-current assets	10162	2.71%	22283	6.09%	32978	9.74%	42522	13.13%	48849	13.92%			
Total Non-current Assets	246674	65.72%	234386	64.09%	175697	51.90%	180175	55.63%	216166	61.59%			
Total Asset	375319	100.00%	365725	100.00%	338516	100.00%	323888	100.00%	351002	100.00%			

Source: Own processing based on the Consolidated Statement of Financial Position of Apple Incorporation FY 2017-2021.

The Consolidated Statement of Financial Position of Apple Incorporation, which displays the variations in the percentage of items from year to year, is shown in table 4. Property, plant, and equipment, including structures, processing facilities, machinery, and equipment, are examples of these changes. We can observe from the table that long-term marketable securities take the most significant percentages of non-current assets and total assets. In 2018, it accounted for 46.70 percent of total assets; by 2021, it had declined to 36.43 percent.

Aside from that, short-term marketable securities use the most significant percentages of current assets and total assets. It accounted for 11.04 percent of total assets in 2018. However, in 20201, it climbed marginally and reached 16.34 percent. Long-term marketable securities were the essential item on the company's balance sheet in 2017-18, totaling \$170799 million, while long-term marketable securities were the lowest in 2018-19 compared to previous years. Over the last three years, there has been no significant change in the proportions of inventories, other current assets, account receivables, and Property Plant & Equipment.

Table 5 Vertical analysis of Equity and Liabilities (Apple Inc.)

	Consolidated Statement of Financial Position (in US\$ million)											
EQUITY	2016-17	%	2017-18	%	2018-19	%	2019-20	%	2020-21	%		
Shareholder's equity	35867	9.56%	40201	10.99%	45174	13.34%	50779	15.68%	57365	16.34%		
Retained earnings	98330	26.20%	70400	19.25%	45898	13.56%	14966	4.62%	5562	1.58%		
Accumulated other comprehensive income/(loss)	-150	-0.04%	-3454	-0.94%	-584	-0.17%	-406	-0.13%	163	0.05%		
Total shareholder's equity	134047	35.72%	107147	29.30%	90488	26.73%	65339	20.17%	63090	17.97%		
Current Liabilities												
Account payable	49049	13.07%	55888	15.28%	46236	13.66%	42296	13.06%	54763	15.60%		
Accrued expenses	25744	6.86%	33327	9.11%	37720	11.14%	42684	13.18%	47493	13.53%		
Deferred revenue	7548	2.01%	5966	1.63%	5522	1.63%	6643	2.05%	7612	2.17%		
Commercial paper	11977	3.19%	11964	3.27%	5980	1.77%	4996	1.54%	6000	1.71%		
Current portion of long-term debt	6496	1.73%	8784	2.40%	10260	3.03%	8773	2.71%	9613	2.74%		
Total Current Liabilities	100814	26.86%	115929	31.70%	105718	31.23%	105392	32.54%	125481	35.75%		
Non-current Liabilities												
Deferred revenue, non-current	2836	0.76%	-	0.00%	-	0.00%	-	0.00%	-	0.00%		
Long-term debt	97207	25.90%	93735	25.63%	91807	27.12%	98667	30.46%	109106	31.08%		
Other non-current liabilities	40415	10.77%	48914	13.37%	50503	14.92%	54490	16.82%	53325	15.19%		
Total Non-Current Liabilities	140458	37.42%	142649	39.00%	142310	42.04%	153157	47.29%	162431	46.28%		
Total Liabilities	241272	64.28%	258578	70.70%	248028	73.27%	258549	79.83%	287912	82.03%		
Total liabilities and shareholder's equity	375319	100.00%	365725	100.00%	338516	100.00%	323888	100.00%	351002	100.00%		

Source: Own processing based on the Consolidated Statement of Financial Position of Apple Incorporation FY 2017-2021.

The vertical analysis allows comparing financial statements from one company to another and across industries much easier. The vertical analysis of liabilities and equity is shown in Table 5.

Long-term debt makes up the majority of non-current liabilities. Apple Incorporation had a massive amount of long-term obligations for \$109106 million in 2020-21, accounting for 31.08 percent of total liabilities and equity. In addition, for the fiscal year 2019-20, additional non-current penalties have been increased to \$54490 million. Deferred revenue, non-current account for \$2836 million in 2016-17, and other non-current liabilities.

As can be seen, accounts payable make for the largest share of total current liabilities, totaling \$49049 million in 2016-17. In 2019-20, accrued expenses totaled \$42684 million, accounting for 13.18 percent of total liabilities and equity. It was \$47493 million in 2020-21, accounting for 13.53 percent of total liabilities and equity.

Horizontal balance sheet item analysis - Horizontal analysis is sometimes referred to as trend analysis. This method displays past data and allows for comparison. In this method, one of the chosen years can be used as a base year, or the preceding year can be used as a base year, and you must always compare two years to see how a particular item changes from year to year. This study can simply show how specific elements have changed over time and how this has affected the company's growth, operations, and revenues.

Table 6 Horizontal analysis of Assets (Apple Inc.)

	Conso	lidated State	ement of Fin	ancial Posit	ion (in US\$	millions)					
Particulars	2015-16	2016-17	%	2017-18	%	2018-19	%	2019-20	%	2020-21	%
ASSETS											
Current assets											
Cash and cash equivalents	20484	20289	-0.95%	25913	27.72%	48844	88.49%	38016	-22.17%	34940	-8.09%
Short-term marketable securities	46671	53892	15.47%	40388	-25.06%	51713	28.04%	52927	2.35%	27699	-47.67%
Accounts receivable	15754	17874	13.46%	23186	29.72%	22926	-1.12%	16120	-29.69%	26278	63.01%
Inventories	2132	4855	127.72%	3956	-18.52%	4106	3.79%	4061	-1.10%	6580	62.03%
Vendor non-trade receivables	13545	17799	31.41%	25809	45.00%	22878	-11.36%	21325	-6.79%	25228	18.30%
Other current assets	8283	13936	68.25%	12087	-13.27%	12352	2.19%	11264	-8.81%	14111	25.28%
Total Current Assets	106869	128645	20.38%	131339	2.09%	162819	23.97%	143713	-11.73%	134836	-6.18%
Non-current assets											
Long-term marketable securities	170430	194714	14.25%	170799	-12.28%	105341	-38.32%	100887	-4.23%	127877	26.75%
Property, plant and equipment, net	27010	33783	25.08%	41304	22.26%	37378	-9.51%	36766	-1.64%	39440	7.27%
Goodwill	5414	5717	5.60%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Acquired intangible assets, net	3206	2298	-28.32%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Other non-current assets	8757	10162	16.04%	22283	119.28%	32978	48.00%	42522	28.94%	48849	14.88%
Total Non-current Assets	214817	246674	14.83%	234386	-4.98%	175697	-25.04%	180175	2.55%	216166	19.98%
Total Asset	321686	375319	16.67%	365725	-2.56%	338516	-7.44%	323888	-4.32%	351002	8.37%

Source: Own processing based on the Consolidated Statement of Financial Position of Apple Incorporation FY 2017-2021.

Table 6 depicts a horizontal examination of assets such as property, plant, and equipment and changes in their share of the total proportion and the importance of this item to the organization. The changes in one line for five years (2017–2021) are shown above.

