

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



Master's Thesis

**Assessment of the Financial Position and Performance of
Chosen Companies Operating in the Enterprise Software
Industry**

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DIPLOMA THESIS ASSIGNMENT

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Economics and Management

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Thesis title

Assessment of the Financial Position and Performance of the Chosen Companies Operating in the Enterprise Software Industry

Objectives of thesis

The aim of this thesis is to assess and compare the financial position and performance of three chosen companies operating in the same industry – enterprise business software development and related services, by analyzing the companies' financial statements with focus on the representation and changes of the reported assets, liabilities, expenses, revenues and cash-flow for a chosen period to identify the potential financial problems and the most significant factors influencing the profit.

Methodology

Methodology for the literature overview is based on data collection 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 companies. Vertical and horizontal analysis and ratio analysis of the financial statements will be used to assess the financial position and performance of the companies and to prepare the practical part of the thesis. The methods of analysis, synthesis, comparison and deduction will be used to formulate the conclusions of the thesis.

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financial statements, financial position, balance sheet, assets, liabilities, equity, financial performance, income statement, expenses, revenues, profit, cash-flow, financial analysis, business software industry

Recommended information sources

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Declaration

I declare that I have worked on my master's thesis titled " Assessment of the Financial Position and Performance of Chosen Companies Operating in the Enterprise Software Industry " by myself and I have used only the sources mentioned at the end of the thesis. As the author of the master's thesis, I declare that the thesis does not break any copyrights.

In Prague on 27.11.2022

Radhik Rajendra Soni

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Assessment of the Financial Position and Performance of Chosen Companies Operating in the Enterprise Software Industry

Abstract

The aim of this thesis is to assess and compare the financial position and performance of three chosen companies operating in the same industry - enterprise business software development and related services, by analyzing the companies' financial statements with focus on the representation and changes of the reported assets, liabilities, expenses, revenues and cash-flow for a chosen period to identify the potential financial problems and the most significant factors influencing the profit.

Financial analyzes of the key financial statements such as the balance sheet and income statement are very important instruments for the finance sector in order to understand the financial positions and performances of companies and thus enable investors to make decisions. In the thesis, the financial analysis of SAP SE, Oracle and Salesforce companies operating in the software industry and examining the differences between the US GAAP and IFRS accounting sets used by these companies is analysed based on horizontal, vertical and ratio analyzes based on the last 5 years annual reports of the companies, and then the comparisons of the companies were made based on the results found. As a result of the thesis, it was seen that although all three companies were adversely affected by the Covid 19 period in 2020, they reached their old profitability levels again in 2021 and the Covid 19 process had positive contributions to the future for software companies. However, in the analysis made, it has been seen that the increase in long-term borrowings of Oracle company in recent years has caused a contraction and a negative outlook, especially in the company's equity, although there is a regular trend in the financial situation of SAP SE and Salesforce companies.

Keywords: SAP SE, Salesforce, Oracle, Financial Position, Financial Performance, Financial Statements, Balance sheet, Assets, Liabilities, Equity, Income statement, Expenses, Revenues, Profit, Cash-flow, Financial analysis, Business software industry

Hodnocení finanční pozice a výkonnosti vybraných společností působících v odvětví podnikového softwaru

Abstraktní

Cílem této diplomové práce je zhodnotit a porovnat finanční pozici a výkonnost tří vybraných společností působících ve stejném odvětví - vývoj podnikového podnikového softwaru a související služby, pomocí analýzy účetních výkazů společností se zaměřením na zastoupení a změny vykazovaných aktiv, pasiv, nákladů, výnosů a cash-flow za zvolené období k identifikaci potenciálních finančních problémů a nejvýznamnějších faktorů ovlivňujících zisk.

Finanční analýzy klíčových finančních výkazů, jako je rozvaha a výsledovka, jsou pro finanční sektor velmi důležitými nástroji k pochopení finanční pozice a výkonnosti společností a umožňují tak investorům činit rozhodnutí. V práci je analyzována finanční analýza společností SAP SE, Oracle a Salesforce působících v softwarovém průmyslu a zkoumání rozdílů mezi účetními sadami US GAAP a IFRS používanými těmito společnostmi na základě horizontální, vertikální a poměrové analýzy založené na poslední 5leté výroční zprávě společností a následně byla provedena srovnání společností na základě zjištěných výsledků. V důsledku této práce bylo vidět, že ačkoli všechny tři společnosti byly nepříznivě ovlivněny obdobím Covid 19 v roce 2020, v roce 2021 opět dosáhly své staré úrovně ziskovosti a proces Covid 19 měl pro softwarové společnosti pozitivní přínos do budoucnosti. V provedené analýze však bylo vidět, že nárůst dlouhodobých půjček společnosti Oracle v posledních letech způsobil pokles a negativní výhled, zejména u vlastního kapitálu společnosti, ačkoli ve finanční situaci existuje pravidelný trend společností SAP SE a Salesforce.

Klíčová slova: SAP SE, Salesforce, Oracle, Finanční pozice, Finanční výkonnost, Účetní závěrka, Rozvaha, Aktiva, Pasiva, Vlastní kapitál, Výkaz zisku a ztráty, Náklady, Výnosy, Zisk, Cash-flow, Finanční analýza, Průmysl obchodního softwaru

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List of abbreviations

IFRS	: International Financial Reporting Standards
US GAAP	: United States Generally Accepted Accounting Principles
ROA	: Return On Assets
ROE	: Return On Equity
SAP SE	: System Analysis Program Development (Systemanalyse Programmentwicklung) Societas Europaea
IASB	: International Accounting Standards Board
FASB	: Financial Accounting Standards Board
SEC	: U.S. Securities and Exchange Commission
NYSE	: New York Stock Exchange
COGS	: Cost of Goods
EPS	: Earnings Per Share
V2MOM	: Vision, Values, Methods, Obstacles, and Measures
SG&A	: Selling, General, and Administrative Expenses
R&D	: Research & Development
IDC	: International Data Corporation

INTRODUCTION

Financial reports contain information such as income and expenses, expenditure items, profit and capital information of a company, and provide information about the financial status of the company's financial situation to the readers. Financial reports are essential for people who trade in capital markets and want to buy shares from these companies. While it provides information about the management performance and value of the company, it also offers the opportunity to make predictions for the future based on companies' past performance. Financial reports have a very important place in terms of the performance and efficiency of capital markets. The transparency and reliability of financial reports provide confidence to investors and ease in investment decisions, and this also benefits companies' economic growth (Lessambo, 2018).

Understanding company activities by examining the company's financial reports and evaluating these activities critically is expressed as financial statement analysis. In the financial statement analysis, the relations between the economic facts and figures in the company's previous financial statements are examined with the help of certain formulas and financial calculations, and evaluations are made about the company's financial structure. Financial analysis includes both mathematical values and interpretation of these values. As a result of the analysis, it becomes much easier to understand the value and financial situation of the company (Alamry, 2020).

The aim of this study is to make a detailed financial analysis through the use of financial reports published by companies, and thus to comment on the current situation of companies and make predictions for the future. For this purpose, first, in the second part of the thesis, a literature review will be done on financial reporting and international reporting standards, then in the practical part, financial analyzes of the selected companies will be made. In the last two chapters of the thesis, the results obtained from the analyzes will be given.

OBJECTIVES AND METHODOLOGY

1.1 Objectives

The aim of this thesis was to assess and compare the financial position and performance of three chosen companies operating in the same industry - enterprise business software development and related services, by analyzing the companies' financial statements with focus on the representation and changes of the reported assets, liabilities, expenses, revenues and cash-flow for a chosen period to identify the potential financial problems and the most significant factors influencing the profit. In this context, the objectives of the thesis have been determined as follows.

- Examining the differences between different financial reporting methods such as IFRS and GAAP.
- To examine the effectiveness of ratio analysis, horizontal and vertical analysis methods in terms of understanding the financial performance of companies.
- To examine the changes in the financial structures of selected companies in recent years.

For the purposes listed above, firstly, the theoretical framework of the thesis will be created in order to understand the financial analysis and reporting methods. For this reason, the theoretical and empirical studies in the literature on these subjects will be examined and thus the theoretical scope of the thesis will be formed. Then, the practical part of the thesis will be included and the financial analysis of the selected companies will be made. After the Practical Part, there will be a discussion chapter where the results obtained are evaluated and their contribution to the literature is evaluated.

1.2 Methodology

Methodology for the literature overview is based on data collection 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 companies. Vertical and horizontal analysis and ratio analysis of the financial statements will be used to assess the financial position and performance of the companies

and to prepare the practical part of the thesis. The methods of analysis, synthesis, comparison and deduction will be used to formulate the conclusions of the thesis.

For the purpose of the thesis, SAP SE, Oracle and Salesforce companies have been selected to analyze and compare their financial performances, and within the scope of the analysis, the financial status of the companies for the last 5 years between 2017-2021 will be included in the analysis. In order to understand the differences arising from the GAAP and IFRS reporting systems, two companies were selected among the companies that make IFRS reporting, while one company was selected from among the companies that use the GAAP method. While analyzing the financial performances of the companies, the balance sheet and financial statements obtained from the annual reports of the companies will be used as data.

The financial position and performances of the selected companies will be analyzed under three main headings. These;

- Horizontal analysis,
- Vertical analysis,
- Ratio analysis.

After the financial analyzes of the three companies are made using the methods listed above, the companies' status will be compared, and the findings and results obtained in similar studies in the literature will be compared.

LITERATURE REVIEW

1.3 Accounting Systems and Financial Statements

Accounting systems and financial statements has become more important with the fact that activities such as technology, capital structures and investment gain an international character. It should be considered as a whole that monetary transactions and certain events that create changes in their sources and that are expressed in money are classified and reported in order to be recorded and presented as a financial report, and the recorded transactions are presented in a way that is beneficial for the use of the beneficiaries. The globalization of commercial activities has revealed a necessity for the standardization of accounting systems of countries. Investors investing in international markets need consistent and comparable financial statements of the companies they want to invest in. One of the most important goals of the International Accounting Standards Committee (IASB), which was first established in 1973, was to meet this need. The IASB has adopted the goal of countries having a harmonized and standardized accounting system by both the public and private sectors. In this way , it will be possible for companies to be listed on the stock exchange of any country without the need to prepare different accounting statements (Fraser & Simkins, 2007) .

There are many reasons why the accounting systems of countries differ from each other. In particular, many factors such as the level of development of countries, economic growth and inflation, rules of conduct and general education level are important factors in the nationalization of accounting systems. The environmental factors that the countries have together with their cultures, languages and economic systems have led each country to apply a different accounting system (Evans & Taylor, 1982). However, accounting is not a static system. It changes over time according to the needs of the society and differs according to the course of societies and the world (Choi, 1999).

Accounting scandals such as Enron and Worldcom, which took place one after another in the early 2000s, once again revealed the importance of reporting systems, and these scandals accelerated the efforts to create a global reporting system. The Norwalk Agreement was signed between the US Financial Accounting Standards Board (FASB) and

the International Accounting Standards Board (IASB), adopting an approach that emphasizes principles-based accounting standards to establish a global reporting standard.

In September 2002, the FASB and IASB met and agreed to work together to harmonize and improve IFRS and US GAAP. The name of the agreement in question is known as the "Norwalk Agreement" and is seen as a turning point in the creation of a single global accounting set. With the Norwalk agreement, it has been determined as a common goal to develop comparable, high-quality accounting standards that can be used both within the country and across borders (Barth, et al. 2012). With this agreement, the two committees have identified far-reaching tactics to achieve these goals. These tactics are; develop standards together; eliminating as little differences as possible and applying it unchanged once harmonization is achieved (FASB, 2022).

IFRS and US GAAP are the two leading different reporting systems used worldwide in accounting. (Leuz, 2003). However, IFRS is becoming an increasingly accepted accounting set for globally integrated capital markets (Kamath and Desai, 2014). It is expected that the full harmonization of GAAP with IFRS will have a major impact on accounting academics, accounting professional organizations and American firms that make global investments, especially those who prepare accounting standards (Harper et al., 2012: 461). The fact that a country like the USA, which has a great influence on world economies, uses the GAAP system, may cause different effects on other countries can act in line with the expectations of a global power like the USA, even if it is against their own interests (Karbhari, 2018).

High-quality financial reporting provides analysts with useful information in evaluating a business's performance and future condition. High-quality reporting is the reporting that best reflects the real situation of the business in the relevant period and will enable the most accurate decisions to be taken about that business (Ift.world, 2007).

IFRS are high quality, easy to understand, applicable, globally accepted accounting standards. Since compliance with IFRS requires reporting in accordance with accounting principles, it is thought that it will increase the quality of financial reporting (Parvathy, 2017). With the adaptation to IFRS, the main purpose is to increase the quality, transparency and comparison in financial reporting all over the world. It is thought that the increase in

financial reporting quality will help reduce capital costs by increasing liquidity in the market. Decision makers expect financial statements to be clear and transparent (Yurisandi and Puspitasari, 2015).

1.4 Characteristics of the Statement of financial position – The Balance sheet

The balance sheet is the table in which the assets and resources of the enterprise at a certain date are transferred. The assets owned by the enterprise are the economic values reserved for the production of goods and services, and these values are financed by equity and liabilities. Financial position is also defined as the economic resources under the control of the enterprise, its financial structure, liquidity, and the ability to adapt to changes in its environment. The balance sheet is also referred to as a statement of situation or statement of financial position, and when the balance sheets of businesses are handled together with different financial statements for a period of several years, it provides the opportunity to obtain important information about businesses. However, it is possible to obtain the important information that the balance sheets will give by understanding the relationship of the data in the balance sheet with each other (Alamry, 2020).

Balance sheets show the financial position of a company at a certain date to all its stakeholders. The balance sheet contains information on the company's assets, liabilities and shareholders' equity. The total assets included in a balance sheet should equal the sum of liabilities and equity.

The balance sheet consists of two parts: assets and liabilities. Among the assets, there are current assets with high liquidity and fixed assets with low liquidity. In the balance sheet, assets are listed on the basis of the main account, from the most liquid to the least liquid, according to their liquidity level. Current assets refer to the liquid assets (planned to be converted into cash in less than 1 year) that the business creates as a result of its current and non-current assets, which are not planned to be converted into cash and used within 1 year. Accordingly, non-current assets with a maturity of less than one year are also included in current assets. Liabilities part of the balance sheet consists of three parts: short-term liabilities, long-term liabilities and equity. Here, the time criterion for short-term or long-term resources is again 1 year. Accordingly, if the fulfillment period of the liability is less than 1 year, it is followed under short-term liabilities, and if it is longer, it is classified as

long-term liabilities. The shareholders' equity of the enterprises, on the other hand, consists of the sum of the period profits and other profit and capital reserves left within the enterprise, in addition to the registered capital. If a balance sheet is prepared in accordance with certain principles, it can show, with a brief examination, how much of the company's assets are met from equity and how much is from foreign sources.

However, there are differences in the balance sheet structures of countries using US GAAP and IFRS. It is categorized by the differences between the two systems as explanation, presentation, measurement, validation and recording. To understand the differences between the two systems, as an example of the difference in the registration category, development costs, which are considered as expenses according to US GAAP, are considered as assets if certain criteria are met in IFRS. At the same time, while non-current assets are depreciated according to historical costs in US GAAP, IFRS carries these expenses to the balance sheet. This is considered as a measurement difference. In the presentation category, they are extraordinary expenses and losses that are not included in IFRS but are included in US GAAP. There are differences between US GAAP and IFRS regarding whether certain items are recorded or how they are accounted for, or when and how they are evaluated. Recording research and development costs is an example of the differences. Research costs are recorded immediately, except for the development of computer software programs according to U.S.GAAP, while in IFRS, they are recorded as active when they meet certain criteria (Hoyle et al, 2015).

1.5 Characteristics of the Statement of financial performance – the Income statement

The Income statement is a table that includes the company's sales, product costs, all expenses and income, tax payments and the resulting net profit for the period covered. Understanding and analyzing a company's income statement in terms of all stakeholders of the business world such as investors, creditors, employees, competitors and suppliers provides very important information for the company. However, the income statement, like other elements of the accounting system, does not provide complete and sufficient information on its own. The income statement should also be considered as one of the many parts that show the financial structure of a company and should be processed accordingly. The information in an income statement is summarized as follows (Fraser & Simkins, 2007):

- Net Sales
- Cost of Goods Sold
- Gross Profit
- Operating Expense
- Operating Profit
- Other Income(Expense)
- Equity Earnings
- Earnings Before Income Taxes
- Taxes
- Net Income
- Net Earnings
- Earnings Per Common Share

It is possible to have information about the profitability and financial performance of the companies and to make predictions about the future periods by using the Income statements of the enterprises for several periods. However, evaluating both balance sheet and other statements such as cash flow together is important for the accuracy and quality of the information about the company.