In 2017 and 2021, the inventories grew positively, with 127.72% in 2017 and 62.03% in 2021. The short-term marketable securities were increased by 15.47% in 2017, and it has been decreased by -47.67% in the year 2021, which indicated that the company had made payments to fulfill its short-term obligations. Account receivable has been positively increased by 13.46% in 2017 and 29.72% in 2018. However, it slightly declined by -1.12% in 2019. Further, there can be seen a drastic decline of -29.69% in accounts receivable during 2020. Despite the severe deterioration, it increased by 63.01% in 2021.

The Property, Plant, and Equipment have grown positively with 7.27% in 2021, indicating that the company expanded its machinery and facilities in 2021. During the last two years, cash and cash equivalents are decreased by -22.27% in 2020, by -8.09% in 2021 and 2019; this decline was at a more growth stage than the last two years, 88.49%. This shows that Apple Incorporation faces difficulty obtaining money from its business activities in the previous year.

Table 7 Horizontal analysis of Equity and Liabilities (Apple Inc.)

	Cons	olidated Sta	tement of Fi	nancial Posi	tion (in US\$	million)					
EQUITY	2015-16	2016-17	%	2017-18	%	2018-19	%	2019-2020	%	2020-21	%
Shareholder's equity	31251	35867	14.77%	40201	12.08%	45174	12.37%	50779	12.41%	57365	12.97%
Retained earnings	96364	98330	2.04%	70400	-28.40%	45898	-34.80%	14966	-67.39%	5562	-62.84%
Accumulated other comprehensive income/(loss)	634	-150	-123.66%	-3454	2202.67%	-584	-83.09%	-406	-30.48%	163	-140.15%
Total shareholder's equity	128249	134047	4.52%	107147	-20.07%	90488	-15.55%	65339	-27.79%	63090	-3.44%
Current Liabilities											
Account payable	37294	49049	31.52%	55888	13.94%	46236	-17.27%	42296	-8.52%	54763	29.48%
Accrued expenses	22027	25744	16.87%	33327	29.46%	37720	13.18%	42684	13.16%	47493	11.27%
Deferred revenue	8080	7548	-6.58%	5966	-20.96%	5522	-7.44%	6643	20.30%	7612	14.59%
Commercial paper	8105	11977	47.77%	11964	-0.11%	5980	-50.02%	4996	-16.45%	6000	20.10%
Current portion of long-term debt	3500	6496	85.60%	8784	35.22%	10260	16.80%	8773	-14.49%	9613	9.57%
Total Current Liabilities	79006	100814	27.60%	115929	14.99%	105718	-8.81%	105392	-0.31%	125481	19.06%
Non-current Liabilities											
Deferred revenue, non-current	2930	2836	-3.21%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Long-term debt	75427	97207	28.88%	93735	-3.57%	91807	-2.06%	98667	7.47%	109106	10.58%
Other non-current liabilities	36074	40415	12.03%	48914	21.03%	50503	3.25%	54490	7.89%	53325	-2.14%
Total Non-Current Liabilities	114431	140458	22.74%	142649	1.56%	142310	-0.24%	153157	7.62%	162431	6.06%
Total Liabilities	193437	241272	24.73%	258578	7.17%	248028	-4.08%	258549	4.24%	287912	11.36%
Total liabilities and shareholder's equity	321686	375319	16.67%	365725	-2.56%	338516	-7.44%	323888	-4.32%	351002	8.37%

Source: Own processing based on the Consolidated Statement of Financial Position of Apple Incorporation FY 2017-2021.

The horizontal examination of liabilities and equity is shown in table 7. In the category of non-current liabilities, the most significant portion of total non-current liabilities in 2017 is long-term debt. Apple Incorporation borrowed \$97207 million in 2016-17, accounting for 28.88 percent of its total liabilities and equity.

As can be seen, the current portion of long-term debt accounts for the most significant percentage of total current liabilities: in 2016-17, it was \$6496 million, or 85.60 percent; in 2017-18, it was \$8784 million, or 35.22 percent, in 2018-19, it was \$10260 million, or 16.80 percent, and in 2019-20, it was \$8773 million, or -14.49 percent of total equity and liabilities. It has been increased by 9.57 percent for 2020-21. While account payable was \$49049 million in 2017, accounting for 31.52 percent of total equity and liabilities, it was -17.27 percent in 2019, -8.52 percent in 2020, and 29.48 percent in 2021.

4.7 Financial Performance Analysis

Financial analysis is also known as financial statement analysis and interpretation (Gupta, 2021). The vertical and horizontal analysis of items in the Statement of Profit and Loss: expenses and revenues, to identify the most critical things (by vertical analysis) and changes over time, is part of the financial performance study of the company (by horizontal analysis).

Table 8 Vertical analysis of Consolidated Statement of Income (Apple Inc.)

	Consolidated Statement of Income (in US\$ million)											
Particulars	2016-17	%	2017-18	%	2018-19	%	2019-20	%	2020-21	%		
Net sales:												
Products	-	0.00%	225,847	0.00%	213,883	387.08%	220,747	384.50%	297,392	314.10%		
Services	-	0.00%	39,748	0.00%	46,291	83.78%	53,768	93.65%	68,425	72.27%		
Total net sales	229234	474.10%	265,595	446.15%	260,174	470.85%	274,515	478.16%	365,817	386.37%		
Cost of sales:												
Products	-	0.00%	148,164	248.89%	144,996	262.41%	151,286	263.51%	192,266	203.07%		
Services	-	0.00%	15,592	26.19%	16,786	30.38%	18,273	31.83%	20,715	21.88%		
Total cost of sales	141048	291.72%	163,756	275.08%	161,782	292.79%	169,559	295.34%	212,981	224.95%		
Gross margin	88186	182.39%	101,839	171.07%	98,392	178.07%	104,956	182.82%	152,836	161.42%		
Operating expenses:												
Research and development	11581	23.95%	14,236	23.91%	16,217	29.35%	18,752	32.66%	21,914	23.15%		
Selling, general and administrative	15261	31.56%	16,705	28.06%	18,245	33.02%	19,916	34.69%	21,973	23.21%		
Total operating expenses	26842	55.51%	30,941	51.97%	34,462	62.37%	38,668	67.35%	43,887	46.35%		
Operating Income	61344	126.87%	70,898	119.09%	63,930	115.70%	66,288	115.46%	108,949	115.07%		
Other income/(expense),net	2745	5.68%	2,005	3.37%	1,807	3.27%	803	1.40%	258	0.27%		
Income before provision for income taxes	64089	132.55%	72,903	122.46%	65,737	118.97%	67,091	116.86%	109,207	115.34%		
Provision for income taxes	15738	32.55%	13,372	22.46%	10,481	18.97%	9,680	16.86%	14,527	15.34%		
Net income	48351	100.00%	59,531	100.00%	55,256	100.00%	57,411	100.00%	94,680	100.00%		

Source: Own processing based on the Standalone Statement of Income of Apple Incorporation FY 2017-2021.

Table 8 demonstrates that net sales account for the majority of overall revenue. During the five years of analysis, revenue increased by more than 400 percent since it includes substantial product sales instead of service sales. In 2020, it represented 478.16 percent, which is the greatest compared to other years. Other income makes for a tiny fraction of overall revenue; hence changes in it have little impact on total income.