1.6 Financial analysis

Financial analyzes of companies are analyzes made to ensure that investors, receivables and all other stakeholders can reach a decision about the company, together with sufficient financial information about the company. It is possible to make evaluations about the profitability, liquidity situation and financial structure of the company with the financial analyzes made, and thus to make decisions about the future situation of the company (Friedlob & Schleifer, 2003). There are many different analysis methods that provide different types of information about the company. Among these methods, the most used analysis methods are vertical analysis, horizontal analysis and ratio analysis.

1.6.1 Vertical Analysis

In vertical analysis, it is the determination of the percentage of each part in the financial statement in the whole. Therefore, in the analysis, each amount in the table is expressed as a percentage of another amount. While calculating the percentage of the asset amounts in the total assets in the Balance Sheet, the place of the amounts in the liability in the total liabilities is calculated. In the vertical analysis of the income statement, the revenues are expressed as a percentage of the total sales (Lakada et al., 2017).

1.6.2 Horizontal Analysis

In horizontal analysis, the change of firms over time is examined. With the percentage changes in the data of the companies for a few years, it can be seen that the company's growth and what kind of strategy it has in this growth, in which items the growth is achieved or in which items the company shrinks. The main purpose of horizontal analysis is to examine how the company's income and expenditures change from one year to the next. In the horizontal analysis, it is determined which years will be selected primarily, and the base year data is subtracted from the comparison year data from these years. Then, the obtained data is divided by the base year data and the obtained figure is multiplied by one hundred to obtain a percentage result. Thus, the change in the company's balance sheet and income status data within these two years is obtained as a percentage (Lakada et al., 2017).

1.6.3 Ratio Analysis

Ratio analysis is a financial analysis method that determines the proportional relations of the items in a firm's financial data with each other, and enables evaluations on issues such as the firm's profitability, liquidity, financial structure and efficiency. In order to evaluate the ratios determined in the ratio analysis, it is essential to determine the base values of each ratio and to make an interpretation by comparing this base value with the calculated ratio of the company. One of the most common ways to analyze financial data is to compare ratios generated from company data with those of other companies or the same company's past ratios. For example, "return on assets" is a common ratio for measuring how effectively a company uses its assets and profitability. This ratio can be calculated and compared for

different companies as part of a wider analysis. While determining the base values used in the interpretation of the ratio analysis;

- The state of the industry
- General economic situation,
- Rates in previous years,
- Ratios of competing companies operating in the same sector,
- The targets and criteria of the companies are effective.

Ratio analysis is a static analysis type because it is done on financial figures for a single period. However, it should not be ignored that the ratios are compared over the years and provide various information about the realizability of the targets and the course of the company (Tekin, 2017).

The names and formulas of some selected ratio ratios are shown below.

Table 1. Formulas of Ratio Analysis

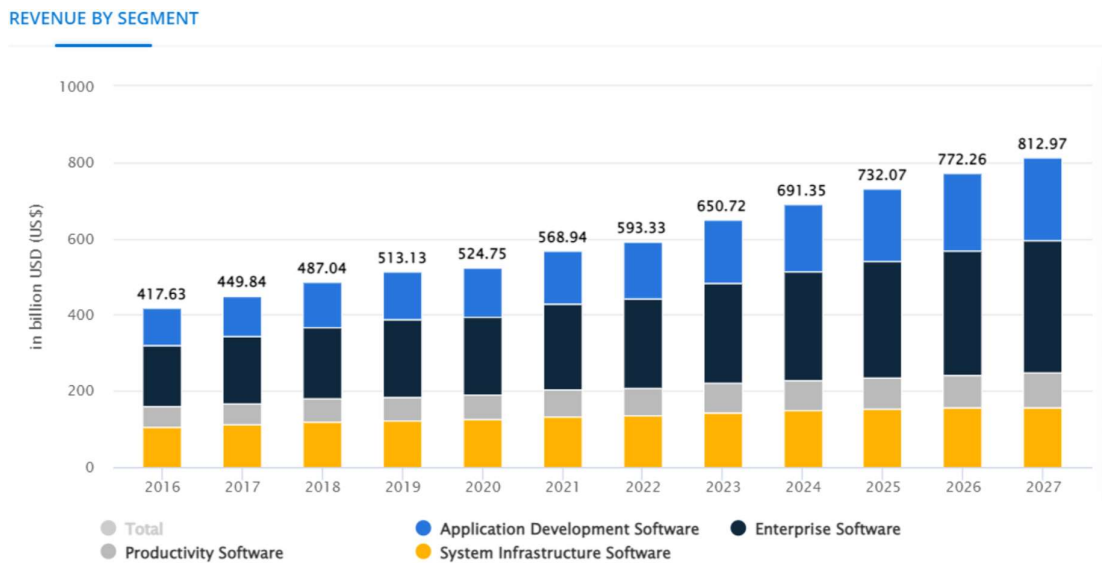
RATIO	FORMULA
Current Ratio	Current Assets / Current Liabilities
Acid Test Ratio	Cash + Short Term Investments + Current Receivables) / Current Liabilities
Cash Ratio	(Cash + Cash Equivalents) / Current Liabilities
Net Profit Margin	Net Profit / Sales
Return on Assets Ratio	Net Profit / Total Assets
Return on Equity	Net Profit / Equity
Ratio of Equity to Assets	Equity / Total Assets
Ratio of Equity to Total Liabilities	Equity / Total Liabilities
Ratio of Current Liabilities to Liabilities	Current Liabilities / Liabilities
Ratio of Long-Term Liabilities to Liabilities	Total Long-Term Liabilities / Liabilities
Ratio of Non-Current Assets to Equity	Non-Current Assets / Equity
Ratio of Current Liabilities to Total Liabilities	Current Liabilities / (Current Liabilities + Long-Term Liabilities)
Gross Margin	(Net Sales - Cost of Sales) / Net Sales

1.6.4 The business and enterprise software industry

The software industry is an industry that includes high-end software segments such as productivity software, enterprise software, system infrastructure and application development software, and the software developed is produced for professional environments rather than individual use. The software released in the software industry is offered to customers in the form of transaction license, subscription or cloud-based software.

The total revenues of the software industry by segments and the estimated revenue until 2027 are shown in Figure 1. Accordingly, as of 2021, the total revenue of the sector is USD 568.94 Billion and estimated to be USD 812.97 Billion in 2027.

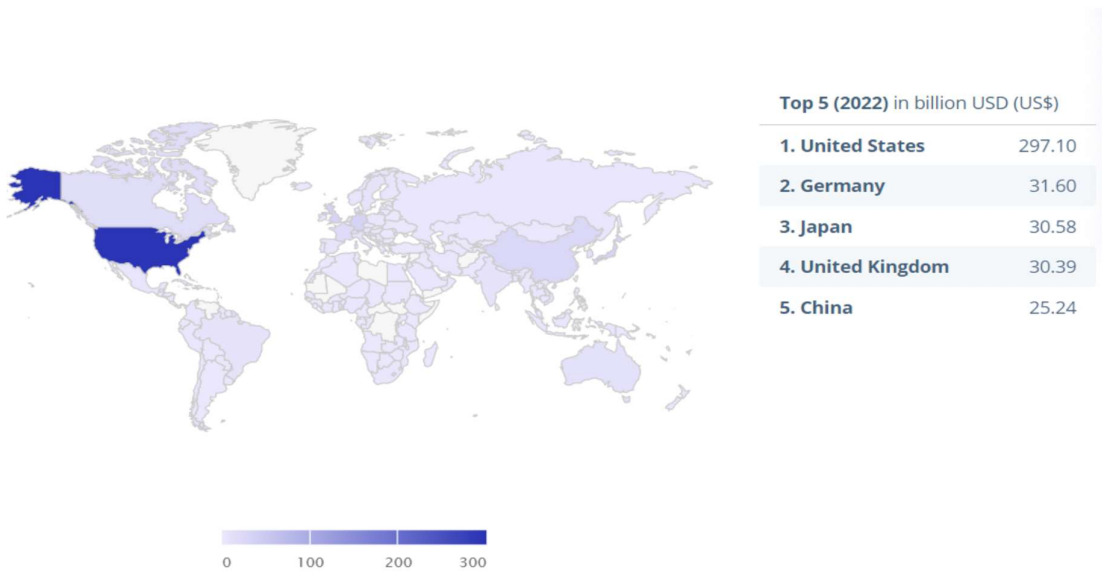
Figure 1 Revenue by Segment of Software Industry



Source: Statista, 2022.

USA appears as the country with the highest share in the sector with its brands such as Microsoft and Oracle. Information on the top 5 countries that have the highest share in the sector is presented in Figure 2.

Figure 2. Global Comparison of Software Industry



Source: Statista, 2022.

The top 5 companies that stand out in the sector globally and have the highest value are shown in Table 2.

Table 2 Top 5 Companies in Software Industry.

Rank	Company	Revenue (B\$)	Market Cap	Country
1	Microsoft	118.2	946.5	United States
2	Oracle	39.6	186.3	United States
3	SAP	29.1	134.9	Germany
4	Salesforce	13.3	120.9	United States
5	Adobe Inc.	9.5	132	United States

Source: BizVibe, 2022.

In the software industry, the design and development costs are high, the duplication and distribution costs are very low. Software industry products can be stand-alone products

that perform a certain function, as well as embedded in many other software and hardware products. Today, from automobiles to home devices, from military hardware. Many vehicles, from ships to airplanes, can function depending on software products. The software industry is intertwined with other modern technologies. Therefore, software industry products need to appeal to different business areas, customer groups and markets. If this is taken into account, it becomes clear that new countries and companies entering the sector must develop new strategies (Malkawi, 2004).

The rapid development of the Software Industry, especially in the USA and other advanced countries, has led to an increase in the knowledge, expertise and labor supply in this field. The country sees a high potential in the software industry and attaches great hope to this sector for the future of their own economy. However, another fact is that the software industry has become an industry operating with lower profitability compared to 10-15 years ago. This situation is negative for the expectations of developing countries, which see the software industry as an economic savior (Arora and Gambardella, 2004).

The software industry is a very dynamic industry in which long-term forecasts do not yield healthy results. Because the developments in hardware and communication technologies directly affect the software industry, new software areas and types emerge every 2-3 years. The same dynamism is also valid for software markets and market strategies. Some general trends that emerged in the 2000s and will continue to be valid in the near future are listed below:

- Large software user companies prefer multi-purpose “Integrated” solutions instead of functional solutions for specific purposes.
- Tendency to “merge” among software manufacturers is increasing.
- Few large companies develop integrated solutions, which reduces the chances of small companies.
- Small software companies can be present in “extreme” areas that require more innovation.
- Increasing emphasis is placed on standardization.
- Data-integrated solutions are in greater demand.

- Classical ERP systems have started to be insufficient for large-scale information systems.
- Software using open source code is becoming more and more common.
- Especially in developed countries, instead of purchasing a general and very large software product, purchasing only the modules of the software required at that time and making the payments according to “Performance” is adopted as a new business style.
- Due to its enormous investments in operating systems, Microsoft products will continue to dominate and Linux derivatives will continue to provide an alternative.

The general trends summarized above are in the field of software; It reveals that large companies such as Microsoft, Oracle, SAP will not lose their dominant position in the near future, and small manufacturers will have a chance in areas that require more innovation (Okur, 2007).

PRACTICAL PART

In this chapter, separate financial analyzes of SAP SE, Oracle, and Salesforce companies will be made. Vertical and horizontal analyzes of the balance sheets will be made in order to examine the financial positions of the companies, and then vertical and horizontal analyzes of the income statements will be made to examine the financial performances of the companies. Finally, ratio analyzes will be made in order to understand the profitability, liquidity and financial structures of the companies.

1.7 SAP SE

In this chapter, the financial performance of SAP SE Company in the last 5 years will be examined. SAP SE is headquartered in WALDORF, Germany. The company, which was founded in 1972 by five people, each of whom is a former IBM employee, is today one of the most important software companies in Europe. As a global company, SAP SE's fields of activity include many advanced software types such as enterprise applications software, enterprise resource management applications, supply chain management applications, and procurement applications software. The company, which has more than 100,000 employees, is traded on exchanges such as Frankfurt Stock Exchange and New York Stock Change (SAP, 2022).

SAP SE is currently the fourth largest software company worldwide in terms of size. The firm operates in three main areas of business: applications, technology and support, Qualtrics and Services. The ERP package, which uses advanced technologies such as artificial intelligence called SAP S/4HANA, developed by the SAP SE company, is a software that is used effectively all over the world. The company stands out with its cloud-based software developed in areas such as human resources management, payroll management system and people analytics. The company's patented products in the names of SAP Ariba, SAP Concur and SAP Fieldglass are in demand by corporate companies around the world. There are also professional business management system software, which provides the management of the supply chains and sales of the company with its global customers and business partners (Yahoo Finance, 2022).

1.7.1 Analysis of financial position of SAP SE

1.7.1.1 Vertical Analysis of Balance Sheet Items

The vertical analysis of the assets of the SAP SE company between the years 2017-2021 is shown in Table 3.

Table 3. Vertical Analysis of Assets

All values EUR Millions.	2017	%	2018	%	2019	%	2020	%	2021	%
Cash & Short Term Investments	4,101	9.65	9,075	17.62	5,611	9.32	6,946	11.88	11,656	16.38
Total Accounts Receivable	6,205	14.60	6,655	12.92	8,413	13.97	6,803	11.63	6,755	9.49
Other Current Assets	1,624	3.82	890	1.73	1,189	1.97	1,320	2.26	1,633	2.29
Total Current Assets	11,930	28.07	16,620	32.27	15,213	25.27	15,069	25.77	20,044	28.16
Net Property, Plant & Equipment	2,967	6.98	3,553	6.90	5,496	9.13	5,041	8.62	4,977	6.99
Total Investments and Advances	1,155	2.72	1,536	2.98	2,336	3.88	3,512	6.01	6,275	8.82
Long-Term Note Receivable	118	5.85	118	5.85	130	6.44	138	6.83	147	7.27
Intangible Assets	24,238	57.03	26,963	52.35	33,653	55.89	31,322	53.57	35,056	49.26
Other Assets	2,089	4.92	2,711	5.26	3,384	5.62	3,389	5.80	4,670	6.56
Total Non-Current Assets	30,567	71.93	34,881	67.73	44,999	74.73	43,402	74.23	51,125	71.84
Total Assets	42,497	100.00	51,501	100.00	60,212	100.00	58,471	100.00	71,169	100.00

Source: Own processing based on the financial statements of the company

When the assets of the SAP SE company are examined from the table given above, it is seen that the assets of the company consist of fixed assets in the range of 67-72% in the last 5 years. The company's total assets, on the other hand, show an increasing trend, apart from a small decrease in 2020. The company's total assets, which were 42,492 million Euros

in 2017, reached 71,169 million Euros at the end of 2021, an increase of 33%. It is seen that the increase in the assets of the company progresses equally in fixed and current assets. The current assets ratio, which was 71.93%-28.07% in 2017, is very close to 71.84%-28.16% in 2021. Since the company is a software company, intangible assets stand out with an average of 50% of its assets. Intangible assets are income from the rights owned by the company due to the software it has developed. Due to the software patents held by the company, half of the company's assets are due to the income from these patents. There was a decrease in all asset items of the company in the 5-year period, but the company showed a good performance in 2021 and increased its assets over 2019. The decline in 2020 is considered to be the economic imbalances caused by the Covid 19 epidemic worldwide. Vertical analysis of last 5 years equity and Liabilities data of SAP SE firm is shown in Table 4.

Table 4. Vertical Analysis of Equity and Liabilities

All values EUR Millions.	2017	%	2018	%	2019	%	2020	%	2021	%
Total Shareholders' Equity	25,484	150.18	28,832	127.43	30,746	104.60	29,716	104.13	38,853	131.06
Accumulated Minority Interest	31	0.18	45	0.20	76	0.26	211	0.74	2,670	9.01
Total Equity	25,515	150.36	28,877	127.63	30,822	104.86	29,927	104.87	41,523	140.06
ST Debt & Current Portion LT Debt	1,298	7.65	768	3.39	2,920	9.93	1,864	6.53	4,167	14.06
Accounts Payable	1,151	6.78	1,491	6.59	1,581	5.38	1,367	4.79	1,580	5.33
Income Tax Payable	597	3.52	611	2.70	255	0.87	414	1.45	304	1.03
Other Current Liabilities	7,164	42.22	7,616	33.66	9,706	33.02	9,197	32.23	10,085	34.02
Total Current Liabilities	10,210	60.17	10,486	46.35	14,462	49.20	12,842	45.00	16,136	54.43
Long-Term Debt	5,002	29.48	10,535	46.56	12,900	43.89	13,600	47.66	10,981	37.04

Provision for Risks & Charges	328	1.93	270	1.19	478	1.63	362	1.27	355	1.20
Deferred Taxes	-786	-4.63	-912	-4.03	-1,169	-3.98	-1,030	-3.61	-1,488	-5.02
Other Liabilities	2,215	13.05	2,246	9.93	2,722	9.26	2,763	9.68	3,662	12.35
Non-Current Liabilities	6,759	39.83	12,139	53.65	14,931	50.80	15,695	55.00	13,510	45.57
Total Liabilities	16,969	100.00	22,625	100.00	29,393	100.00	28,537	100.00	29,646	100.00

Source: Own processing based on the financial statements of the company

Looking at the equity and assets information of SAP SE company in the last 5 years from Table 4, it is seen that equities were 1.5 times higher than the total liabilities in 2017 and this rate was around 140% in 2021. Total current liabilities, on the other hand, decreased from 60% in 2017 to 54.43% in 2021. Non-Current assets, on the other hand, increased from 39.83% in 2017 to 45.57% in 2021. It is seen that it is in the other current assets the most with a share of 37.4% in the total liabilities of the company.

1.7.1.2 Horizontal Analysis of Balance Sheet Items

In order to examine the 5-year change in the financial position of the SAP SE company, horizontal analysis of its assets, equity and liabilities will be made in this chapter. In this way, it will be better understood how the company's balance sheet data has changed in the last 5 years and how the company's financial position has changed. First of all, the 5-year change in the assets of the company is shown in Table 5.

Table 5. Horizontal Analysis of Assets

All values EUR Millions.	2017	2018	%	2019	%	2020	%	2021	%
Cash & Short Term Investments	4,101	9,075	121.29	5,611	-38.17	6,946	23.79	11,656	67.81
Total Accounts Receivable	6,205	6,655	7.25	8,413	26.42	6,803	-19.14	6,755	-0.71
Other Current Assets	1,624	890	-45.20	1,189	33.60	1,320	11.02	1,633	23.71
Total Current Assets	11,930	16,620	39.31	15,213	-8.47	15,069	-0.95	20,044	33.01
Net Property, Plant & Equipment	2,967	3,553	19.75	5,496	54.69	5,041	-8.28	4,977	-1.27

Total Investments and Advances	1,155	1,536	32.99	2,336	52.08	3,512	50.34	6,275	78.67
Long-Term Note Receivable	118	118	0.00	130	10.17	138	6.15	147	6.52
Intangible Assets	24,238	26,963	11.24	33,653	24.81	31,322	-6.93	35,056	11.92
Other Assets	2,089	2,711	29.78	3,384	24.82	3,389	0.15	4,670	37.80
Total Non-Current Assets	30,567	34,881	14.11	44,999	29.01	43,402	-3.55	51,125	17.79
Total Assets	42,497	51,501	21.19	60,212	16.91	58,471	-2.89	71,169	21.72

Source: Own processing based on the financial statements of the company

When the change in the assets of the SAP SE company is examined, it is seen that the biggest change in proportion is the change of 67.81% in the cash assets of the company in 2021. However, it is striking that there is an increasing trend in both current and fixed assets of the company within 5 years, excluding 2020. The biggest percentage change in total assets was in 2021. It is seen that the company has more than compensated for the decline in its assets in 2021.

The horizontal analysis table created to understand the 5-year change in the equity and liabilities of Sap SE is shown in Table 6.

Table 6. Horizontal Analysis of Equity and Liabilities

All values EUR Millions.	2017	2018	%	2019	%	2020	%	2021	%
ST Debt & Current Portion LT Debt	1,298	768	-40.83	2,920	280.21	1,864	-36.16	4,167	123.55
Accounts Payable	1,151	1,491	29.54	1,581	6.04	1,367	-13.54	1,580	15.58
Income Tax Payable	597	611	2.35	255	-58.27	414	62.35	304	-26.57
Other Current Liabilities	7,164	7,616	6.31	9,706	27.44	9,197	-5.24	10,085	9.66

Total Current Liabilities	10,210	10,486	2.70	14,462	37.92	12,842	-11.20	16,136	25.65
Long-Term Debt	5,002	10,535	110.62	12,900	22.45	13,600	5.43	10,981	-19.26
Provision for Risks & Charges	328	270	-17.68	478	77.04	362	-24.27	355	-1.93
Deferred Taxes	-786	-912	16.03	-1,169	28.18	-1,030	-11.89	-1,488	44.47
Other Liabilities	2,215	2,246	1.40	2,722	21.19	2,763	1.51	3,662	32.54
Non-Current Liabilities	6,759	12,139	79.60	14,931	23.00	15,695	5.12	13,510	-13.92
Total Liabilities	16,969	22,625	33.33	29,393	29.91	28,537	-2.91	29,646	3.89
Total Shareholders' Equity	25,484	28,832	13.14	30,746	6.64	29,716	-3.35	38,853	30.75
Accumulated Minority Interest	31	45	45.16	76	68.89	211	177.63	2,670	1,165.40
Total Equity	25,515	28,877	13.18	30,822	6.74	29,927	-2.90	41,523	38.75

Source: Own processing based on the financial statements of the company

Looking at the company's equity and liabilities information, it is seen that the biggest increase in the last 5 years was in its short-term debts in 2021 with an increase of 123.55%. Apart from this, it is seen that the company's total current liabilities, which were 10,210 million Euros in 2017, are 16,136 million Euros in 2021, and its total liabilities, which were 16,969 million Euros in 2017, are 29,646 million Euros in 2021. In general, it is seen that there is an increasing trend in all liabilities of the company, with the exception of 2020. Likewise, it is seen that total equity has increased regularly, with the exception of 2020. In particular, the 38.75% increase in total equity in 2021 draws attention.

1.7.2 Analysis of financial performance of SAP SE

1.7.2.1 Horizontal Analysis of Income Statement

In this chapter, horizontal and vertical analyzes of the income statements obtained from the annual reports of the company will be made in order to examine the financial performance of the company in the last 5 years. A horizontal analysis of the income statements of the SAP SE company for the years 2017-2021 is made and shown in Table 7.

Table 7. Horizontal Analysis of Income Statement of SAP SE

All values EUR	2017	2018	%	2019	%	2020	%	2021	%
Sales/Revenue	23,461	24,708	5.32	27,553	11.51	27,338	-0.78	27,842	1.84
Cost of Goods	7,051	7,462	5.83	8,355	11.97	7,633	-8.64	7,724	1.19
COGS	5,779	6,100	5.55	6,483	6.28	5,802	-10.50	5,949	2.53
Depreciation &	1,272	1,362	7.08	1,872	37.44	1,831	-2.19	1,775	-3.06
Gross Income	16,410	17,246	5.09	19,198	11.32	19,705	2.64	20,118	2.10
SG&A Expense	11,351	11,503	1.34	13,614	18.35	12,525	-8.00	14,726	17.57
Research &	3,352	3,624	8.11	4,292	18.43	4,447	3.61	5,180	16.48
Other SG&A	7,999	7,879	-1.50	9,322	18.31	8,078	-13.34	9,546	18.17
Unusual Expense	182	19	-89.56	1,130	5847.37	574	-49.20	780	35.89
Non Operating	-36	-77	113.89	-56	-27.27	853	-1623.21	2,474	190.04
Non-Operating	476	371	-22.06	787	112.13	113	-85.64	56	-50.44
Interest Expense	288	418	45.14	589	40.91	352	-40.24	295	-16.19
Gross Interest	288	418	45.14	589	40.91	352	-40.24	295	-16.19
Pretax Income	5,029	5,600	11.35	4,596	-17.93	7,220	57.09	6,847	-5.17
Income Tax	983	1,511	53.71	1,226	-18.86	1,937	57.99	1,471	-24.06
Income Tax -	935	733	-21.60	625	-14.73	895	43.20	608	-32.07
Income Tax -	716	1,019	42.32	1,153	13.15	1,000	-13.27	1,360	36.00
Income Tax -	-584	57	-109.76	-3	-105.26	-38	1166.67	109	-386.84
Income Tax -	-84	-298	254.76	-549	84.23	80	-114.57	-606	-857.50
Consolidated Net	4,046	4,089	1.06	3,370	-17.58	5,283	56.77	5,376	1.76
Minority Interest	38	6	-84.21	49	716.67	138	181.63	120	-13.04
Net Income	4,008	4,083	1.87	3,321	-18.66	5,145	54.92	5,256	2.16
Net Income After	4,008	4,083	1.87	3,321	-18.66	5,145	54.92	5,256	2.16

Net Income	4,008	4,083	1.87	3,321	-18.66	5,145	54.92	5,256	2.16
EPS (Basic)	4.45	4.35	-2.25	2.78	-36.09	3.42	23.02	3.35	-2.05
Basic Shares	1,197	1,194	-0.25	1,194	0.00	1,182	-1.01	1,180	-0.17
EPS (Diluted)	3.35	3.42	2.09	2.78	-18.71	4.35	56.47	4.45	2.30
Diluted Shares	1,198	1,194	-0.33	1,194	0.00	1,182	-1.01	1,180	-0.17
EBITDA	6,331	7,105	12.23	7,456	4.94	9,011	20.86	7,167	-20.46

Source: Own processing based on the financial statements of the company

When Table 7 is examined, it is seen that the revenue of the company, which was 23,461 million Euros in 2017, increased to 27,842 million Euros in 2021. The company showed the biggest revenue increase in 2019 with an increase of 11.51% during this 5-year period, however, it experienced a decrease in revenue in 2020 and could not reach the revenue of 27.553 million Euros in 2021, which it achieved in 2019. However, in 2020, the company managed to get out of this decrease in sales by increasing its net income by both reducing its expenses and reducing its costs. When we look at the expenditures of 2020, we can see that the company experienced a decrease of 8% and 8.64% in both R&D expenditures and Cost of Goods. This shows that the company has achieved success in 2020 in terms of coping with the economic uncertainty and recession experienced around the world due to Covid 19.

1.7.2.2 Vertical Analysis of Income Statement

In order to better understand the financial performance of SAP SE company in the last 5 years, it is important to understand both the distribution of its revenue and the direction in which its expenditures have changed the most proportionally. For this reason, in this chapter, the vertical analysis method will be used to see the distribution of both the revenue and the expenses of the company to which items and to what extent. The vertical analysis of the company's revenues for the last 5 years is shown in Table 8, and the vertical analysis of its expenditures is shown in Table 9.

Table 8. Vertical Analysis of Revenues of SAP SE

All values EUR Millions	2017	%	2018	%	2019	%	2020	%	2021	%
Revenue from operations	23,021	98	24,414	99	26,822	97	26,372	96	25,312	91
Other Income	440	2	294	1	731	3	966	4	2,530	9
Total Income	23,461	100	24,708	100	27,553	100	27,338	100	27,842	100

Source: Own processing based on the financial statements of the company

Looking the income distribution of the company, it is seen that although the operating income was 98% in 2017, this ratio decreased to 96% in 2020 and 91% in 2020 and 2021. While the company's non-operational income was 440 million Euros in 2017, this reached 2.530 million Euros in 2021.

Table 9. Vertical Analysis of Expenses of SAP SE

All values EUR Millions	2017	%	2018	%	2019	%	2020	%	2021	%
EXPENSES										
Cost of Goods Sold (COGS) incl. D&A	7,051	12.97	7,462	13.16	8,355	12.76	7,633	12.21	7,724	11.48
COGS excluding D&A	5,779	10.63	6,100	10.76	6,483	9.90	5,802	9.28	5,949	8.84
Depreciation & Amortization Expense	1,272	2.34	1,362	2.40	1,872	2.86	1,831	2.93	1,775	2.64
SG&A Expense	11,351	20.87	11,503	20.29	13,614	20.79	12,525	20.03	14,726	21.89
Research & Development	3,352	6.16	3,624	6.39	4,292	6.55	4,447	7.11	5,180	7.70
Other SG&A	7,999	14.71	7,879	13.89	9,322	14.23	8,078	12.92	9,546	14.19
Unusual Expense	182	0.33	19	0.03	1,130	1.73	574	0.92	780	1.16
EXCEPTIONAL EXPENSES	53,396	98.19	55,195	97.34	64,266	98.13	60,595	96.90	65,798	97.81
TAX EXPENSE										
Income Tax	983	1.81	1,511	2.66	1,226	1.87	1,937	3.10	1,471	2.19
Income Tax - Current Domestic	- 935	1.72	733	1.29	625	0.95	895	1.43	608	0.90
Income Tax - Current Foreign	- 716	1.32	1,019	1.80	1,153	1.76	1,000	1.60	1,360	2.02
Income Tax - Deferred Domestic	-584	-1.07	57	0.10	-3	0.00	-38	-0.06	109	0.16
Income Tax - Deferred Foreign	-84	-0.15	-298	-0.53	-549	-0.84	80	0.13	-606	-0.90
TOTAL EXPENSES	54,379	100.00	56,706	100	65,492	100	62,532	100	67,269	100

Source: Own processing based on the financial statements of the company

Looking at the distribution of the company's expenditures between 2017 and 2021, it is seen that tax expenditures remained in the range of 1-3%, the ratio of SG&A expenditures

in expenditures was around 20% on average, and product costs were also in the range of 10-13%. It is seen that the biggest share among the expenditure items of the company is SG&A expenditures. It is also seen that the company's R&D expenditures increase every year.

1.7.3 Selected Financial Ratios of SAP SE

1.7.3.1 Liquidity Ratios

The liquidity ratio information of the SAP SE company is calculated on the company balance sheets and shown in Table 10. When the table is examined, it is seen that the current ratio of the company remained at the rate of 1-1,5 excluding 2018. Since the firm is a software company, it has no inventory and its current assets mostly consist of cash and receivables. This keeps the company away from the risk of being sold or not the inventory in terms of paying its short-term liabilities. Therefore, having the current ratio above 1 keeps the risk for the company away from the risk of paying its short-term liabilities. This situation causes the other liquidity ratios of the company to be close to the current ratio. The company has the opportunity to pay its short-term liabilities mostly in cash and cash equivalents and the rest with receivables.

Table 10. Liquidity Ratios of SAP SE (2017-2021)

LIQUIDITY RATIOS	2017	2018	2019	2020	2021
Current Ratio	1.17	1.58	1.05	1.17	1.24
Acid Test Ratio	1.01	1.50	0.97	1.07	1.14
Cash Ratio	0.40	0.87	0.39	0.54	0.72

Source: Own processing based on the financial statements of the company

1.7.3.2 Profitability Ratios

The profitability ratios of SAP SE are calculated and shown in Table 11. When the profitability ratios of the company are analyzed, it is seen that the Gross Margin value has been consistent at the level of 70% on average in the last 5 years, and the net profit margin

has advanced as 17% and 19%, excluding 2018. In the research conducted by NYU Stern School of Business by examining the profit margin averages of 375 software companies using 2021 data, it was seen that the sector's gross margin was 71.59% and the net profit margin average was 19.66%. When an evaluation is made on the basis of the sector average, it is seen that the profitability ratios of the SAP SE company are close to the sector average. In terms of ROA and ROE values, the sector average for ROA is 11.34% in 2021 and the ROE average is 27.04%¹. When evaluated in terms of these ratios, it is seen that SAP SE company lags behind the average. In other words, the net profit of the company in terms of assets and equity is below the sector average.

Table 11. Profitability Ratios of SAP SE (2017-2021)

PROFITABILITY RATIOS	2017	2018	2019	2020	2021
Gross Margin	0,70	0,70	0,70	0,72	0,72
Operating profitability ratio	0,21	0,23	0,17	0,26	0,25
Net Profit Margin	0,17	0,17	0,12	0,19	0,19
Return on Assets Ratio(%)	9.43	7.93	5.52	8.80	7.39
Return on Equity Ratio(%)	15.73	14.16	10.80	17.31	13.53

Source: Own processing based on the financial statements of the company

¹ https://csimarket.com/Industry/industry_ManagementEffectiveness.php?ind=1011

1.8 SALESFORCE

Salesforce, which stepped into the software world in 1999 with Marc Benioff, Parker Harris, Frank Dominguez and Dave Moellenhoff working on the first CRM software in a one-room apartment, turned into a large company with 40 employees and an 8000 square meter office at the end of its first year. In the first year of its establishment, Salesforce executives created the V2MOM (Vision, Values, Methods, Obstacles, and Measures) strategic plan, which shows its employees a vision and a common goal, and the company still sets its goals in line with this strategic plan. The company, which opened to Dublin and Tokyo in 2001, took the first step towards becoming a global company and increased its turnover to 22.4 million USD at the end of 2001. The company continued to grow rapidly, reaching 5,740 customers and 70,000 users in 107 countries worldwide in 2002. By 2021, the company has become the number one in the CRM sector, and the total assets of the company have reached 99,178 Million USD. Today, the company continues to be among the largest software companies in the world and to lead the industry. According to research by IDC, the company is expected to generate \$1.6 trillion in new revenue opportunities, along with 9.3 million new jobs by 2026 (Salesforce, 2022).

1.8.1 Analysis of financial position of SALESFORCE

In this chapter, vertical and horizontal analyzes of Balance Sheets obtained from the company's annual reports will be made in order to examine the financial position of Salesforce company between 2017-2021.

1.8.1.1 Vertical Analysis of Balance Sheet Items

The results of the vertical analysis conducted to examine the distribution of the current and fixed assets of the Salesforce company between 2017 and 2021 in its total assets and its change over a 5-year period are shown in Table 12.