Selling, general, and administrative expenses will account for the most significant percentage of overall operating costs in 2020. Advertising costs are included in selling, public, and administrative fees, which account for 34.69 percent of total expenses in 2020 and 23.21 percent in 2021. From the moment the product's technological know-how is produced until the product is available for consumer release, research and development costs include generating computer software that will be sold, rented, or otherwise advertised as an investment. In 2020, the cost of research and development will be 32.66 percent, the highest in the previous three years.

The study has revealed that other revenue and expenses have remained stable over the last two years, i.e., 2018 and 2019, since there have been no significant variations in the proportion of additional income and expenses. Interest income, dividend income, interest expense, and so on are other revenue and expenses. Other payments and expenses have fallen slightly, with 3.37 percent in 2018, 3.27 percent in 2019, 1.40 percent in 2020, and 0.27 percent in 2021. Over the last five years, income before income tax has been falling. In 2017,

it was 132.55 percent; in 2018, it was 122.46 percent; in 2019, it was 118.97 percent; in 2020, it was 116.86 percent; and in 2021, it was 115.34 percent. Similarly, income tax provision has decreased during the last five years. In 2017, 2018, 2019, 2020, and 2021, it is 32.55 percent, 22.46 percent, 18.97 percent, 16.86 percent, and 15.34 percent, respectively.

Table 9 Horizontal analysis of Consolidated Statement of Income (Apple Inc.)

Consolidated Statement of Income (in US\$ million)											
Particulars	2015-16	2016-17	%	2017-18	%	2018-19	%	2019-20	%	2020-21	%
Net sales:											
Products	· -	-	0.00%	225,847	0.00%	213,883	-5.30%	220,747	3.21%	297,392	34.72%
Services	-	-	0.00%	39,748	0.00%	46,291	16.46%	53,768	16.15%	68,425	27.26%
Total net sales	215639	229234	6.30%	265,595	15.86%	260,174	-2.04%	274,515	5.51%	365,817	33.26%
Cost of sales:											
Products	-	-	0.00%	148,164	0.00%	144,996	-2.14%	151,286	4.34%	192,266	27.09%
Services	-		0.00%	15,592	0.00%	16,786	7.66%	18,273	8.86%	20,715	13.36%
Total cost of sales	131376	141048	7.36%	163,756	16.10%	161,782	-1.21%	169,559	4.81%	212,981	25.61%
Gross margin	84263	88186	4.66%	101,839	15.48%	98,392	-3.38%	104,956	6.67%	152,836	45.62%
Operating expenses:											
Research and development	10045	11581	15.29%	14,236	22.93%	16,217	13.92%	18,752	15.63%	21,914	16.86%
Selling, general and administrative	14194	15261	7.52%	16,705	9.46%	18,245	9.22%	19,916	9.16%	21,973	10.33%
Total operating expenses	24239	26842	10.74%	30,941	15.27%	34,462	11.38%	38,668	12.20%	43,887	13.50%
Operating Income	60024	61344	2.20%	70,898	15.57%	63,930	-9.83%	66,288	3.69%	108,949	64.36%
Other income/(expense),net	1348	2745	103.64%	2,005	-26.96%	1,807	-9.88%	803	-55.56%	258	-67.87%
Income before provision for income taxes	61372	64089	4.43%	72,903	13.75%	65,737	-9.83%	67,091	2.06%	109,207	62.77%
Provision for income taxes	15685	15738	0.34%	13,372	-15.03%	10,481	-21.62%	9,680	-7.64%	14,527	50.07%
Net income	45687	48351	5.83%	59,531	23.12%	55,256	-7.18%	57,411	3.90%	94,680	64.92%

Source: Own processing based on the Consolidated Statement of Financial Position of Apple Incorporation FY 2017-2021.

Horizontal analysis (sometimes referred to as trend analysis) is a financial statement analysis approach that depicts variations in the amounts of corresponding financial statement items over time. It's a handy tool for assessing trends. The baseline year in the above study is 2016, and the comparison year is 2017. The balance sheet and income statement items from 2016 are compared to the balance sheet and income statement items from 2017. Likewise, in the remaining years, the same has been done. Table 9 shows how profit changed between 2017 and 2021 and its factors. The study of a few totals from the income statement is required to determine whether profit has increased or decreased. Revenues increased over the previous two years, for example, by 5.51 percent in 2020, 33.26 percent in 2021, and -2.04 percent in 2019 due to the Covid-19 epidemic, which caused supply chain disruptions and forced the closure of production units.

In 2020, 16.15 percent of the company's income came from services, which grew to 27.26 percent in 2021. In 2020, product revenue grew by 3.21 percent, and in 2021, it grew by 34.72 percent. The table above examined Apple Incorporation's profit and loss statement and determined what caused the profit to decline year after year.

4.8 Financial Ratio Analysis

The following section will focus on the ratio analysis by calculating the most critical ratios applicable to the chosen company. Ratio analysis covers different company areas, and it indicates a detailed view of the various aspects of a financial statement. The liquidity ratios, leverage ratios, profitability ratios were calculated for the company, covering years from 2017-to 2021.

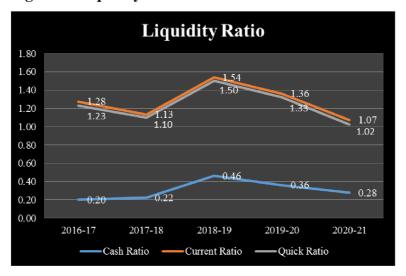
Liquidity ratios indicate how much liquidity the company has to meet its short-term obligations.

Table 10 Liquidity Ratios in million

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Cash Ratio	0.2	0.22	0.46	0.36	0.28
Current Ratio	1.28	1.13	1.54	1.36	1.07
Quick Ratio	1.23	1.1	1.5	1.33	1.02

Source: Author's work from annual report 2021

Figure 4: Liquidity Ratios



Source: Own processing

The liquidity ratio measures a company's ability to pay short-term obligations. As a result, balancing it with a company's profitability is necessary, as it negatively affects profitability if liquidity is excessive, leading to lower profitability. A cash ratio greater than one indicates that a corporation will be able to pay down its existing liabilities with cash and cash equivalents while still having funds available.

So, according to the above table, the firm's cash ratio has been less than one over the previous five years, indicating that the company does not have enough cash to pay off its debt. Creditors prefer a high cash ratio since it suggests that a company can quickly pay off its debt. In 2017, Apple Incorporation's cash ratio was 0.20; in 2018, it was 0.22; in 2019, it was 0.46; in 2020, it was 0.36; and in 2021, it was 0.28. As a result, the corporation must keep appropriate cash and cash equivalents.

Furthermore, a larger current ratio indicates that the corporation has sufficient existing assets to cover its current liabilities. A high current balance is generally thought to be beneficial to the organization. Creditors are more ready to give credit to people who can demonstrate that they have the financial means to pay back their debts.

As a result of the investigation, it was discovered that the business's current ratio has been above one over the previous five years, indicating that the company has sufficient liquid assets to meet its short-term liabilities. Every year, the company's current ratio is more than one, suggesting adequate resources to pay its debts.

In 2017, it was 1.28; in 2018, it is slightly decreased to 1.13; in 2019, it is increased to 1.54; in 2020, it was 1.36; and in 2021, it is reduced to 1.07 as compared to the previous year respectively.