Table 12. Vertical Analysis of Assets

All values USD Millions	2017	%	2018	%	2019	%	2020	%	2021	%
Cash & Short Term Investments	4,521	20.56	4,342	14.13	7,947	14.42	11,966	18.05	10,537	10.62
Total Accounts Receivable	3,921	17.84	4,924	16.02	6,623	12.01	8,263	12.46	10,326	10.41
Other Current Assets	471	2.14	629	2.05	467	0.85	514	0.78	533	0.54
Total Current Assets	8,913	40.54	9,895	32.19	15,037	27.28	20,743	31.29	21,396	21.57
Net Property Plant & Equipment	1,947	8.86	2,051	6.67	5,415	9.82	5,663	8.54	5,695	5.74
Other Long-Term Investments	677	3.08	1,302	4.24	1,963	3.56	3,909	5.90	4,784	4.82
Long-Term Note Receivable	159	0.72	121	0.39	93	0.17	42	0.06	-	-
Intangible Assets	8,287	37.70	14,926	48.56	29,858	54.16	30,432	45.90	56,915	57.39
Other Assets	2,001	9.10	2,442	7.94	2,760	5.01	5,512	8.31	5,137	5.18
Non Current Assets	13,071	59.46	20,842	67.81	40,089	72.72	45,558	68.71	77,782	78.43
Total Assets	21,984	100.00	30,737	100.00	55,126	100.00	66,301	100.00	99,178	100.00

Source: Own processing based on the financial statements of the company

Looking at the asset distribution of the company for the last 5 years, it is seen that the ratio of fixed assets to total assets has increased, while its current assets have decreased from the same level. It is observed that current assets, which had a share of 40.54% in total assets in 2017, decreased to 21.57% in 2021. On the other hand, it is seen that fixed assets

are at the level of 78.43 in 2021. It is seen that the largest share among the company's assets belongs to intangible assets, and the ratio of intangible assets to total assets has increased in the last 5 years. Intangible assets ratio, which was 37.70 percent in 2017, reached 57.39% in 2021. Intangible assets are the rights the company has obtained from the software it has developed and the income it has earned due to patents, and it is seen that the company increases its assets mostly through these assets.

The vertical analysis of the company's equity and liabilities data for the last 5 years is shown in Table 13.

Table 13. Vertical Analysis of Equity and Liabilities

All values USD Millions.	2017	%	2018	%	2019	%	2020	%	2021	%
Total Shareholders' Equity	10,376	89.39	15,605	103.13	33,885	159.53	41,493	167.26	58,131	141.62
Total Equity	10,376	89.39	15,605	103.13	33,885	159.53	41,493	167.26	58,131	141.62
ST Debt & Current Portion LT Debt	1,025	8.83	203	1.34	803	3.78	801	3.23	800	1.95
Accounts Payable	76	0.65	165	1.09	1856	8.74	262	1.06	296	0.72
Accrued Payroll	1,001	8.62	1,167	7.71	15	0.07	17	0.07	24	0.06
Miscellaneous Current Liabilities	7,965	68.62	972	6.42	10,686	50.31	12,607	50.82	15,628	38.07
Total Current Liabilities	10,067	86.72	11,255	74.38	14,845	69.89	17,728	71.46	21,788	53.08
Long-Term Debt	695	5.99	3,173	20.97	5,450	25.66	5,608	22.61	13,566	33.05
Deferred Taxes	-	-	-	-	-	-	-	-	3969	9.67
Other Liabilities	846	7.29	704	4.65	946	4.45	1472	5.93	1724	4.20
Non-Current Liabilities	1,541	13.28	3,877	25.62	6,396	30.11	7,080	28.54	19,259	46.92
Total Liabilities	11,608	100	15,132	100	21,241	100	24,808	100	41,047	100

Source: Own processing based on the financial statements of the company

It is seen that the company's equity increased according to its total liabilities over a 5-year period, and the ratio, which was 89.39 in 2017, increased to 141.62% in 2021. It is observed that the ratio of the company's non-current liabilities to total liabilities has increased from 13.28 to 46.92% within 5 years. It is seen that the reason for this is the large increase in the long-term debt of the company despite the decrease in the short-term debts of the company within 5 years. It is seen that long-term borrowing, which was 695 Million USD in 2017, reached 13,566 Million USD in 2021. On the other hand, the company's short-term debt decreased from 1.025 Million USD in 2017 to 800 Million USD in 2021. The share of the company's long-term debts in its total liabilities in 2021 is 33.05%.

1.8.1.2 Horizontal Analysis of Balance Sheet Items

In order to understand the financial position of the company between 2017-2021, it is important to examine the change in the balance sheet using the horizontal analysis method. For this reason, the horizontal analysis of the company's balance sheet covering the years 2017-2021 is shown in Table 14 and Table 15.

Table 14. Horizontal Analysis of Assets

All values USD Millions	2017	2018	%	2019	%	2020	%	2021	%
Cash & Short Term Investments	4,521	4,342	-3.96	7,947	83.03	11,966	50.57	10,537	-11.94
Total Accounts Receivable	3,921	4,924	25.58	6,623	34.50	8,263	24.76	10,326	24.97
Other Current Assets	471	629	33.55	467	-25.76	514	10.06	533	3.70
Total Current Assets	8,913	9,895	11.02	15,037	51.97	20,743	37.95	21,396	3.15
Net Property Plant & Equipment	1,947	2,051	5.34	5,415	164.02	5,663	4.58	5,695	0.57
Other Long-Term Investments	677	1,302	92.32	1,963	50.77	3,909	99.13	4,784	22.38
Long-Term Note Receivable	159	121	-23.90	93	-23.14	42	-54.84	-	-
Intangible Assets	8,287	14,926	80.11	29,858	100.04	30,432	1.92	56,915	87.02
Other Assets	2,001	2,442	22.04	2,760	13.02	5,512	99.71	5,137	-6.80
Non Current Assets	13,071	20,842	59.45	40,089	92.35	45,558	13.64	77,782	70.73
Total Assets	21,984	30,737	39.82	55,126	79.35	66,301	20.27	99,178	49.59

Source: Own processing based on the financial statements of the company

Looking at the change in the assets of the company in Table 14, it is seen that there is an increase of nearly 5 times in the total assets of the company. The biggest increase among its assets was in the non-current assets of the company. While the non-current assets of the company were 13,071 Million USD in 2017, this figure reached 77,782 Million USD in 2021. The biggest source of this increase is intangible assets. It is seen that there was an increase of 87.02% in the intangible assets of the company in 2021. Although there was an increase of 51.97% and 37.95% in the current assets of the company in 2019 and 2020, this increase remained at 3.15% in 2021. It is seen that the assets owned by the company due to the rights and patents acquired due to the software made by the company increased 7 times from 2017 to 2021.

Table 15. Horizontal Analysis of Equity and Liabilities

All values USD Millions.	2017	2018	%	2019	%	2020	%	2021	%
Total Shareholders' Equity	10,376	15,605	50.40	33885	117.14	41,493	22.45	58,131	40.10
Total Equity	10,376	15,605	50.40	33885	117.14	41,493	22.45	58,131	40.10
ST Debt & Current Portion LT Debt	1025	203	-80.20	803	295.57	801	-0.25	800	-0.12
Accounts Payable	76	165	117.11	1856	1024.85	262	-85.88	296	12.98
Accrued Payroll	1,001	1,167	16.58	15	-98.71	17	13.33	24	41.18
Miscellaneous Current Liabilities	7,965	972	-87.80	10686	999.38	12,607	17.98	15,628	23.96
Total Current Liabilities	10,067	11,255	11.80	14,845	31.90	17,728	19.42	21,788	22.90
Long-Term Debt	695	3,173	356.55	5,450	71.76	5608	2.90	13,566	141.90
Deferred Taxes	-	-	-	-	-	-	-	3969	-
Other Liabilities	846	704	-16.78	946	34.38	1,472	55.60	1,724	17.12
Non-Current Liabilities	1,541	3,877	151.59	6396	64.97	7,080	10.69	19,259	172.02
Total Liabilities	11,608	15,132	30.36	21,241	40.37	24,808	16.79	41,047	65.46

Source: Own processing based on the financial statements of the company

Looking at the change in the company's equity and liabilities, it is seen that the biggest increase is in the company's non-current liabilities. While the company's non-current liabilities were 1.542 Million USD in 2017, it increased to 19,259 Million USD in 2021. In particular, the 172.02% increase in 2021 draws attention. On the other hand, it is seen that there has been 2 times increase in the company's current liabilities in the last 5 years. Equity, on the other hand, has seen an increase of nearly 5 times in 5 years. Total equity, which was 10,376 Million USD in 2017, reached 58,131 Million USD in 2021.

1.8.2 Analysis of financial performance of SALESFORCE

In this chapter, the financial performance of the Salesforce company will be examined. In this context, horizontal and vertical analyzes of the company's income statement will be made.

1.8.2.1 Horizontal Analysis of Income Statement

The horizontal analysis showing the change in the income statement of Salesforce company between 2017-2021 is shown in Table 16.

Table 16. Horizontal Analysis of Income Statement of SALESFORCE

All values USD Millions.	2017	2018	%	2019	%	2020	%	2021	%
Sales/Revenue	10540	13282	26.02	17098	28.73	21252	24.30	26492	24.66
Cost of Goods Sold (COGS) incl. D&A	3486	4420	26.79	5463	23.60	6955	27.31	9101	30.86
COGS excluding D&A	2141	2721	27.09	2452	-9.89	3051	24.43	4455	46.02
Depreciation & Amortization Expense	1345	1699	26.32	3011	77.22	3904	29.66	4646	19.01
Depreciation	466	515	10.52	1343	160.78	1746	30.01	1698	-2.75
Amortization of Intangibles	287	447	55.75	792	77.18	11	-98.61	16	45.45
Amortization of Deferred Charges	592	737	24.49	876	18.86	1058	20.78	1348	27.41

Gross Income	7054	8862	25.63	11635	31.29	14297	22.88	17391	21.64
SG&A Expense	6600	8300	25.76	11132	34.12	13842	24.34	16843	21.68
Research & Development	1553	1886	21.44	2766	46.66	3598	30.08	4465	24.10
Other SG&A	5047	6414	27.09	8366	30.43	10244	22.45	-	-
EBIT	-	562	-	503	-10.50	455	-9.54	548	20.44
Unusual Expense	-15	-7	-53.33	215	-	-	-	-918	-
Non Operating Income/Expense	1	507	50600.00	432	-14.79	2232	416.67	286	-87.19
Non-Operating Interest Income	37	61	64.86	117	91.80	-	-	-	-
Interest Expense	87	154	77.01	131	-14.94	126	-3.82	220	74.60
Gross Interest Expense	87	154	77.01	131	-14.94	126	-3.82	220	74.60
Pretax Income	420	983	134.05	706	-28.18	2561	262.75	1532	-40.18
Income Tax	60	-127	-311.67	580	-556.69	-1511	-360.52	88	-105.82
Income Tax - Current Domestic	-5	39	-880.00	545	1297.44	291	-46.61	-10	-103.44
Income Tax - Current Foreign	85	117	37.65	8	-93.16	-12	-250.00	352	-3033.33
Income Tax - Deferred Domestic	-16	-285	1681.25	-33	-88.42	294	-990.91	-238	-180.95
Income Tax - Deferred Foreign	-4	2	-150.00	60	2900.00	-2084	-3573.33	-16	-99.23
Net Income	360	1110	208.33	126	-88.65	4072	3131.75	1444	-64.54
EPS (Basic)	0.49	1.43	191.84	0.15	-89.51	4.38	2820.00	1.48	-66.21
Basic Shares Outstanding	715	751	5.03	829	10.39	908	9.53	955	5.18
EPS (Diluted)	0.49	1.43	191.84	0.15	-89.51	4.38	2820.00	-	-
Diluted Shares Outstanding	735	775	5.44	850	9.68	930	9.41	974	4.73

EBITDA	1799	2261	25.68	3514	55.42	4359	24.05	5194	19.16
EBIT	-	562	-	503	-10.50	455	-9.54	548	20.44

Source: Own processing based on the financial statements of the company

When Table 16 is examined, it is seen that the company's sales have increased by 2.5 times in 5 years. On the other hand, it is seen that the cost of goods has increased from 3,486 Million USD to 9,101 Million USD. While the company's SG&A expenditures regularly increase in the range of 20-25% each year, there is a decrease in income tax payments. The net income of the company after deducting all its expenses after the sales made, on the other hand, experienced great decreases in 2019 and 2021. A decrease of 88% is seen in 2019 and a decrease of 64% in 2021. Despite this, the net income of the company, which was 360 Million USD in 2107, reached 1.444 Million USD in 2021.

1.8.2.2 Vertical Analysis of Income Statement

The results of the vertical analysis conducted to examine the distribution of the company's revenues and liabilities within the total are shown in Table 17 and Table 18.

Table 17. Vertical Analysis of Revenues of SALESFORCE

All values EUR Millions	2017	%	2018	%	2019	%	2020	%	2021	%
Revenue from operations	10,502	99.64	12,714	95.72	16,549	96.79	21,252	100.00	26,492	100.00
Other Income	38	0.36	568	4.28	549	3.21	0	0.00	0	0.00
Total Income	10,540	100.00	13,282	100.00	17,098	100.00	21,252	100.00	26,492	100.00

Source: Own processing based on the financial statements of the company

When Table 17 is examined, it is seen that the non-operating income of the company was only 3.21% in 2019, and there was no non-operating income in 2020 and 2021.

Table 18. Vertical Analysis of Expenses of SALESFORCE

All values EUR Millions	2017	%	2018	%	2019	%	2020	%	2021	%
EXPENSES										
Cost of Goods Sold (COGS) incl. D&A	3,486	34.12	4,420	34.69	5,463	31.18	6,955	44.85	9,101	35.92
COGS excluding D&A	2,141	20.95	2,721	21.36	2,452	13.99	3,051	19.67	4,455	17.59
Depreciation & Amortization Expense	1,345	13.16	1,699	13.34	3,011	17.19	3,904	25.17	4,646	18.34
Depreciation	466	4.56	515	4.04	1,343	7.67	1,746	11.26	1,698	6.70
Amortization of Intangibles	287	2.81	447	3.51	792	4.52	11	0.07	16	0.06
Amortization of Deferred Charges	592	5.79	737	5.78	876	5.00	1,058	6.82	1,348	5.32
SG&A Expense	6,600	64.59	8,300	65.15	11,132	63.54	13,842	89.26	16,843	66.48
Research & Development	1,553	15.20	1,886	14.80	2,766	15.79	3,598	23.20	4,465	17.62
Other SG&A	5,047	49.39	6,414	50.35	8,366	47.75	10,244	66.06	-	-
Unusual Expense	-15	-0.15	-7	-0.05	215	1.23	-	-	-918	-3.62
Interest Expense	87	0.85	154	1.21	131	0.75	126	0.81	220	0.87
EXCEPTIONAL EXPENSES	10,158	99.41	12,867	101.00	16,941	96.69	17,019	109.74	25,246	99.65
TAX EXPENSE										
Income Tax	60	0.59	-127	-1.00	580	3.31	-1,511	-9.74	88	0.35
TOTAL EXPENSES	10,218	100.00	12,740	100.00	17,521	100.00	15,508	100.00	25,334	100.00

Source: Own processing based on the financial statements of the company

Looking the distribution of the company's expenses within the total expenses, it is seen that the tax payments occupy a very low place and even some years, as in 2018 and

2020, it gains due to taxation. Looking at the company's other expenses excluding tax, it is seen that the highest rate is in SG&A expenditures. While the ratio of the company's SG&A expenditures in total expenses was 64.59 in 2017, it was 66.48% in 2021. The ratio of the company's cost of goods to its total expenses has been parallel in the range of 34-35% in the last 5 years.

1.8.2.3 Selected Financial Ratios of SALESFORCE

1.8.2.4 Liquidity Ratios

The liquidity ratios of the Salesforce firm are calculated and shown in Table 19. When Table 19 is examined, it is seen that the current assets of the company are insufficient to pay its current liabilities. Although it was exceed 1 level in 2020, current liabilities in 2021 again exceeded current assets. However, compared to 2017 and 2018, it is seen that the liquidity ratios of the company, better partially, are in an improvement in other years. Currently, the company is seen in a risky situation in terms of its ability to pay its current liabilities with current assets.

Table 19. Liquidity Ratios of Salesforce (2017-2021)

LIQUIDITY RATIOS	2017	2018	2019	2020	2021
Current Ratio	0,89	0,88	1,01	1,17	0,98
Acid Test Ratio	0,84	0,82	0,98	1,14	0,96
Cash Ratio	0,45	0,39	0,54	0,67	0,48

Source: Own processing based on the financial statements of the company

1.8.2.5 Profitability Ratios

The profitability ratios of Salesforce are shown in Table 20. Although the gross margin of the company is close to the sector average, which is around 70%, it is seen that the company remains in very low figures in terms of net profit margin. Although it reached a level close to the sector average in 2020, it decreased to 5% again in 2021. Again, in terms of ROA and ROE values, Salesforce is far behind the sector averages.

Table 20. Profitability Ratios of Salesforce (2017-2021)

PROFITABILITY RATIOS	2017	2018	2019	2020	2021
Gross Margin	0,67	0,67	0,68	0,67	0,66
Operating profitability ratio	0,04	0,07	0,04	0,12	0,06
Net Profit Margin	0,03	0,08	0,01	0,19	0,05
Return on Assets Ratio(%)	1.64	3.61	0.23	6.14	1.46
Return on Equity Ratio(%)	3.47	7.11	0.37	9.81	2.48

Source: Own processing based on the financial statements of the company

1.9 ORACLE

The foundation year of ORACLE, headquartered in California, USA, dates back to 1977 as Software Development Laboratories. The company has the title of being the second largest software company today, and the most important and well-known company is its own Oracle database software. However, with the company's acquisition of Sun Microsystems in 2010, software such as Solaris and Java were included in the Oracle inventory. The company's first founders in 1977 were Larry Ellison, Bob Miner, and Ed Oates. The company first developed and released Oracle in 1979, the oldest commercial relational database program using Structured Query Language (SQL). The company grew rapidly in a short time and went public in 1986. By 1987, Oracle had become the world's largest database company. One of the most important features of the company is the acquisition of many software companies through aggressive purchases, and thus the company has grown quite rapidly. The companies that the company has purchased so far include PeopleSoft (2005), Siebel (2006), BEA (2008), Sun Microsystems (2010) and NetSuite (2016). Although the company slowed down its growth rate in the competitive environment that emerged in the

1990s, with the spread of the internet, it managed to reach its old speed again as one of the first companies to adopt the internet².

As of 2021, the total value of the assets of Oracle, which continues to be the largest database company in the world today, is 109,297 Million USD. In this chapter, the financial position and financial performance of the company between 2107-2021 will be analyzed. In this context, first of all, the company's balance sheets and then income statements will be examined with vertical and horizontal analysis methods, and then ration analyzes will be made in order to examine profitability, liquidity and financial structure.

1.9.1 Analysis of financial position of ORACLE

In this chapter, vertical analysis of the assets and liabilities in the balance sheet of the company will be made in order to examine the financial position of the company. Vertical analysis of Oracle's assets between 2017 and 2021 is shown in Table 21.

Table 21. Vertical Analysis of Assets

All values USD Millions.	2017	%	2018	%	2019	%	2020	%	2021	%
Cash & Short Term Investments	67,261	48.79	37,827	34.80	43,057	37.30	46,554	35.51	21,902	20.04
Total Accounts Receivable	5,938	4.31	5,910	5.44	6,329	5.48	6,207	4.73	6,744	6.17
Inventories	398	0.29	320	0.29	211	0.18	142	0.11	314	0.29
Other Current Assets	2,562	1.86	2,329	2.14	2,543	2.20	2,664	2.03	2,673	2.45
Total Current Assets	76,159	55.25	46,386	42.67	52,140	45.17	55,567	42.38	31,633	28.94

² <https://www.britannica.com/topic/Oracle-Corporation>

Net Property Plant & Equipment	5,897	4.28	6,252	5.75	8,244	7.14	9,649	7.36	13,216	12.09
Total Investments and Advances	24	0.02	5	0.00	29	0.03	73	0.06	0	0.00
Intangible Assets	50,425	36.58	49,058	45.13	47,507	41.15	46,365	35.36	45,251	41.40
Other Assets	5,346	3.88	7,008	6.45	7,518	6.51	19,453	14.84	19,197	17.56
Non Current Assets	61,692	44.75	62,323	57.33	63,298	54.83	75,540	57.62	77,664	71.06
Total Assets	137,851	100.00	108,709	100.00	115,438	100.00	131,107	100.00	109,297	100.00

Source: Own processing based on the financial statements of the company

Looking the ratio of the company's assets to its total assets, it is seen that the largest share is in non-current assets. It is seen that intangible assets have the largest share among non-current assets. However, it is noteworthy that there has been a downward trend in the company's intangible assets and total assets since 2017. Intangible assets, which were USD 50,425 Million with a share of 36.58% in total assets in 2017, decreased to USD 45,251 Million with a share of 41.40% in 2021. However, the company's total assets, which were 137,851 Million USD in 2017, decreased to USD 109,297 Million in 2021. However, it is also observed that the ratio of the company's current assets to its total assets has decreased significantly within 5 years. While this rate was 55.25% in 2017, it decreased to 28.94% in 2021.

The vertical analysis of the company's liabilities and equity between the years 2017-2021 is shown in Table 22.

Table 22. Vertical Analysis of Equity and Liabilities

All values USD Millions.	2017	%	2018	%	2019	%	2020	%	2021	%
Total Shareholders' Equity	46,372	50.97	21,785	25.23	12,074	11.75	5,238	4.19	-6,220	-5.41
Total Equity	46,873	51.52	22,363	25.90	12,717	12.38	5,952	4.76	-5,768	-5.01
ST Debt & Current Portion LT Debt	4,491	4.94	4,494	5.20	2,946	2.87	8,914	7.12	4,476	3.89
Accounts Payable	529	0.58	580	0.67	637	0.62	745	0.60	1,317	1.14
Accrued Payroll	1,806	1.99	1,628	1.89	1,453	1.41	2,017	1.61	1,944	1.69
Miscellaneous Current Liabilities	12,298	13.52	11,928	13.81	12,164	11.84	12,488	9.98	11,774	10.23
Total Current Liabilities	19,124	21.02	18,630	21.58	17,200	16.74	24,164	19.31	19,511	16.96
Long-Term Debt	56,128	61.69	51,673	59.84	70,726	68.85	78,095	62.40	75,010	65.19
Provision for Risks & Charges	25	0.03	23	0.03	1	-	-	-	-	-
Deferred Taxes - Credit	58	0.06	264	0.31	41	0.04	7,864	6.28	6,031	5.24
Other Liabilities	15,643	17.19	15,756	18.25	14,753	14.36	15,032	12.01	14,513	12.61
Non-Current Liabilities	71,854	78.98	67,716	78.42	85,521	83.26	100,991	80.69	95,554	83.04
Total Liabilities	90,978	100.00	86,346	100.00	102,721	100.00	125,155	100.00	115,065	100.00

Source: Own processing based on the financial statements of the company

When Table 22 is examined, it is seen that the total equity value of the company has decreased gradually since 2017 and decreased to the level of USD 6,220 Million in 2021. The biggest reason for this is the increase trend in the liabilities of the company despite the decrease in the total assets of the company. When the liabilities of the company are examined, it is seen that the non-current liabilities are higher than the current liabilities, and this ratio has been in an increasing trend since 2017. While this rate was 21.02%-78.98% in 2017, it became 16.96%-83.04% in 2021. It is noteworthy that among the liabilities of the company, long-term borrowings occupy an important place.

1.9.1.1 Horizontal Analysis of Balance Sheet Items

In this chapter, horizontal analyzes will be made in order to see the changes in the company's assets and liabilities in a 5-year period. The horizontal analysis of the company's assets is shown in Table 23, and the horizontal analysis of its liabilities is shown in Table 24.

Table 23. Horizontal Analysis of Assets

All values USD Millions.	2017	2018	%	2019	%	2020	%	2021	%
Cash & Short Term Investments	67,261	37,827	43.76	43,057	13.83	46,554	8.12	21,902	-52.95
Total Accounts Receivable	5,938	5,910	-0.47	6,329	7.09	6,207	-1.93	6,744	8.65
Inventories	398	320	19.60	211	-34.06	142	-32.70	314	121.13
Other Current Assets	2,562	2,329	-9.09	2,543	9.19	2,664	4.76	2,673	0.34
Total Current Assets	76,159	46,386	39.09	52,140	12.40	55,567	6.57	31,633	-43.07
Net Property Plant & Equipment	5,897	6,252	6.02	8,244	31.86	9,649	17.04	13,216	36.97
Total Investments and Advances	24	5	79.17	29	480.00	73	151.72	0	-
Intangible Assets	50,425	49,058	-2.71	47,507	-3.16	46,365	-2.40	45,251	-2.40

Other Assets	5,346	7,008	31.0 9	7,518	7.28	19,453	158.7 5	19,197	-1.32
Non Current Assets	61,692	62,323	1.02	63,298	1.56	75,540	19.34	77,664	2.81
Total Assets	137,851	108,709	-21.1 4	115,438	6.19	131,107	13.57	109,297	-16.64

Source: Own processing based on the financial statements of the company

Table 23 shows that the assets of the company decreased especially in 2018 and 2021. Although there was an increase in its assets in 2019 and 2020, the total assets of the company decreased from 137,851 Million USD to 109,297 in 2021 in the 5-year period. There is a decrease in the current assets of the company in cash and similar assets, and a decrease in intangible assets in fixed assets. In addition to this, it is seen that there has been an increase in the company's Net Property Plant & Equipment assets in a 5-year period.

Table 24. Horizontal Analysis of Equity and Liabilities

All values USD Millions.	2017	2018	%	2019	%	2020	%	2021	%
Total Shareholders' Equity	46,372	21,785	-53.02	12,074	-44.58	5,238	-56.62	-6,220	-218.75
Total Equity	46,873	22,363	-52.29	12,717	-43.13	5,952	-53.20	-5,768	-196.91
ST Debt & Current Portion LT Debt	4,491	4,494	0.07	2,946	-34.45	8,914	202.58	4,476	-49.79
Accounts Payable	529	580	9.64	637	9.83	745	16.95	1,317	76.78
Accrued Payroll	1,806	1,628	-9.86	1,453	-10.75	2,017	38.82	1,944	-3.62
Miscellaneous Current Liabilities	12,298	11,928	-3.01	12,164	1.98	12,488	2.66	11,774	-5.72
Total Current Liabilities	19,124	18,630	-2.58	17,200	-7.68	24,164	40.49	19,511	-19.26
Long-Term Debt	56,128	51,673	-7.94	70,726	36.87	78,095	10.42	75,010	-3.95
Provision for Risks & Charges	25	23	-8.00	1	-95.65	-	-	-	-
Deferred Taxes - Credit	58	264	355.17	41	-84.47	7,864	19080.49	6,031	-23.31

Other Liabilities	15,643	15,756	0.72	14,753	-6.37	15,032	1.89	14,513	-3.45
Non-Current Liabilities	71,854	67,716	-5.76	85,521	26.29	100,991	18.09	95,554	-5.38
Total Liabilities	90,978	86,346	-5.09	102,721	18.96	125,155	21.84	115,065	-8.06

Source: Own processing based on the financial statements of the company

Table 24 shows that the total liabilities of the company decreased in 2018 and 2021 and increased in 2019 and 2020. In total, the company's total liabilities increased from 90,978 Million USD to 115,065 Million USD in a 5-year period. When the 5-year period of the company is evaluated in general, although a horizontal course is observed, it is seen that there is an increase in non-current liabilities. However, it is seen that the equity value of the company has decreased considerably over the course of 5 years. This decrease has reached a negative value of -6,220 million dollars with -218.75%, especially in 2021.

1.9.2 Analysis of financial performance of ORACLE

In this chapter, horizontal and vertical analyzes of the last 5 years' income statements data will be made in order to examine the financial performance of the company.

1.9.2.1 Horizontal Analysis of Income Statement

Horizontal analysis of the Oracle company's income statements for the years 2017-2021 is shown in Table 25.

Table 25. Horizontal Analysis of Income Statement of ORACLE

All values USD Millions.	2017	2018	%	2019	%	2020	%	2021	%
Sales/Revenue	39,383	39,506	0.31	39,068	-1.11	40,479	3.61	42,440	4.84
Cost of Goods Sold (COGS) incl. D&A	9,680	9,684	0.04	9,524	-1.65	9,234	-3.04	10,027	8.59
COGS excluding D&A	6,895	6,765	-1.89	6,556	-3.09	6,318	-3.63	6,905	9.29
Depreciation & Amortization Expense	,785	,919	.81	,968	.68	,916	1.75	,122	.06
Depreciation	1,165	1,230	5.58	1,382	12.36	1,537	11.22	1,972	28.30

Amortization of Intangibles	1,620	1,689	4.26	1,586	-6.10	1,379	-13.05	1,150	-16.61
Gross Income	29,703	29,822	0.40	29,544	-0.93	31,245	5.76	32,413	3.74
SG&A Expense	15,799	15,767	-0.20	15,331	-2.77	15,463	0.86	16,551	7.04
Research & Development	6,084	6,026	-0.95	6,067	0.68	6,527	7.58	7,219	10.60
Other SG&A	9,715	9,741	0.27	9,264	-4.90	8,936	-3.54	-	-
EBIT	-	14,055	-	14,213	1.12	15,782	11.04	15,862	0.51
Unusual Expense	640	520	-18.75	321	-38.27	553	72.27	4,936	792.59
Non Operating Income/Expense	117	-125	-206.84	-197	57.60	345	-275.13	-285	-182.61
Non-Operating Interest Income	1,203	1,092	-9.23	527	-51.74	101	-80.83	94	-6.93
Interest Expense	2,025	2,082	2.81	1,995	-4.18	2,496	25.11	2,755	10.38
Gross Interest Expense	2,025	2,082	2.81	1,995	-4.18	2,496	25.11	2,755	10.38
Pretax Income	12,559	12,420	-1.11	12,227	-1.55	13,179	7.79	7,833	-40.56
Income Tax	8,837	1,185	-86.59	1,928	62.70	-747	-138.74	932	-224.77
Minority Interest Expense	135	152	12.59	164	7.89	180	9.76	184	2.22
Net Income	3,587	11,083	208.98	10,135	-8.55	13,746	35.63	6,717	-51.13
Net Income After Extraordinaries	3,587	11,083	208.98	10,135	-8.55	13,746	35.63	6,717	-51.13
Basic Shares Outstanding	4,121	3,634	-11.82	3,211	-11.64	2,945	-8.28	27	-99.08
EBITDA	16,689	16,974	1.71	17,181	1.22	18,698	8.83	18,984	1.53

Source: Own processing based on the financial statements of the company

When Table 25 is examined, it is seen that the sales of the company showed a very low increase in 2018 in a 5-year period, decreased by 1.11% in 2019, and increased by 3.61% and 4.84% in 2020 and 2021, respectively. However, an average of 9% increase has been observed in the product activities of the company in the last 3 years. Although there was a decrease in SG&A expenditures between 2017 and 2020, it is seen that there was an increase of 7.04% in 2021. Compared to other years, a significant increase is observed in the company's tax payments in 2021. When the net income of the company is analyzed by deducting all expenses, it is seen that there was an increase in 2108 and 2020, but there was a decrease in the net income of the company in 2019 and 2020. Especially the 51.13% decrease in 2021 draws attention. It is seen that this decrease is caused by the increase in SG&A expenditures and tax payments in 2021.

1.9.2.2 Vertical Analysis of Income Statement

Vertical analyzes of Oracle's revenue and liabilities are shown in Table 26 and Table 27.

Table 26. Vertical Analysis of Revenues of ORACLE

All values USD Millions	2017	%	2018	%	2019	%	2020	%	2021	%
Revenue from operations	38,063	96.65	38,539	97.55	38,738	99.16	40,033	98.90	42,631	100.45
Other Income	1,320	3.35	967	2.45	330	0.84	446	1.10	-191	-0.45
Total Income	39,383	100.00	39,506	100.00	39,068	100.00	40,479	100.00	42,440	100.00

Source: Own processing based on the financial statements of the company

When Table 26 is examined, it is seen that the company's non-operational revenues decreased for 5 years and reached a negative level in 2021. The rate, which was 3.35% in 2017, decreased to -0.45% in 2021.

Table 27. Vertical Analysis of Expenses of ORACLE

All values USD Millions	2,017	%	2,018	%	2,019	%	2,020	%	2,021	%
EXPENSES										
Cost of Goods Sold (COGS) incl. D&A	9,680	24.34	9,684	30.11	9,524	29.70	9,234	30.87	10,027	26.16
COGS excluding D&A	6,895	17.34	6,765	21.04	6,556	20.44	6,318	21.12	6,905	18.02

Depreciation & Amortization Expense	2,785	7.00	2,919	9.08	2,968	9.26	2,916	9.75	3,122	8.15
Depreciation	1,165	2.93	1,230	3.82	1,382	4.31	1,537	5.14	1,972	5.15
Amortization of Intangibles	1,620	4.07	1,689	5.25	1,586	4.95	1,379	4.61	1,150	3.00
SG&A Expense	15,799	39.73	15,767	49.03	15,331	47.81	15,463	51.69	16,551	43.19
Research & Development	6,084	15.30	6,026	18.74	6,067	18.92	6,527	21.82	7,219	18.84
Other SG&A	9,715	24.43	9,741	30.29	9,264	28.89	8,936	29.87	-	-
Unusual Expense	640	1.61	520	1.62	321	1.00	553	1.85	4,936	12.88
Interest Expense	2,025	5.09	2,082	6.47	1,995	6.22	2,496	8.34	2,755	7.19
EXCEPTIONAL EXPENSES	30,929	77.78	30,972	96.31	30,139	93.99	30,662	102.50	37,391	97.57
TAX EXPENSE										
Income Tax	8,837	22.22	1,185	3.69	1,928	6.01	-747	-2.50	932	2.43
Income Tax Current Domestic	8,584	21.59	1,279	3.98	1,635	5.10	749	2.50	895	2.34
Income Tax Current Foreign	1,100	2.77	1,097	3.41	1,144	3.57	929	3.11	1,183	3.09
Income Tax Deferred Domestic	853	2.15	455	1.41	-933	-2.91	8,554	28.59	-1,800	-4.70
Income Tax Deferred Foreign	6	0.02	-1,646	-5.12	82	0.26	-10,979	-36.70	654	1.71
TOTAL EXPENSES	39,766	100.00	32,157	100.00	32,067	100.00	29,915	100.00	38,323	100.00

Source: Own processing based on the financial statements of the company

When Table 27, which shows the expenditure data of the company, is examined, it is seen that the place of the company's tax payments in total expenditures in 2017 was quite high at 22.22%, but this rate remained at the level of 2-6% in other years. It is seen that the highest rate among the expenditures of the company is in SG&A expenditures, followed by Cost of Goods. It is seen that SG&A expenditures are around 40-50% of total expenditures

over a 5-year period, while cost of goods is around 25% on average. The unusual expense of 4,936 million USD, which the company made in 2021, also draws attention. This rate corresponds to 12.88% of total expenditures in 2021.