Profitability ratios - The profitability ratios help to understand the company's profitability capacity, which is one of the objectives of this thesis.

Table 11 Profitability Ratios in million

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Net Profit	21.09%	22.41%	21.24%	20.91%	25.88%
Return on Assets (%)	12.88%	16.28%	16.32%	17.73%	26.97%
Return on Equity (%)	36.07%	55.56%	61.06%	87.87%	150.07%
Return on Capital Employed (%)	28.72%	38.06%	38.02%	42.66%	64.96%

Source: Author's work from annual report 2021

Profitability Ratios 160 00% 140.00% 120.00% 100.00% 80.00% 60.00% 40.00% 20.00% 0.00% 2016-17 2017-18 2018-19 2019-20 2020-21 Net Profit Return on Assets(%) Return on Equity(%) Return on Capital Employed(%)

Figure 5: Profitability Ratios

Source: Own processing

A profitability ratio is an index that specifies the ability of a company to generate profit relative to revenue. Profitability ratios include various ratios such as net profit, Return on Assets, Return on Equity, Return on Capital Employed.

Net profit is a measure of profitability. It is calculated as a percentage of revenue. The net profit ratio is positive for the preceding five years as the company has reported increasing profit trends during the past five years. The net profit ratio in 2017 was 21.09%, in 2018, it was 22.41%; in 2019, it is 21.24%; in 2020, it is 20.91%, while in 2021, it is increased to 25.88%. This indicates that the company is performing well in terms of net profit ratio.

A rising Return on Assets implies that the company is doing an excellent job of growing earnings with each dollar spent on investment. A declining ROA shows that the corporation has over-invested in assets that have failed to generate revenue growth, indicating that the company is in jeopardy. The ROA result shows that the company's assets return are declining year after year, suggesting that it is not operating effectively. This indicates that the corporation may not have made adequate investments. Apple Incorporation's return on assets has been steadily improving over the last five years, from 2017 to 2021. Apple Incorporation's ROA was 12.88 percent in 2017, and it will be 26.97 percent in 2021.

A rising Return on Equity indicates that a corporation generates more profits while using less capital. It's also a measure of productivity. As shown in Table 9, the return on equity increases year after year. It indicates that the corporation is getting more efficient

while reducing shareholder equity. The company's return on equity was 36.07 percent in 2017 and will be 150.07 percent in 2021.

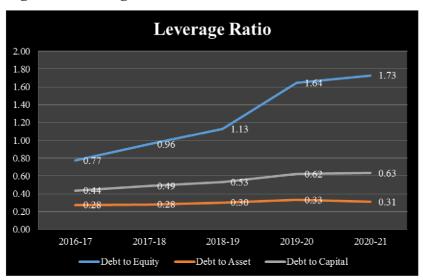
Return on Capital Employed is a good measure for evaluating the company's performance. It indicates if a company is doing well in generating profits from its capital or not. The company is performing well in terms of return on capital employed as the return on capital employed has been continuously increasing for the company in the last five years. The return on capital employed ratio for Apple Incorporation is 28.72% in 2017, 38.06% in 2018, 38.02% in 2019, 42.66% in 2020 and 64.96% in 2021.

Leverage ratios - Leverage ratios help analyze the debt ratios and other ratios related to the company's paying capabilities.

Table 12 Leverage Ratios in million

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Debt to Equity	0.77	0.96	1.13	1.64	1.73
Debt to Asset	0.28	0.28	0.3	0.33	0.31
Debt to Capital	0.44	0.49	0.53	0.62	0.63

Figure 6: Leverage Ratios



Source: Own processing

The debt to equity ratio is used to measure a company's financial leverage. A debt to equity ratio of 0.5 indicates that you may have \$0.50 of debt for every \$1.00 in equity. A ratio above 1.0 indicates more debt than equity. For example, a ratio of 1.5 means you have \$1.50 of debt for every \$1.00 in equity. Apple's debt to equity ratio is 0.77, 0.96, 1.13, 1.16

and 1.73 for the year 2017, 2018, 2019, 2020 and 2021 respectively. This indicates that the company has high debt as compared to its equity.

A Debt to Asset ratio equal to 1 shows the company owns the same liabilities as its assets. It means the company is highly leveraged. A proportion of more than 1 indicates the company owns more liabilities than its assets. From table 10, it has been found that the debt to asset ratio for Apple has been less than one for the preceding five years. This, in turn, indicates that the company has more assets than its liabilities.

Debt to capital ratio of Apple is 0.44 in 2017, 0.49 in 2018, 0.53 in 2019, 0.62 in 2020 and 0.63 in 2021. Apple Incorporation has sufficient capital to fulfill its liabilities as its debt to capital ratio has been less than one in the past five years.

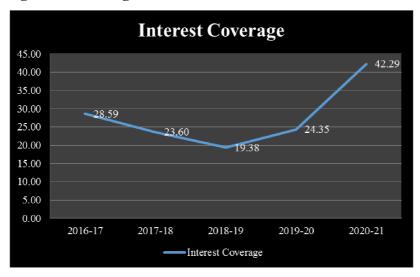
Coverage ratios - Coverage ratios help analyze how efficiently a company's income can cover interest expenses and lease payments. Interest expenses and lease payments are part of a company's debt.

Table 13 Coverage Ratios in million

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Interest Coverage	28.59	23.6	19.38	24.35	42.29

Source: Author's work from annual report 2021

Figure 7: Coverage Ratios



Source: Own processing

The interest coverage ratio shows a company's ability to cover its interest liability by earnings before tax. The higher the ratio indicates, the more robust solvency in terms of payments of lease payments. The interest coverage ratio for Apple has been positive in the past five years, which means the company can cover its interest liability. The interest coverage ratio of Apple in the year 2017 was 28.59, which decreased to 23.60 in 2018 and again reduced to 19.38 in 2019. However, in 2020 it is increased to 24.35, and it was again increased to 42.29 in 2021.

Activity Ratios - Activity ratios are used to determine the company's efficiency in utilizing its assets for generating cash and revenue.

Table 14 Activity Ratios in million

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Asset Turnover Ratio	0.61	0.73	0.77	0.85	1.04
Inventory Turnover Ratio	29.05	41.39	39.4	41.75	32.37
Receivables Turnover	6.43	5.42	5.68	7.33	7.1

Source: Author's work from annual report 2021

Activity Ratios 45.00 41.75 40.00 35.00 30.00 29.05 25.00 20.00 15.00 10.00 5.00 0.00 2017-18 2016-17 2019-20 2018-19 2020-21 Asset Turnover Ratio Inventory Turnover Ratio

Figure 8: Activity Ratios

Source: Own processing

The asset turnover ratio examines the value of a company's revenues concerning the value of its assets. It can be used as an indicator of efficiency as it suggests how the company is using its assets to generate revenue. The higher the asset turnover ratio, the more efficiently a company generates revenue from its assets.

However, if the company has a low asset turnover ratio, it is not efficient in using its assets to generate revenue. The investment to turnover ratio of Apple Incorporation is meager, but it is increasing. The investment to turnover ratio is 0.61 in 2017, 0.73 in 2018, 0.77 in 2019, 0.85 in 2020, and 1.04 in 2021, which is the highest compared to the preceding four years.

The inventory turnover ratio is an efficiency ratio that assesses how efficiently inventory is being managed. It shows how many times the stock is sold during a period. This ratio can be used to identify excessive inventory levels compared to sales. The highest inventory turnover ratio was reported in the year 2020, which was 41.75, and it implies that the company is managing its inventory efficiently. It doesn't overspend on stock purchases and does not incur high holding and storage expenses. The ratio was recorded lowest in 2017, around 29.05%. The balance was 41.39 in 2018, 39.40 in 2019, and 32.37 in 2021.

The receivable turnover ratio measures a company's efficiency in collecting its account receivables, or the amount owed to customers. A high ratio indicates that a company's collections of account receivables are efficient, and the company has a high percentage of quality customers who pay their bills quickly. A high rate can also suggest that a company is cautious when extending debt to its customers. A subsequent credit policy can be beneficial as it can help the company avoid developing debt to customers who may not be able to pay on time.

The low receivable turnover ratio shows insufficient collection process, lousy credit policies, or customers may not be able to make money financially or be eligible for debt. In general, a lower ratio suggests that a company review its credit policies to ensure timely collection of its receivables. The receivable turnover ratio of Apple Incorporation was 6.43 in 2017, and it increased by 7.10 in 2021. This indicates that the company is efficient in collecting money from its account receivables.

5 Results and Discussion

The practical section of the thesis is used to evaluate the company's financial situation and performance. The balance sheet data examine the company's financial status, while the income statement assesses its financial performance. Internal (business revenues and expenses) and external (market conditions) factors can both influence profit (for example, law regulations or exchange rate changes in the national currency).

5.1 Financial Position Assessment

Apple Incorporation's financial status is examined using a vertical and horizontal balance sheet analysis. The vertical analysis revealed that non-current assets are the most critical assets in the organization, with long-term marketable securities accounting for 50% of total assets, followed by property, plant, and equipment, which accounted for approximately 9% of total assets in 2017.

Furthermore, current assets are Apple Incorporation's most valuable assets, accounting for 34.28 percent of the company's total assets in 2017 and 38.41 percent in 2021. (See Table 4). With 25.90 percent of total equity and liabilities, long-term debts are the most critical source of financing under non-current penalties, followed by other non-current liabilities, with 10.77 percent of total equity and liabilities in 2017. Furthermore, retained earnings, which account for 26.20 percent of total equity and weaknesses, are a substantial source of financing for Apple Incorporation.

According to Apple Incorporation's horizontal analysis, the most significant changes in assets were noted in current assets, such as cash and cash equivalents, accounts receivable, and short-term marketable securities (see Table 6). In 2017, existing assets accounted for 20.38 percent of total assets. Cash and cash equivalents account for -0.95 percent of total assets in 2017 and -8.09 percent in 2021, account receivables account for 13.46 percent in 2017 and 63.01 percent in 2021, and short-term marketable securities account for 15.47 percent of total assets in 2017 and -47.67 percent in 2021.

On the other hand, the vertical analysis revealed that these quantities are not as substantial in overall assets. Non-current assets accounted for 14.83 percent of total assets in 2017 and current assets. Property, plants, and equipment were up 25.08 percent in 2017 and will be up 7.27 percent in 2021. Furthermore, long-term marketable securities climbed by 26.75 percent in 2021, the most significant gain in the previous five years. Long-term

debt is the most critical liability, which is expected to decrease in 2020 but increase again in 2021. Apart from long-term debt, other non-current liabilities rose to 21.03 percent in 2018. The current share of long-term borrowings, commercial paper, and accounts payable within current liabilities has changed most.

The current part of long-term loans has been steadily dropping over the last four years, and accounts payable have steadily declined from 2018 to 2020. There have been no significant changes in share capital in the past three years (see Table 7). However, retained earnings (the most critical component in equity) have been steadily declining during the last four years.

Apple Incorporation's horizontal analysis shows that the firm is operating well since it has a solid asset base and a low proportion of liabilities. The horizontal analysis revealed considerable changes in several items during the studied years, but these changes had no impact on total assets, liabilities, or equity. Long-term debt, current portion of long-term debt, and accounts payable are the only substantial amounts that have changed. Over the monitored years, long-term debt and the present fraction of long-term debt increased steadily. Because the corporation has many long-term and short-term liabilities, interest rate increases may cause complications. Some of the loans' interest rates could be linked to floating international and LIBOR base rates.

5.2 Financial Performance Assessment

Vertical and horizontal examination of the profit and loss statement was used to assess the company's financial performance. According to the standing analysis, selling, general, and administrative expenses account for most overall costs. Advertisement costs, exchange discrepancies, and other miscellaneous costs are selling, public, and administrative costs. The operational costs are 31.56 percent of selling, general, and administrative expenses. In 2017, R&D costs accounted for 23.95 percent of operating expenses (Table 8).

The horizontal analysis revealed the most significant changes in other income and expenses. Other income and expenses were 103.64 percent in 2017 but are expected to fall to -67.87 percent by 2021. (See table 9). Selling, general, administrative, and research and development expenses have seen significant adjustments. Aside from costs, net sales revenue has been increasing over the past two years. The most important changes were in the fair value of financial instruments and foreign exchange gains (losses). Still, the quantities were minor, and the company had no control over the changes. As stated in the company's annual

report, fluctuating exchange rates of the national currency may impact the company's performance.

5.3 Financial Ratio Assessment

In every year of its history, the company has made a profit. Internal and external factors can influence gain. It's also crucial to consider the characteristics of the sector. Selling, general and administrative expenses, and research and development expenses significantly affect earnings.

5.4 Profit Influencing Factors

There are a few potential problem areas that could impact the company's performance.

- Long-term borrowing debts the risk is linked to the possibility of an increase in interest rates and credit risk.
- Exchange rate losses the risk is linked to fluctuations in the national currency's exchange rate.
- Country-specific the risk is linked to changes in national legislation, such as tax regulations, licensing requirements, environmental and safety requirements, government control over product prices, and international penalties. The Company is subject to international rules and regulations, which may increase the Company's costs and have a detrimental impact on the Company's business individually or collectively.
- Technological Development The global markets for the Company's products and services are highly competitive and prone to rapid technological change, and the Company may not be able to compete effectively in these markets.
- Transportation and third-party risk The Company's whole manufacturing is done in full or in part by a few international service partners based in Asia. In addition, the corporation exported a significant amount of transportation and logistics management. While these technologies may lower operational expenses, they also provide the Company with less direct control over production and distribution. It's unclear whether the Company's lessened control will affect the quality or quantity of its products or services or its ability to respond to changing conditions.

5.5 Major Problem Areas

The liquidity ratio indicates a company's solvency to pay its short-term liabilities. Therefore, there is a need to balance it with a company's profitability. It shows a negative relation with profitability if excessive liquidity leads to reduced profitability.

Regarding liquidity ratios, the company's cash ratio has been less than one in the past five years, which means that it doesn't have sufficient funds to pay off its debt. Therefore, the company needs to adequately maintain its cash and cash equivalents for better performance. Apple Incorporation has enough liquid assets to cover its short-term liabilities as its current ratio has been above 1 in the preceding five years (See table 10). The quick ratio of Apple Incorporation is more than one, which means the company has enough long-term assets to pay its current debt.