1.9.3 Selected Financial Ratios of ORACLE

1.9.3.1 Liquidity Ratios

The liquidity ratios of Oracle are calculated and shown in Table 28. When the table is examined, it is seen that the company's current ratio and acid test ratio are quite high until 2021. This shows that when the inventory of the company is considered negligibly among its assets, the company remains in cash more. Although the high liquidity ratios of the companies are good in terms of current assets, it also shows that the company is insufficient in terms of investing its cash. In addition to this, a rapid downward trend in the liquidity ratios of Oracle has been observed in the last 5 years. Looking at the company's balance sheet, it is seen that the reason for this is the decrease in the current assets of the company, although the current liabilities of the company have not changed much. However, since the current status of the company is above 1, it is not in a risky situation in terms of current liabilities.

Table 28. Liquidity Ratios of Oracle (2017-2021)

LIQUIDITY RATIOS	2017	2018	2019	2020	2021
Current Ratio	3,98	2,49	3,03	2,30	1,62
Acid Test Ratio	3,83	2,35	2,87	2,18	1,47
Cash Ratio	3,52	2,03	2,50	1,93	1,12

Source: Own processing based on the financial statements of the company

1.9.3.2 Profitability Ratios

The profitability ratios of Oracle company are shown in Table 29. Accordingly, it is seen that the profitability of the company is above the sector average of 71.59% (gross

margin) and 19.66% (net margin). However, it is seen that ROA and ROE values are far behind the sector. Especially due to the decrease in equity that the company has experienced in the last 5 years, the ROE value displayed a negative image as of 2021.

Table 29. Profitability Ratios of Oracle (2017-2021)

PROFITABILITY RATIOS	2017	2018	2019	2020	2021
Gross Margin	0,75	0,75	0,76	0,77	0,76
Operating profitability ratio	0,32	0,31	0,31	0,33	0,18
Net Profit Margin	0,09	0,28	0,26	0,34	0,16
Return on Assets Ratio(%)	2.60	10.20	8.78	10.48	6.15
Return on Equity Ratio(%)	7.74	50.87	83.94	262.43	-107.99

Source: Own processing based on the financial statements of the company

RESULTS AND DISCUSSION

1.10 Comparison of financial performance and position

In the Practical Part, ratio analyzes were made with the financial positions and performances of SAP SE, Sailforce and Oracle companies. In this chapter, the results obtained in the fourth chapter will be compared with the three companies, and the factors affecting the profitability of the companies and the effects of the use of US GAAP and IFRS will be evaluated.

1.10.1 Financial Position

It is seen that more than 70% of the total assets of the SAP SE company are composed of fixed assets, and intangible assets occupy an important place among the fixed assets. It is seen that this ratio has been around 50% in the last 5 years, and it is seen that half of its total assets consist of intangible assets on average. As of 2021, 71.84% of total assets consist of fixed assets and 28.16% are current assets. As of 2021, 49.26% of total assets consist of intangible assets. It is seen that the liabilities of the company have an average of 50-50% rotating and non-performing liabilities within a 5-year period. As of 2021, this ratio is 45.57% non-performing liabilities and 54.43% current liabilities. The company's total equity stands at 1.4 times its total liabilities in 2021. It is seen that the total assets of the company have grown in a 5-year period, excluding 2020, and these growths were 21.19% in 2018, 16.91% in 2019 and 21.72% in 2021. The company's total assets decreased by 2.89% in 2020 alone. The company's total liabilities, on the other hand, are also growing, excluding 2020. Total liabilities grew by 33.33% in 2018, by 29.91% in 2019 and by 3.89% in 2021. The company's total liabilities decreased by 2.91% in 2020.

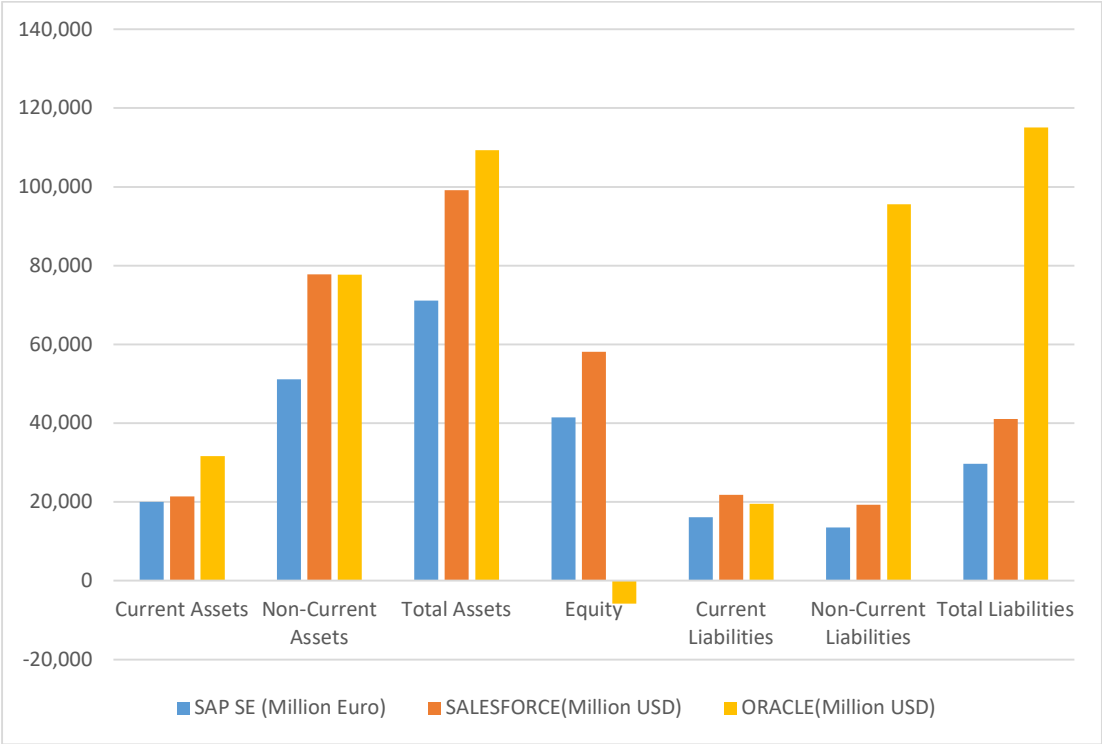
When we look at the assets of the Salesforce company, it is seen that the fixed assets have the highest share in the total assets, similar to the SAP SE company, and intangible assets have the largest share among the fixed assets. It is also seen that the share of intangible assets and thus fixed assets within the total assets of the company has been in an increasing trend in the last 5 years. It is seen that the share of fixed assets in total assets as of 2021 is 78.43%, while intangible assets are 57.39%. When the liabilities of the company are examined, it is seen that the ratio of non-performing liabilities, which was 13.28% in 2017,

when the share of fixed liabilities within the last 5 years increased gradually, reached 46.92% in 2021. As of 2021, it is seen that the highest share in the total liabilities of the company is in long-term debts with 33.05%. In the last 5 years, the company's total assets have grown by nearly 5 times, and it is seen that there is a growth in the assets of the company, with the lowest 20.27% in 2020 and the largest 79.35% in 2019. It is seen that this growth is mostly due to the growth in fixed assets. While there is a growth trend in the company's liabilities, it is not at the same rate as its assets. As of 2021, the company's total liabilities have grown by 65.46%, while its total liabilities, which were 11,608 million USD in 2017, are 41,047 million USD in 2021.

It is seen that fixed assets and intangible assets dominate the total assets of Oracle company, as in the other two companies. It is observed that the share of fixed assets in the total assets of the company has increased every year in the last 5 years. As of 2021, the share of fixed assets of the company in total assets is 71.06% and the share of intangible assets is 41.40%. In addition, it is seen that cash and short-term investment assets have a periodic place in the total assets of the company, but there is a decrease in this within 5 years. While the company's cash and short-term investment assets were 48.79% in total assets in 2017, this ratio decreased to 20.04% in 2021. It is seen that the fixed liabilities of the company have a significant share in the total liabilities. The ratio of liabilities in total liabilities in the last 5 years is 80%. By 2021, this rate is 83.04%. It is seen that the highest ratio among total liabilities is in long-term debts. In 2021, the ratio of long-term debts to the total liabilities of the company is 65.19%. Looking at the change in the assets and liabilities of the company in the last 5 years, it is seen that although there is a downward trend in the total assets of the company, there has been an increase in its liabilities.

It is seen that the decrease in the total assets of the company is mostly due to the current assets, while the increase in the total liabilities is mostly due to the increase in the long-term debts of the company. There is a downward trend in the company's equity in the last 5 years. The total equity of the company, which was 46,873 million USD in 2017, decreased to -5,768 million USD in 2021. As of 2021, the assets and liabilities of the three companies are shown in Figure 3.

Figure 3 Comparison of 2021 Balance Sheets of SAP SE, SALESFORCE AND ORACLE



Source: Own processing based on the financial statements of the companies

In Figure 3, the asset and liability information in the balance sheets of the three companies are shown comparatively. When we look at the comparison of the companies, it is seen that the standing liabilities of Oracle company in 2021 are considerably higher than the other companies and that their equity is negative for this reason. Although the assets of Oracle company are more than other companies, it can be said that the company's total liabilities are more than its total assets, which does not show a positive image for the coming years. It can be said that the other two companies have a more positive image than Oracle, and Salesforce is the best of the three companies as of 2021 in terms of general financial position.

1.10.2 Financial Performance

Looking at the income statements of the SAP SE company since 2017, it is seen that the sales of the company have increased by approximately 4,000 million USD in 5 years. In addition, it is seen that the net profit of the company increased from 4,008 Million Euros in 2017 to 5,256 Million Euros in 2021. Looking at the expenditures and product costs of the company during these years, it is seen that an increase of approximately 700 Million USD in product costs, while the increase in the company's SG&A expenditures is around 3,000 Million Euros. Although the company experienced a decrease of 8.64% in 2020 in terms of revenues, it was able to maintain the company's profit by reducing its expenses this year. However, it continued its investments by increasing its revenues by 1.84% in 2021. It is seen that the company's SG&A expenditures decreased by 8% in 2020 and increased by 17.57% in 2021. Looking at the total expenses of the company, it is seen that the largest share among expenses is in SG&A expenditures with 21.89% as of 2021, followed by product costs with 11.48%.

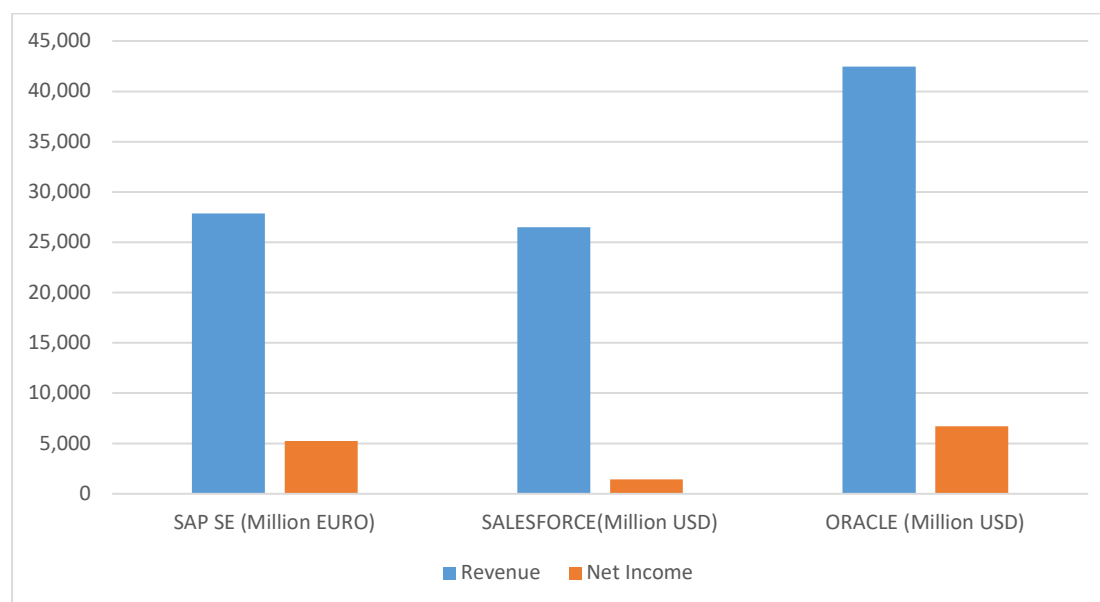
Looking at the 5-year income statements of SALESFORCE, it is seen that the company's revenue, which was 10,540 million USD in 2017, increased by 2.5 times in 2021 to 26,492 million USD. Looking at the net income of the company, it is seen that the net income, which was 360 Million USD in 2017, reached the level of 1,444 Million USD in 2021, an increase of approximately 4 times. Although the company brought its net income to 4,072 Million USD in the last 5 years, especially in 2020, its net income decreased to 1,444 in 2021. Although an increase was observed in the net income of the company in the 5-year period, it cannot be said that this increase has exhibited a consistent trend. Looking at the expenditures of the company, it is seen that SG&A expenditures, which were 6,600 Million USD in 2017, increased to 16,843 Million USD in 2021, while product costs increased from 3,486 Million USD to 9,101 Million USD. As of 2021, it is seen that SG&A expenditures have the highest share among the expense items of the company with a rate of 66.48%. After SG&A expenditures, product costs come with 35.92%.

It is seen that the total sales of Oracle company, which was 39,383 in 2017 over a 5-year period, reached the level of approximately 3,000 Million USD to 42,440 Million USD in 2021, and its net profit came to 6,717 Million USD from 3,587 Million USD. When we look at the expenditure items of the company, it is seen that the highest share is in SG&A

expenditures with 43.19% as of 2021, but the company has increased only 700 million USD in these expenditures over a 5-year period.

The comparative representation of the income and net profits of the three companies as of 2021 on the graph is shown in Figure 4.

Figure 4 Comparison of 2021 Revenues and Net Incomes of SAP SE, SALESFORCE and ORACLE

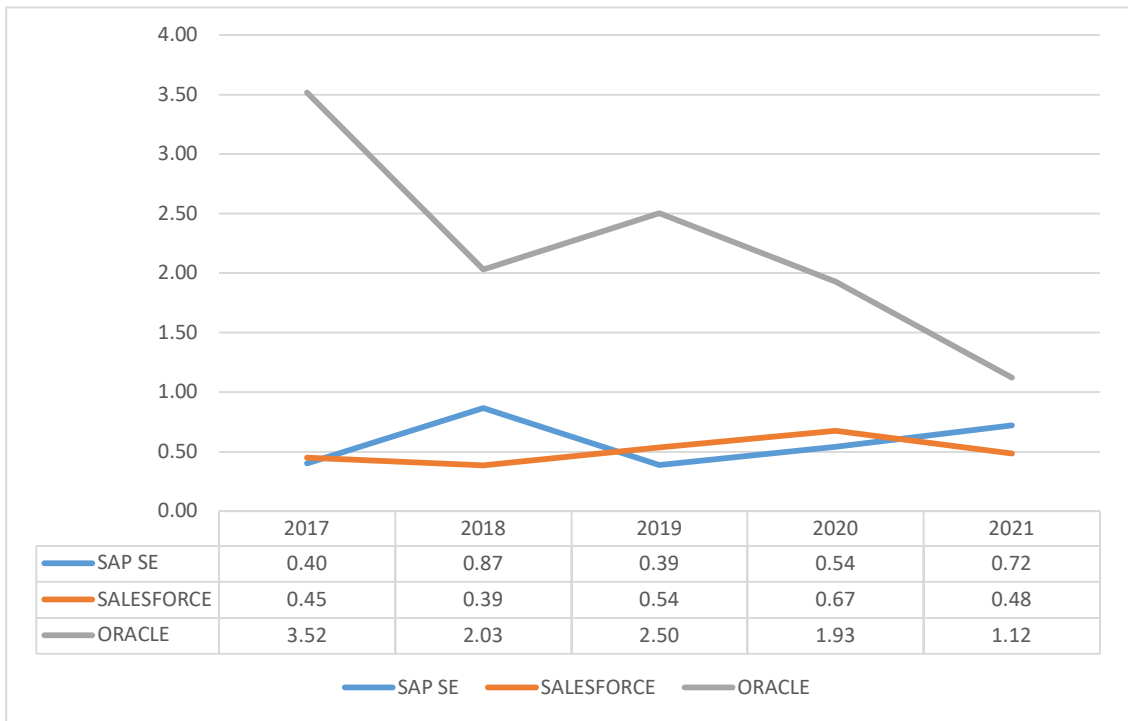


Source: Own processing based on the financial statements of the companies

1.11 Comparison of financial ratios

The Cash Ratio changes of the three companies between 2017 and 2021 are shown in Figure 5. When Figure 5 is examined, it is seen that the Cash ratios of SAP SE and Salesforce companies are below 1 for 5 years, but the cash ratio of Oracle company, which has been quite high since 2017, has reached the level of 1.12 in 5 years. As of 2021, it is seen that the cash reserves of Salesforce and SAP SE companies are not sufficient to meet their short-term liabilities, while Oracle is sufficient.