A profitability ratio is an index that specifies the ability of a company to generate profit relative to revenue. The net profit ratio is constantly increasing for the preceding five years as the company has reported a profit during the past five years. Therefore, the company is performing well in terms of net profit ratio. However, the Company needs to implement an effective strategy for earning more profit. The return on assets for Apple Incorporation is continuously increased in the past five years, i.e., 2017 to 2021. The ROA of Apple Incorporation in 2017 was 12.88% which is improved to 26.97% in 2021.

This indicated that Apple is efficiently investing its money. Apple is becoming more efficient with decreasing shareholder equity. As the return on equity of the company is in increasing trend. It is 36.07% in 2017, while in 2021, it is 150.07%. The return on capital employed ratio for Apple Incorporation is 28.72% in 2017, 38.06% in 2018, 38.02% in 2019, 42.66% in 2020 and 64.96% in 2021. The company is doing well in generating profits from its capital (See table 11).

In terms of the leverage ratio, Apple isn't performing well in the debt to equity ratio as its debt to equity ratio has been more than 1 in the past three years. This indicates that the company has more debt as compared to its equity. The debt to asset ratio for Apple has been less than one for the preceding five years. This indicates that the company has more assets than its liabilities, as its debt to asset ratio for Apple is less than one for the preceding five years. Debt to capital ratio of Apple is 0.44 in 2017, 0.49 in 2018, 0.53 in 2019, 0.62 in 2020 and 0.63 in 2021. Apple Incorporation has sufficient capital to fulfill its liabilities as its debt to capital ratio has been less than one in the past five years (see table 12).

The interest coverage ratio for Apple has been positive in the past five years, which means the company can cover its interest liability. The activity ratios showed that the company is not performing well regarding asset turnover and inventory turnover ratios. Therefore, the company should efficiently use its assets to generate more revenue and maintain its inventory correctly by using an effective inventory management technique.

5.6 Key Recommendations

- From the analysis, it has been found that the company is not maintaining its liquidity
 ratio higher than an ideal requirement. Therefore, the company should use its cash
 resources more efficiently to increase its income.
- The company should reduce its other expenses and general and administrative costs to mitigate losses and generate profit.
- The company should try to reduce its long-term and short-term debts to overcome interest rate risk.
- The company should focus on reducing its debt as the debt to equity ratio of the company is more than 1.
- Using an effective inventory management technique, the company should efficiently use its assets to generate more revenue and maintain its inventory correctly.

6 Conclusion

The purpose of this thesis was to evaluate Apple Incorporation's financial position and performance by examining the company's financial statements with a focus on the representation and changes of reported assets, liabilities, expenses, and revenues for a given period, as well as to identify potential financial problems and the most significant factors influencing profit.

The company's financial situation can be determined by looking at the balance sheet, and the financial performance can be determined by looking at the income statement. The balance sheet shows the assets, equity, and liabilities of a corporation at a specific time. The income statement (statement of profit or loss) summarises a company's expenses, revenues, and earnings over a particular period.

The thesis is about Apple Inc., an essential information and technology corporation. The practical element of the thesis and the thesis conclusions were based on the company's published annual reports. The accounting periods from 2017 to 2021 were studied in this research. The company's financial situation study revealed that non-current assets, namely long-term marketable securities, property, plant and equipment, and other non-current assets, are the most significant assets. Long-term debts, the current part of long-term obligations, and accounts payable are the most significant liabilities. Long-term debts began to rise gradually.

The vertical analysis revealed that non-current assets account for most of the company's assets, with long-term marketable securities accounting for 50% of total assets. With 25.90 percent of total equity and liabilities, long-term debts are the most critical source of financing under non-current penalties, followed by other non-current liabilities, with 10.77 percent of total equity and liabilities in 2017. Furthermore, retained earnings, which account for 26.20 percent of total equity and weaknesses, are a substantial source of financing for Apple Incorporation.

Apple Incorporation's horizontal analysis shows that the firm is operating well since it has a solid asset base and a low proportion of liabilities. The horizontal analysis revealed considerable changes in several items during the studied years, but these changes had no impact on total assets, liabilities, or equity. Long-term debt, current portion of long-term debt, and accounts payable are the only substantial amounts that have changed. Over the

monitored years, long-term debt and the present fraction of long-term debt increased steadily.

The company's profit is influenced by the growth of sales and expenses inside the organization and country- and industry-specific laws. According to liquidity ratios, the corporation does not have enough cash to pay off its debt. As a result, to improve performance, the corporation must keep appropriate cash and cash equivalents on hand. As the corporation has declared profit over the last five years, the net profit ratio has been steadily improving. However, by executing a successful business strategy, the company should aim to enhance its profit.

Apple has a poor debt-to-equity ratio. This signifies that the corporation owes more money than it owns. As a result, the organization should concentrate on identifying methods for debt reduction. Apple's debt to asset ratio has been less than one for the previous five years, indicating that the company has more assets than liabilities. Apple has enough capital to meet its obligations, with a debt-to-capital ratio of less than one during the last five years. Apple's interest coverage ratio has been positive for the past five years, indicating that it can meet its interest liability. Regarding activity ratios, the company's asset turnover ratio and inventory turnover ratio are low. As a result, the company should make the most of its assets to generate more money, and it should keep track of its inventory using good inventory management techniques.

To boost revenue, the corporation should better use its monetary resources. To offset losses and generate profit, the corporation should minimize other expenses, such as selling, general, and administrative costs. To avoid interest rate risk, the corporation should lower its long-term and short-term obligations.

7 References

- 1. Baran, D., Pastýr, A. and Baranová, D. (2016) 'Financial Analysis of a Selected Company', *Research Papers Faculty of Materials Science and Technology Slovak University of Technology*, 24(37). doi: 10.1515/rput-2016-0008.
- 2. Brashares, A. (2001) The USA. Steve Jobs, Think Different. Twenty-First Century Books. ISBN 13: 076131959
- 3. Brigham, E. and Houston, J., 2009. *Fundamentals of financial management*. 12th ed. Mason, OH: South-Western. ISBN 978-0-324-59771-4.
- 4. Bansal, R., Kar, S.K. and Mishra, S., 2016. Oil, Gas & Energy Law Intelligence. https://www.researchgate.net/publication/270825409
- CFI (2019) 'Return on Equity (ROE) Formula, Examples and Guide to ROE'. https://corporatefinanceinstitute.com/resources/knowledge/finance/what-is-return-on-equity-roe/
- 6. Fridson, M. S. and Alvarez, F. (2011) 'Financial Statement Analysis A Practitioner's Guide, 4th edition, John Wiley & Sons, Inc, New York' ISBN 13: 0471409154
- 7. Gupta, S. K. (2021) 'Apple SWOT 2022 | SWOT Analysis of Apple | Business Strategy Hub'. https://bstrategyhub.com/swot-analysis-of-apple-apple-swot/
- 8. Halpin, D. W. and Senior, B. A. (2009) Financial Management and Accounting Fundamentals for Construction, Financial Management and Accounting Fundamentals for Construction, doi: 10.1002/9780470548813. ISBN 0470182717
- 9. Honders, C. (2015) Steve Jobs: Visionary of the Digital Revolution. The Rosen Publishing Group, Inc. ISBN 13: 1622759262
- 10. Kabra, A. (2021) 'Top 20 Biggest Tech Companies in The World in 2022 The Teal Mango'. https://www.thetealmango.com/featured/biggest-tech-companies-in-the-world/
- 11. Kenton, W. (2021) 'Cash Ratio Definition (Understanding the Cash Ratio)'. https://www.investopedia.com/terms/c/cash-ratio.asp
- 12. Kim, W. G. and Ayoun, B. (2005) 'Ratio analysis for the hospitality industry: A cross sector comparison of financial trends in the lodging, restaurant, airline, and amusement sectors', *Journal of Hospitality Financial Management*, 13(1). doi: 10.1080/10913211.2005.10653800.
- 13. Kourtis, E., Kourtis, G. and Curtis, P. (2019) 'An Integrated Financial Ratio Analysis

- as a Navigation Compass through the Fraudulent Reporting Conundrum: A Case Study', *International Journal of Finance, Insurance and Risk Management*, IX(2).
- 14. Malik, H. (2011) 'Determinants of Insurance Companies Profitability: an Analysis of Insurance Sector of Pakistan', *Academic Research International*, 1(3).
- 15. Manish Roy Tirkey & Shaban. E. A. Salem (2013) A Comparative Study of Financial Statement of ICICI and HDFC through Ratio Analysis. *International Journal of Accounting and Financial Management Research (IJAFMR)*, 3(4), pp. 89–96.
- 16. Mitra, R. (2011) 'Framing the corporate responsibility-reputation linkage: The case of Tata Motors in India', *Public Relations Review*, 37(4). doi: 10.1016/j.pubrev.2011.06.002.
- 17. Mohana, R. P. (2011) Financial Statement Analysis and Reporting. PHI Learning Pvt. Ltd, ISBN: 978-81-203-3949-1.
- 18. O'Grady, J. D. (2009) Apple Inc. Greenwood. ISBN 13: 0313362446
- 19. Pandey, I. M. (2005) *Financial Management*. Vikas Publishing House Pvt. Ltd. ISBN 13: 8125916581
- 20. Peterson, P. D. and Fabozzi, F. J. (2012) Analysis of Financial Statements. doi: 10.1002/9781119203513. ISBN 13: 1119203513
- 21. PR Newswire (2021) 'Global IT Services Market Outlook 2021-2026: Growing Demand for Cloud Based IT Services and Emerging Big Data Technology Driving Market Growth'.
- 22. Rhyne, R. G. and Brigham, E. F. (1979) 'Fundamentals of Financial Management.', *The Journal of Finance*, 34(5). doi: 10.2307/2327254.
- 23. Robinson, T. R., van Greuning, H., Henry, E., Broihahn, M.A. (2008) International Financial Statement Analysis (CFA Institute Investment Series), John Wiley & Sons, Inc. ISBN 13: 0470287668
- 24. Rosman, R., Wahab, N. A. and Zainol, Z. (2014) 'Efficiency of Islamic banks during the financial crisis: An analysis of Middle Eastern and Asian countries', *Pacific Basin Finance Journal*, 28. doi: 10.1016/j.pacfin.2013.11.001.
- 25. Sakevych, A. and Kobyletskii, P. (2005) *An Introduction to the Financial Statement Analysis*. BookRix. ISBN 13: 3739624679
- 26. Select USA (no date) 'Software & IT Services Industry Spotlight | SelectUSA.gov'. https://www.selectusa.gov/software-and-information-technology-services-industry-united-states

- 27. Sugumar, D. V (2019) 'A Study on Financial Performance of Indian Oil Corporation in India', *International Journal for Research in Applied Science and Engineering Technology*, 7(1). doi: 10.22214/ijraset.2019.1141.
- 28. The Business Research Company (2022) 'Information Technology Market Analysis, Size And Trends Global Forecast To 2022-2030'. https://www.thebusinessresearchcompany.com/report/information-technology-global-market-report

Appendix

1 Consolidated Statement of Financial Position of September 2021 and September 2020

Apple Inc.

CONSOLIDATED BALANCE SHEETS

(In millions, except number of shares which are reflected in thousands and par value)

	Sep	September 25, 2021		September 26, 2020	
ASSETS:					
Current assets:					
Cash and cash equivalents	\$	34,940	\$	38,016	
Marketable securities		27,699		52,927	
Accounts receivable, net		26,278		16,120	
Inventories		6,580		4,061	
Vendor non-trade receivables		25,228		21,325	
Other current assets		14,111		11,264	
Total current assets		134,836		143,713	
Non-current assets:					
Marketable securities		127,877		100,887	
Property, plant and equipment, net		39,440		36,766	
Other non-current assets		48,849		42,522	
Total non-current assets		216,166		180,175	
Total assets	\$	351,002	\$	323,888	
LIABILITIES AND SHAREHOLDERS' EQUITY:					
Current liabilities:					
Accounts payable	\$	54,763	\$	42,296	
Other current liabilities		47,493		42,684	
Deferred revenue		7,612		6,643	
Commercial paper		6,000		4,996	
Term debt		9,613		8,773	
Total current liabilities		125,481		105,392	
Non-current liabilities:					
Term debt		109,106		98,667	
Other non-current liabilities		53,325		54,490	
Total non-current liabilities		162,431		153,157	
Total liabilities		287,912		258,549	
Commitments and contingencies					
Shareholders' equity:					
Common stock and additional paid-in capital, \$0.00001 par value: 50,400,000 shares authorized; 16,426,786 and 16,976,763 shares issued and outstanding, respectively		57,365		50,779	
Retained earnings		5,562		14,966	
Accumulated other comprehensive income/(loss)		163		(406	
Total shareholders' equity		63,090		65,339	
Total liabilities and shareholders' equity	S	351,002	\$	323.888	

See accompanying Notes to Consolidated Financial Statements.

Apple Inc. | 2021 Form 10-K | 31

CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except number of shares which are reflected in thousands and per share amounts)

			,	Years ended		
	s	eptember 25, 2021	s	eptember 26, 2020	S	eptember 28, 2019
Net sales:	-		_		_	
Products	\$	297,392	\$	220,747	\$	213,883
Services		68,425		53,768		46,291
Total net sales		365,817		274,515		260,174
Cost of sales:						
Products		192,266		151,286		144,996
Services		20,715		18,273		16,786
Total cost of sales		212,981		169,559		161,782
Gross margin		152,836		104,956		98,392
Operating expenses:						
Research and development		21,914		18,752		16,217
Selling, general and administrative		21,973		19,916		18,245
Total operating expenses	_	43,887		38,668	_	34,462
Operating income		108,949		66,288		63,930
Other income/(expense), net		258		803		1,807
Income before provision for income taxes		109,207	_	67,091	_	65,737
Provision for income taxes		14,527		9,680		10,481
Net income	\$	94,680	\$	57,411	\$	55,256
Earnings per share:						
Basic	\$	5.67	\$	3.31	\$	2.99
Diluted	\$	5.61	\$	3.28	\$	2.97
Shares used in computing earnings per share:						
Basic		16,701,272		17,352,119		18,471,336
Diluted		16,864,919		17,528,214		18,595,651

See accompanying Notes to Consolidated Financial Statements.