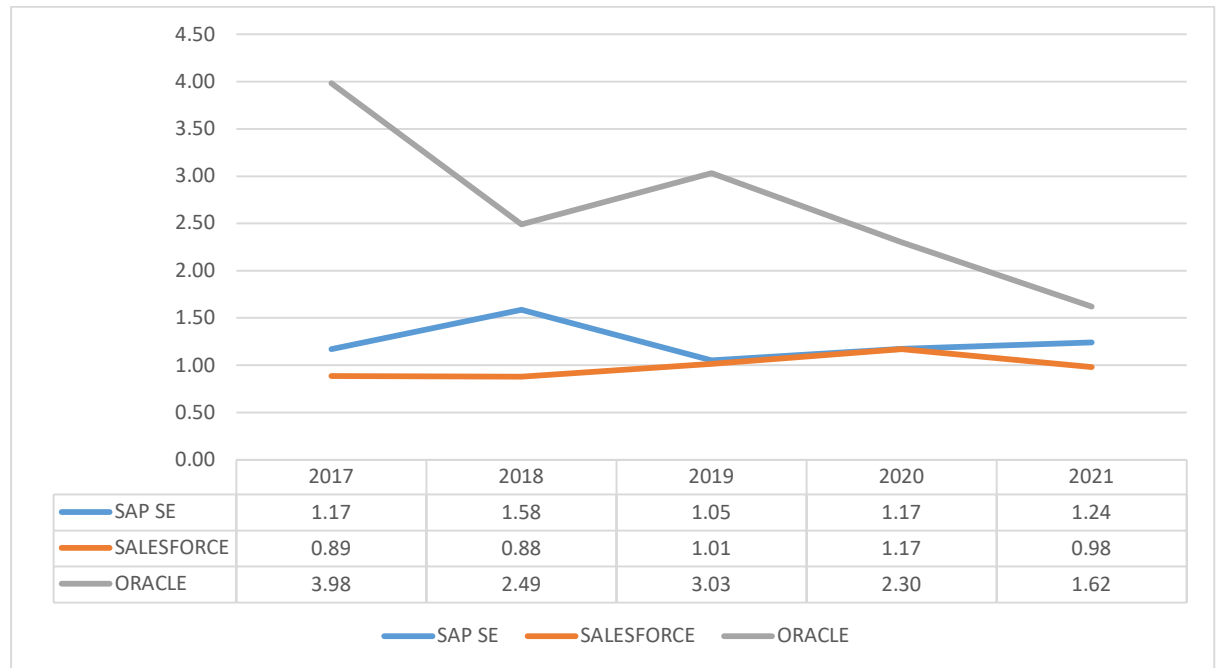
Figure 5 Cash Ratio (SAP SE, SALESFORCE, ORACLE, (2017-2021))



Source: Own processing based on the financial statements of the companies

The change in the current rates of the three companies between 2017 and 2021 is shown in Figure 6. When Figure 6 is examined, it is seen that the Current ratio values of SAP SE and Oracle companies for 5 years are sufficient to meet their short-term liabilities, while the Salesforce company is sufficient in 2019 and 2020, while it is below 1 in other years.

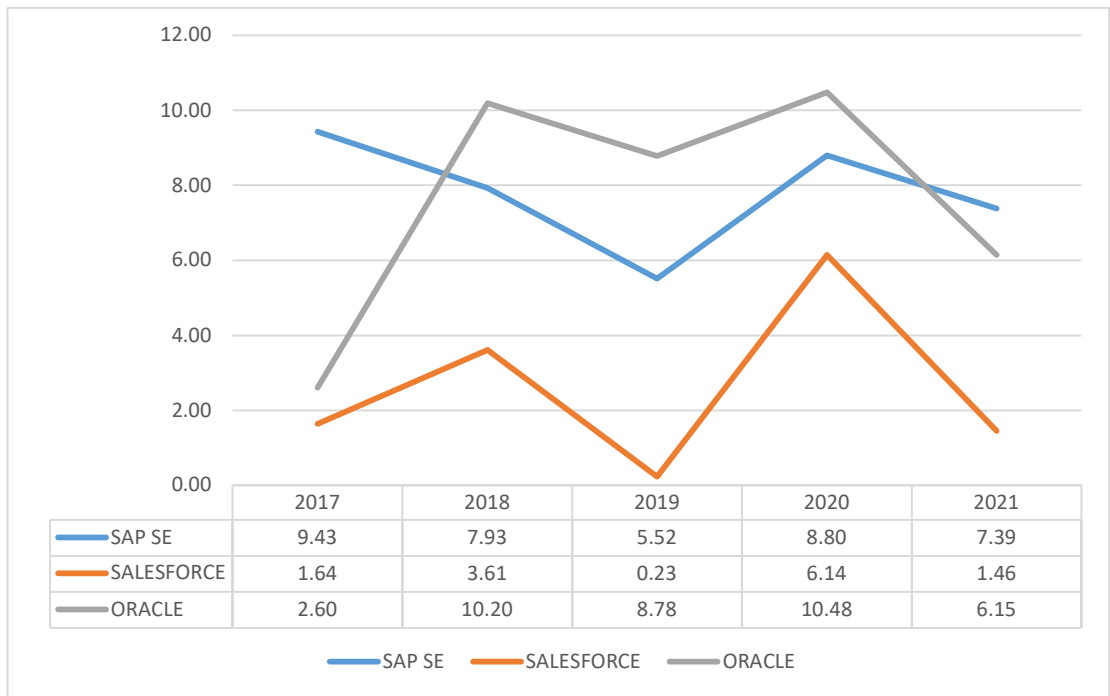
Figure 6 Current Ratio (SAP SE, SALESFORCE, ORACLE, (2017-2021))



Source: Own processing based on the financial statements of the companies

The 5-year change in ROA rates of companies is shown in Figure 7. ROA shows how much companies can convert their assets into net income. The fact that this ratio is a positive value and ideally 5% is interpreted as positive for companies. When Figure 7 is examined, it is seen that the ROA values of SAP SE and Oracle companies are at the desired levels, but the ROA ratios of SALESFORCE, excluding 2020, are lower than other companies, even though they are above 0. In 2019 and 2021, SalesForce's ROA rate is quite low.

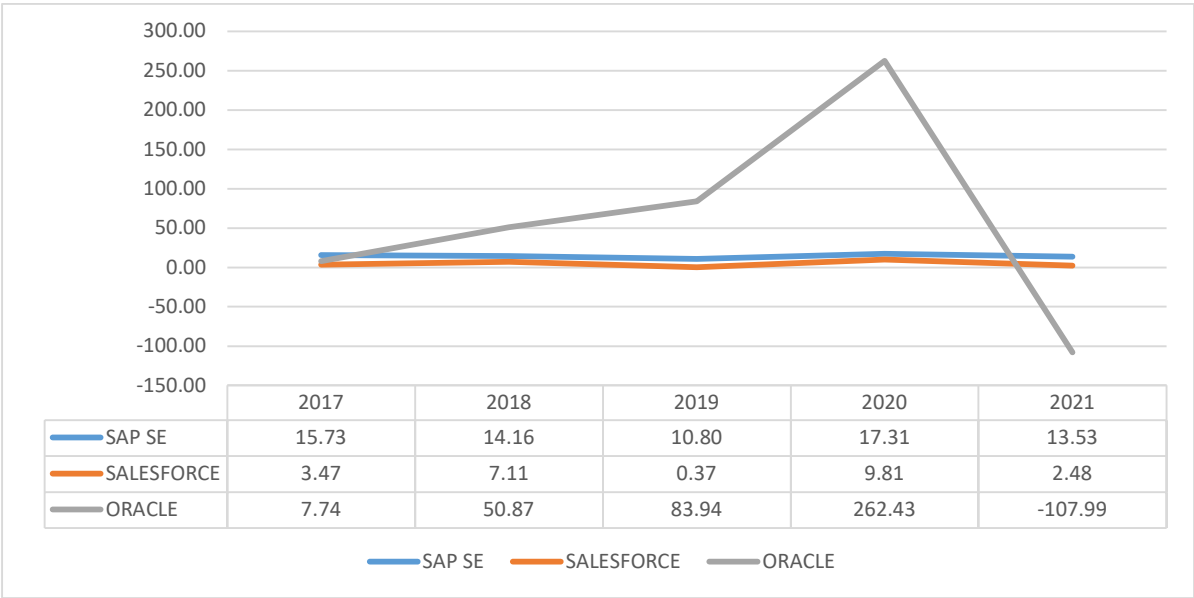
Figure 7 Return of Assets (SAP SE, SALESFORCE, ORACLE, (2017-2021))



Source: Own processing based on the financial statements of the companies

The ROE ratios of the companies for the years 2017-2021 are shown in Figure 8. The ROE ratio tells how effectively shareholders have used their investment in the company. In this respect, it is one of the most important profitability indicators for investors. When Figure 8 is examined, the return on equity of the SAP SE company is progressing in a certain trend, the Salesforce company is at a good level in 2018 and 2020, but the other years remain low, and the return on equity of the Oracle company is quite high, such as -107% in 2021, although it is quite high in 2018, 2019 and 2020. appears to be low and negative.

Figure 8 Return of Equities (SAP SE, SALESFORCE, ORACLE, (2017-2021))



Source: Own processing based on the financial statements of the companies

1.12 Most significant factors affecting the profits of the company

Although there is no single universal meaning for informatics, information technologies broadly encompass technologies that enable information to be processed and converted into services. Activities in software, hardware and service provision and data collection and processing are included in this scope. Companies that carry out quite a variety of activities under the umbrella of the IT sector are evaluated. Public and private sector participants who want to increase efficiency are consumers of information technology products. When we look at the sub-sector distribution of the information technology market all over the world, 26% is telecommunication services, 23% is communication devices and infrastructure, 21% is business services and 12% is software services. According to the data of International Data Corporation (IDC), the income of the global information technologies sector decreased slightly in 2020, realized as 4.8 trln USD as of August 2020, remaining below the initial estimate of 5.2 trln USD. In the event that the target of 5 trln USD, which is in the 2021 forecasts, is realized, a growth of 4.2% is foreseen in the sector. According to IDC's forecast, the industry could grow by around 5% per year until 2024. According to the

2021 forecasts, the USA will get the highest share from the sector with 1.6 trln USD (33%). It is followed by Europe with 19% and China with 14%. The year 2020 was indisputably an extraordinary year, challenging small businesses in particular to an unexpected extent. With the Kovid-19 pandemic becoming the most important agenda item in the world, digital activities have become more important than ever in every sector. For this reason, the crisis for the sector, which was adversely affected by the global epidemic at the first stage, may mean an opportunity in the coming years, unlike most of the other sectors. Because, the processes of data processing and cloud systems and the productization of new technologies in general are getting richer. In addition, the strengthening expectations that the worst period for the global economy is over and growth is accelerating during the pandemic also supports the sector.

Technology and R&D investments of companies are at the forefront of the factors affecting the profitability of companies operating in the software sector. In addition to this, it is necessary to meet the need for qualified personnel and to follow the constantly developing technological infrastructure innovations. Unlike companies in other sectors, it is seen that company revenues are mostly concentrated on intangible assets, while company expenditures are on R&D expenditures. Looking at the companies' annual reports for 2021, the issues listed as economic risk factors as summarized are (SAP SE, 2022; SALESFORCE, 2022; ORACLE CORP., 2022):

- The uncertainty caused by the conflicts, the global epidemic, social and political issues in the global economy in recent years, ,
- The possibility of data security being damaged due to cyber attacks,
- Damage to the reputation of the companies due to coding, undetected errors of software products whose software is made and sold by companies,:
- Increased competition, market consolidation, technological innovation, and new business models in the software industry,
- Fluctuations in currency exchange rates,
- Volatile and significantly weakened global economic conditions,
- The occurrence of natural disasters and other events beyond the control.

Especially global companies operating in different countries can be affected by fluctuations in exchange rates. Considering that countries are experiencing different economic turmoil due to the Covid 19 global epidemic globally, the exchange rate fluctuations in the currencies of the countries in the coming years brings the possibility that global companies will be adversely affected by this situation.

1.13 Most significant factors affecting the industry

The most important development affecting the sector in recent years has been the Covid 19 epidemic. In the first times of the epidemic, companies were negatively affected by this situation economically, but as of 2021, it is seen that the financial situation of the companies is better than before the epidemic. The biggest reason for this is that with Covid 19, all companies and sectors globally have given more importance to digitalization than before. All sectors have started to search for digital solutions where people can interact less physically, and new solutions have begun to be developed both in the field of trade and in the field of customer relations. For this reason, with Covid 19, the competition between software companies has increased significantly.

However, within the framework of Industry 4.0, which is developing globally, artificial intelligence and IOT developments offer important opportunities for companies operating in the field of software.

Looking at the annual reports of the companies, it is seen that the most important risk factors for the industry, the uncertain economic conditions around the world, and the uncertainty of the long-term effects of Covid 19 are the most important risk factors for the sector. In addition to this, it is seen that companies, specifically for the software sector, indicate the following as the most important risk factors are (SAP SE, 2022; SALESFORCE, 2022; ORACLE CORP., 2022);

- To stay behind its competitors in terms of innovation and customer relations under increasing competition conditions,
- Failure to introduce new products,
- Making mistakes in cyber security, information security and privacy.

1.14 Difference between US GAAP and IFRS

In this study, Oracle and Salesforce companies, whose financial positions and financial performances are examined, use the US GAAP accounting system because they are USA origin companies, while SAP SE uses the IFRS accounting system because they originate in Germany. Although SAP SE company is also traded on the NYSE stock exchange, there is no obligation to use the US GAAP system according to the decision of the SEC in 2007. However, although SAP SE uses IFRS, it is seen that it provides explanatory information to its investors by making calculations in the form of Non IFRS and Non GAAP in its accounting reports.

The main differences between US GAAP and IFRS are as follows:

- IFRS is a policy-based accounting set and US GAAP is a rule-based accounting standard set. US GAAP provides definitions and provides detailed information on how each application should be handled. However, IFRS provides more guidance than detailed rules (Deloitte, 2021).
- Although there are many similarities in terms of presentation of the tables of both accounting sets, it is seen that IFRS imposes more requirements than US GAAP and tries to provide more comparative information (Guillaume & Pierre, 2016).
- One of the key differences between US GAAP and IFRS is in the recognition of income. To give an example for the IT sector; According to the guidance in US GAAP, while the recognition of computer software revenue, the estimation of the selling price should be based on objective evidence about the seller, there is no such application in the IFRS accounting system (Guillaume & Pierre, 2016).
- One of the key differences between US GAAP and IFRS relates to inventory valuation. The last-in, first-out (LIFO) method used in US GAAP for valuing inventories cannot be used in IFRS. This situation increases the distinction between the two systems, as it also brings differences in taxation (Guillaume & Pierre, 2016).

- There is also a difference in terms of consolidation between the two accounting sets. In US GAAP, the share rate of the investee is taken as a basis while consolidating, while in IFRS, the investor's control power over the investee is taken as a basis (Guillaume & Pierre, 2016).
- There are differences in two accounting aspects in the calculation of intangible assets. Under IFRS, intangible assets are recognized only if they provide future benefits. Therefore, the asset in question can only be recorded if it can be valued and determined in monetary terms. On the other hand, US GAAP records intangible assets at their current market price and no further valuation is made for the asset in question for the future (Deloitte, 2021).
- US GAAP states that fixed assets such as buildings, vehicles, furniture and similar should be recorded at cost value and expensed by taking into account the useful life of the asset and decomposing the depreciation structure. In IFRS, fixed assets are initially recorded at cost, but can then be revalued to fair value. Therefore, the value of fixed assets under IFRS can be increased or decreased based on the current fair value (Obradovic & Karapavlovic, 2014).
- Another fundamental difference between the two sets of standards is the issue of impairment. The two sets of standards treat the recognition and measurement of impairment differently. While IFRS allows for impairment reversal, US GAAP does not (Obradovic & Karapavlovic, 2014).