Apple Inc. | 2021 Form 10-K | 29

CONSOLIDATED BALANCE SHEETS
(In millions, except number of shares which are reflected in thousands and par value)

	September 28, 2019		September 29, 2018	
ASSETS:				
Current assets:		40.044	•	05.040
Cash and cash equivalents	\$		\$	25,913
Marketable securities		51,713		40,388
Accounts receivable, net		22,926		23,186
Inventories		4,106		3,956
Vendor non-trade receivables		22,878		25,809
Other current assets		12,352		12,087
Total current assets		162,819		131,339
Non-current assets:				
Marketable securities		105,341		170,799
Property, plant and equipment, net		37,378		41,304
Other non-current assets		32,978		22,283
Total non-current assets		175,697		234,386
Total assets	\$	338,516	\$	365,725
LIABILITIES AND SHAREHOLDERS' EQUITY:				
Current liabilities:				
Accounts payable	\$	46,236	\$	55,888
Other current liabilities		37,720		33,327
Deferred revenue		5,522		5,966
Commercial paper		5,980		11,964
Term debt		10,260		8,784
Total current liabilities		105,718		115,929
Non-current liabilities:				
Term debt		91,807		93,735
Other non-current liabilities		50,503		48,914
Total non-current liabilities		142,310		142,649
Total liabilities		248,028	_	258,578
Commitments and contingencies				
Shareholders' equity:				
Common stock and additional paid-in capital, \$0.00001 par value: 12,600,000 shares authorized; 4,443,236 and 4,754,986 shares issued and outstanding, respectively		45,174		40,201
Retained earnings		45,898		70,400
Accumulated other comprehensive income/(loss)		(584)		(3,454
Total shareholders' equity	_	90,488	_	107,147
Total liabilities and shareholders' equity	S	338,516	\$	365,725

See accompanying Notes to Consolidated Financial Statements.

Apple Inc. I 2019 Form 10-K I 31

CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except number of shares which are reflected in thousands and per share amounts)

		Years ended						
	Se	ptember 28, 2019	Se	ptember 29, 2018	September 3 2017			
Net sales:	_		_		_			
Products	\$	213,883	\$	225,847	\$	196,534		
Services		46,291		39,748		32,700		
Total net sales		260,174		265,595		229,234		
Cost of sales:								
Products		144,996		148,164		126,337		
Services		16,786		15,592		14,711		
Total cost of sales	_	161,782	_	163,756	_	141,048		
Gross margin		98,392		101,839		88,186		
Operating expenses:								
Research and development		16,217		14,236		11,581		
Selling, general and administrative		18,245		16,705		15,261		
Total operating expenses	_	34,462	Ξ	30,941	Ξ	26,842		
Operating income		63,930		70,898		61,344		
Other income/(expense), net		1,807		2,005		2,745		
Income before provision for income taxes	_	65,737		72,903		64,089		
Provision for income taxes		10,481		13,372		15,738		
Net income	\$	55,256	\$	59,531	\$	48,351		
Earnings per share:								
Basic	\$	11.97	\$	12.01	\$	9.27		
Diluted	\$	11.89	\$	11.91	\$	9.21		
Shares used in computing earnings per share:								
Basic		4,617,834		4,955,377		5,217,242		
Diluted		4,648,913		5,000,109		5,251,692		

See accompanying Notes to Consolidated Financial Statements.

Apple Inc. I 2019 Form 10-K I 29

Appendix 5 Consolidated Statement of Financial Position of September 2017 and September 2016

Apple Inc.

CONSOLIDATED BALANCE SHEETS

(In millions, except number of shares which are reflected in thousands and par value)

	September 30, 2017		September 24, 2016	
ASSETS:				
Current assets:				
Cash and cash equivalents	\$	20,289	\$	20,484
Short-term marketable securities		53,892		46,671
Accounts receivable, less allowances of \$58 and \$53, respectively		17,874		15,754
Inventories		4,855		2,132
Vendor non-trade receivables		17,799		13,545
Other current assets		13,936		8,283
Total current assets		128,645		106,869
Long-term marketable securities		194,714		170,430
Property, plant and equipment, net		33,783		27,010
Goodwill		5,717		5,414
Acquired intangible assets, net		2,298		3,206
Other non-current assets		10,162		8,757
Total assets	\$	375,319	\$	321,686
LIABILITIES AND SHAREHOLDERS' EQUITY:				
Current liabilities:				
Accounts payable	\$	49,049	\$	37,294
Accrued expenses		25,744		22,027
Deferred revenue		7,548		8,080
Commercial paper		11,977		8,105
Current portion of long-term debt		6,496		3,500
Total current liabilities		100,814		79,006
Deferred revenue, non-current		2,836		2,930
Long-term debt		97,207		75,427
Other non-current liabilities		40,415		36,074
Total liabilities		241,272		193,437
Commitments and contingencies				
Shareholders' equity:				
Common stock and additional paid-in capital, \$0.00001 par value: 12,600,000 shares authorized; 5,126,201 and 5,336,166 shares issued and outstanding, respectively		35,867		31,25
Retained earnings		98,330		96,364
Accumulated other comprehensive income/(loss)		(150)		634
Total shareholders' equity		134,047		128,249
Total liabilities and shareholders' equity	\$	375,319	\$	321.686

See accompanying Notes to Consolidated Financial Statements.

Apple Inc. I 2017 Form 10-K I 41

CONSOLIDATED STATEMENTS OF OPERATIONS (In millions, except number of shares which are reflected in thousands and per share amounts)

		Y	ears ended		
Sep	otember 30, 2017	Se	September 24, 2016		ptember 26, 2015
\$	229,234	\$	215,639	\$	233,715
	141,048		131,376		140,089
	88,186	_	84,263	_	93,626
	11,581		10,045		8,067
	15,261		14,194		14,329
	26,842		24,239	_	22,396
	61,344		60,024		71,230
	2,745		1,348		1,285
64,089 61,372		61,372	72,515		
	15,738		15,685		19,121
\$	48,351	\$	45,687	\$	53,394
\$	9.27	\$	8.35	\$	9.28
\$	9.21	\$	8.31	\$	9.22
	5,217,242		5,470,820		5,753,421
	5,251,692		5,500,281		5,793,069
\$	2.40	\$	2.18	\$	1.98
	\$ \$ \$ \$	\$ 229,234 141,048 88,186 11,581 15,261 26,842 61,344 2,745 64,089 15,738 \$ 48,351 \$ 9.27 \$ 9.21 5,217,242 5,251,692	September 30, 2017 September 30, 2017 \$ 229,234 \$ 141,048 88,186 \$ 11,581 15,261 26,842 61,344 2,745 64,089 15,738 \$ 48,351 \$ 9.27 \$ 9.21 \$ 5,217,242 5,251,692 \$ 5,251,692	September 30, 2017 September 24, 2016 \$ 229,234 \$ 215,639 141,048 131,376 88,186 84,263 11,581 10,045 15,261 14,194 26,842 24,239 61,344 60,024 2,745 1,348 64,089 61,372 15,738 15,685 \$ 48,351 \$ 45,687 \$ 9.27 \$ 8.35 \$ 9.21 \$ 8.31 5,217,242 5,470,820 5,251,692 5,500,281	September 30, 2017 September 24, 2016 Septemb

See accompanying Notes to Consolidated Financial Statements.

Apple Inc. I 2017 Form 10-K I 39