The differences between IFRS and US GAAP described above are only fundamental differences. All of the differences, including the key differences mentioned above, have a significant impact on the comparability of the financial statements (Djoudi and Gasmi, 2021).

CONCLUSION

The aim of this thesis was to assess and compare the financial position and performance of three chosen companies operating in the same industry - enterprise business software development and related services, by analyzing the companies' financial statements with focus on the representation and changes of the reported assets, liabilities, expenses, revenues and cash-flow for a chosen period to identify the potential financial problems and the most significant factors influencing the profit.

In this thesis, the financial positions and performances of SAP SE, Salesforce and Oracle companies, which are the global leaders of the software industry, were analyzed for the last 5 years. As a result of the analysis, it is seen that the financial situation of the companies has been a development trend in the last 5 years, and it has been seen that all three companies were negatively affected by the Covid 19 process, which was effective in the world economy in 2019-2020. However, from 2021 onwards, companies recovered quickly.

Although the Covid 19 process showed a negative picture for companies at the first stage, interest in both the internet and the software industry has increased worldwide with the Covid 19 process, and the fact that digitalization has become one of the most important priorities in all sectors has created significant advantages for software companies. For this reason, the economic indicators of the analyzed companies have gained a positive outlook since 2021.

The use of US GAAP and IFRS accounting systems, which is an important difference for the companies examined in the study, was also taken into consideration. However, in the annual reports published by SAP SE, which is the only company that uses IFRS among companies, it has been seen that due to this difference, it gives distinctions in financial indicators as Non IFRS and Non GAAP. For this reason, it has been seen that investors who invest in the USA, especially in company comparisons, are provided with an opportunity to evaluate.

In the analysis, it has been observed that although there is a regular trend in the financial situation of SAP SE and Salesforce companies, the increase in long-term borrowings of Oracle company in recent years has caused a contraction and a negative

outlook especially in the company's equity. Despite the high value of the company, it shows that the company may continue to display a risky outlook if the negative outlook in its equity cannot be corrected in the coming years.

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APPENDIX 1 (SAP SE BALANCE SHEET 2017-2021)

Fiscal year is January-December. All values EUR Millions.	2017	2018	2019	2020	2021
Cash & Short Term Investments	4101	9075	5611	6946	11656
Cash Only	4011	8627	5314	5311	8898
Total Accounts Receivable	6205	6655	8413	6803	6755
Accounts Receivables, Net	5809	6182	7561	6199	5887
Other Receivables	396	473	852	604	868
Other Current Assets	1624	890	1189	1320	1633
Total Current Assets	11930	16620	15213	15069	20044
Net Property, Plant & Equipment	2967	3553	5496	5041	4977
Buildings	-	-	-	1457	1609
Land & Improvements	1162	1344	1537	-	-
Construction in Progress	213	224	36	99	77
Leases	-	-	1967	1857	1841
Other Property, Plant & Equipment	1592	1985	1956	1628	1450
Total Investments and Advances	1155	1536	2336	3512	6275
Other Long-Term Investments	1155	1536	2336	3512	6275
Long-Term Note Receivable	118	118	130	138	147
Intangible Assets	24238	26963	33653	31322	35056
Net Goodwill	21271	23736	29162	27538	31090
Net Other Intangibles	2967	3227	4491	3784	3966
Other Assets	1039	1698	2136	2194	2891
Tangible Other Assets	1039	1698	2136	2194	2891
Total Assets	42484	51502	60215	58464	71169
ST Debt & Current Portion LT Debt	1298	768	2920	1864	4167
Short Term Debt	1298	768	2531	1484	3760
Current Portion of Long Term Debt	-	-	389	380	407
Accounts Payable	1151	1491	1581	1367	1580
Income Tax Payable	597	611	255	414	304

Other Current Liabilities	7164	7616	9706	9197	10085
Miscellaneous Current Liabilities	7164	7616	9706	9197	10085
Total Current Liabilities	10210	10486	14462	12842	16136
Long-Term Debt	5002	10535	12900	13600	10981
Long-Term Debt excl. Capitalized Leases	5002	10535	11086	11860	9245
Non-Convertible Debt	5002	10535	11086	11860	9245
Provision for Risks & Charges	328	270	478	362	355
Deferred Taxes	786	912	1169	1030	1488
Deferred Taxes - Credit	251	102	82	158	291
Deferred Taxes - Debit	1037	1014	1251	1188	1779
Other Liabilities	1178	1232	1471	1575	1883
Other Liabilities (excl. Deferred Income)	1099	1144	1382	1539	1870
Deferred Income	79	88	89	36	13
Total Liabilities	16969	22625	29393	28537	29646
Common Equity (Total)	25484	28832	30746	29716	38853
Common Stock Par/Carry Value	1229	1229	1229	1229	1229
Additional Paid-In Capital/Capital Surplus	570	543	545	545	1918
Retained Earnings	24769	27406	28782	32026	37021
Cumulative Translation Adjustment/Unrealized For. Exch. Gain	330	1239	1776	1016	1779
Unrealized Gain/Loss Marketable Securities	157	-	-	-	-
Other Appropriated Reserves	20	5	6	4	22
Treasury Stock	1591	1580	1580	3072	3072
Total Shareholders' Equity	25484	28832	30746	29716	38853
Accumulated Minority Interest	31	45	76	211	2670
Total Equity	25515	28877	30822	29927	41523
Liabilities & Shareholders' Equity	42484	51502	60215	58464	71169

APPENDIX 2 (SAP SE INCOME STATEMENT 2017-2021)

Fiscal year is January-December. All values EUR Millions.	2017	2018	2019	2020	2021
Sales/Revenue	23,461	24,708	27,553	27,338	27,842
Sales Growth	-	5.32%	11.51%	-0.78%	1.84%
Cost of Goods Sold (COGS) incl. D&A	7,051	7,462	8,355	7,633	7,724
COGS excluding D&A	5,779	6,1	6,483	5,802	5,949
Depreciation & Amortization Expense	1,272	1,362	1,872	1,831	1,775
COGS Growth	-	5.83%	11.97%	-8.64%	1.19%
Gross Income	16,41	17,246	19,198	19,705	20,118
Gross Income Growth	-	5.09%	11.32%	2.64%	2.10%
Gross Profit Margin	-	-	-	-	72.26%
SG&A Expense	11,351	11,503	13,614	12,525	14,726
Research & Development	3,352	3,624	4,292	4,447	5,18
Other SG&A	7,999	7,879	9,322	8,078	9,546
SGA Growth	-	1.34%	18.35%	-8.00%	17.57%
EBIT	-	-	5,584	-	5,392
Unusual Expense	182	19	1,13	574	780
Non Operating Income/Expense	-36	-77	-56	853	2,474
Non-Operating Interest Income	476	371	787	113	56
Interest Expense	288	418	589	352	295
Interest Expense Growth	-	45.14%	40.91%	-40.24%	-16.19%
Gross Interest Expense	288	418	589	352	295
Pretax Income	5,029	5,6	4,596	7,22	6,847
Pretax Income Growth	-	11.35%	-17.93%	57.09%	-5.17%
Pretax Margin	-	-	-	-	24.59%
Income Tax	983	1,511	1,226	1,937	1,471
Income Tax - Current Domestic	935	733	625	895	608
Income Tax - Current Foreign	716	1,019	1,153	1	1,36
Income Tax - Deferred Domestic	-584	57	-3	-38	109
Income Tax - Deferred Foreign	-84	-298	-549	80	-606
Consolidated Net Income	4,046	4,089	3,37	5,283	5,376

Minority Interest Expense	38	6	49	138	120
Net Income	4,008	4,083	3,321	5,145	5,256
Net Income Growth	-	1.87%	-18.66%	54.92%	2.16%
Net Margin	-	-	-	-	18.88%
Net Income After Extraordinaries	4,008	4,083	3,321	5,145	5,256
Net Income Available to Common	4,008	4,083	3,321	5,145	5,256
EPS (Basic) Growth	-	2.13%	-18.66%	56.50%	2.33%
Basic Shares Outstanding	1,197	1,194	1,194	1,182	1,18
EPS (Diluted) Growth	-	2.21%	-18.66%	56.50%	2.33%
Diluted Shares Outstanding	1,198	1,194	1,194	1,182	1,18
EBITDA	6,331	7,105	7,456	9,011	7,167
EBITDA Growth	-	12.23%	4.94%	20.86%	-20.46%
EBITDA Margin	-	-	-	-	25.74%
EBIT	-	-	5,584	-	5,392

APPENDIX 3 (SALESFORCE BALANCE SHEET 2017-2021)

Fiscal year is February-January. All values USD Millions.	2017	2018	2019	2020	2021
Cash & Short Term Investments	4521	4342	7947	11966	10537
Cash Only	2543	2669	4145	5052	4293
Total Accounts Receivable	3921	4924	6623	8263	10326
Accounts Receivables Net	3921	4924	6623	8263	10326
Accounts Receivables Gross	3942	4946	6646	8263	10326
Bad Debt/Doubtful Accounts	21	22	23	-	-
Accounts Receivable Turnover	269	27	258	257	257
Other Current Assets	471	629	467	514	533
Miscellaneous Current Assets	471	629	467	514	533
Total Current Assets	8913	9895	15037	20743	21396
Net Property Plant & Equipment	1947	2051	5415	5663	5695
Property Plant & Equipment - Gross	3403	3834	7216	7618	8096
Buildings	626	629	777	485	487
Land & Improvements	184	184	184	293	293
Leases	709	671	-	-	-
Computer Software and Equipment	920	1064	1608	1901	2543
Other Property Plant & Equipment	964	1286	1607	1735	1893
Accumulated Depreciation	1456	1783	1801	1955	2401
Total Investments and Advances	677	1302	1963	3909	4784
Other Long-Term Investments	677	1302	1963	3909	4784
Long-Term Note Receivable	159	121	93	42	-
Intangible Assets	8287	14926	29858	30432	56915
Net Goodwill	7314	12851	25134	26318	47937
Net Other Intangibles	973	2075	4724	4114	-
Other Assets	2001	2442	276	5512	5137
Deferred Charges	1776	202	2274	2861	3796
Tangible Other Assets	225	422	486	2651	1341
Total Assets	21984	30737	55126	66301	99178
Asset Turnover	-	-	-	-	32
Liabilities & Shareholders' Equity					

ST Debt & Current Portion LT Debt	1025	203	803	801	800
Short Term Debt	-	-	750	766	-
Current Portion of Long Term Debt	1025	203	53	35	114
Accounts Payable	76	165	1856	262	296
Other Current Liabilities	8966	10887	12186	14307	18028
Accrued Payroll	1001	1167	15	17	24
Miscellaneous Current Liabilities	7965	972	10686	12607	15628
Total Current Liabilities	10067	11255	14845	17728	21788
Long-Term Debt	695	3173	5450	5608	13566
Long-Term Debt excl. Capitalized Leases	695	3173	2673	2673	10592
Non-Convertible Debt	695	3173	2673	2673	10592
Capitalized Lease Obligations	-	-	332	93	271
Deferred Taxes	-	-	-	-	1282
Deferred Taxes - Credit	-	-	-	-	3969
Deferred Taxes - Debit	-	-	-	-	5251
Other Liabilities	846	704	946	1472	1724
Other Liabilities (excl. Deferred Income)	846	704	946	1472	1724
Total Liabilities	11608	15132	21241	24808	41047
Common Equity (Total)	10376	15605	33885	41493	58131
Common Stock Par/Carry Value	1	1	1	1	1
Additional Paid-In Capital/Capital Surplus	9752	13927	32116	35601	50919
Retained Earnings	635	1735	1861	5933	7377
Other Appropriated Reserves	12	58	93	42	166
Total Shareholders' Equity	10376	15605	33885	41493	58131
Total Equity	10376	15605	33885	41493	58131
Liabilities & Shareholders' Equity	21984	30737	55126	66301	99178

APPENDIX 4 (SALESFORCE INCOME STATEMENT 2017-2021)

Fiscal year is February-January. All values USD Millions.	2017	2018	2019	2020	2021
Sales/Revenue	10,54	13,282	17,098	21,252	26,492
Sales Growth	-	26.02%	28.73%	24.30%	24.66%
Cost of Goods Sold (COGS) incl. D&A	3,486	4,42	5,463	6,955	9,101
COGS excluding D&A	2,141	2,721	2,452	3,051	4,455
Depreciation & Amortization Expense	1,345	1,699	3,011	3,904	4,646
Depreciation	466	515	1,343	1,746	1,698
Amortization of Intangibles	287	447	792	1,1	1,6
Amortization of Deferred Charges	592	737	876	1,058	1,348
COGS Growth	-	26.79%	23.60%	27.31%	30.86%
Gross Income	7,054	8,862	11,635	14,297	17,391
Gross Income Growth	-	25.63%	31.29%	22.88%	21.64%
Gross Profit Margin	-	-	-	-	65.65%
SG&A Expense	6,6	8,3	11,132	13,842	16,843
Research & Development	1,553	1,886	2,766	3,598	4,465
Other SG&A	5,047	6,414	8,366	10,244	-
SGA Growth	-	25.76%	34.12%	24.34%	21.68%
EBIT	-	562	503	455	548
Unusual Expense	-15	-7	215	-	-918
Non Operating Income/Expense	1	507	432	2,232	286
Non-Operating Interest Income	37	61	117	-	-
Interest Expense	87	154	131	126	220
Interest Expense Growth	-	77.01%	-14.94%	-3.82%	74.60%
Gross Interest Expense	87	154	131	126	220
Pretax Income	420	983	706	2,561	1,532
Pretax Income Growth	-	134.05%	-28.18%	262.75%	-40.18%
Pretax Margin	-	-	-	-	5.78%
Income Tax	60	-127	580	-1,511	88
Income Tax - Current Domestic	-5	39	545	291	-10
Income Tax - Current Foreign	85	117	8	-12	352
Income Tax - Deferred Domestic	-16	-285	-33	294	-238

Income Tax - Deferred Foreign	-4	2	60	-2,084	-16
Consolidated Net Income	360	1,11	126	4,072	1,444
Net Income	360	1,11	126	4,072	1,444
Net Income Growth	-	208.33%	-88.65%	3131.75%	-64.54%
Net Margin	-	-	-	-	5.45%
Net Income After Extraordinaries	360	1,11	126	4,072	1,444
Net Income Available to Common	360	1,11	126	4,072	1,444
EPS (Basic) Growth	-	191.84%	-89.64%	2854.45%	-66.14%
Basic Shares Outstanding	715	751	829	908	955
EPS (Diluted) Growth	-	192.42%	-89.65%	2853.75%	0.00%
Diluted Shares Outstanding	735	775	850	930	974
EBITDA	1,799	2,261	3,514	4,359	5,194
EBITDA Growth	-	25.68%	55.42%	24.05%	19.16%
EBITDA Margin	-	-	-	-	
EBIT	-	562	503	455	548

APPENDIX 5 (ORACLE CORP. BALANCE SHEET 2017-2021)

Fiscal year is June-May. All values USD Millions.	2017	2018	2019	2020	2021
Cash & Short Term Investments	67,261	37,827	43,057	46,554	21,902
Cash Only	21,620	20,514	37,239	30,098	21,383
Total Accounts Receivable	5,938	5,910	6,329	6,207	6,744
Accounts Receivables Net	5,136	5,134	5,551	5,409	5,953
Accounts Receivables Gross	5,506	5,505	596	5,601	6,315
Bad Debt/Doubtful Accounts	370	371	409	192	362
Other Receivables	802	776	778	798	-
Accounts Receivable Turnover	7	7	6	6	6
Inventories	398	320	211	142	314
Other Current Assets	2,562	2,329	2,543	2,664	2,673
Miscellaneous Current Assets	2,562	2,329	2,543	2,664	2,673
Total Current Assets	76,159	46,386	52,140	55,567	31,633
Net Property Plant & Equipment	5,897	6,252	8,244	9,649	13,216
Property Plant & Equipment - Gross	11,808	13,075	15,825	184	23,174
Buildings	3,893	4,253	4,394	4,734	4,729
Land & Improvements	868	896	885	871	1,166
Construction in Progress	229	158	280	233	512
Other Property Plant & Equipment	6,818	7,768	8,266	9,962	13,267
Accumulated Depreciation	5,911	6,823	7,581	8,751	9,958
Total Investments and Advances	24	5	29	73	-
Other Long-Term Investments	24	5	29	73	-
Intangible Assets	50,425	49,058	47,507	46,365	45,251
Net Goodwill	43,755	43,779	43,769	43,935	43,811
Net Other Intangibles	667	5,279	3,738	243	-
Other Assets	3,951	4,312	4,266	5,817	6,415
Tangible Other Assets	3,951	4,312	4,266	5,817	6,415
Total Assets	137,851	108,709	115,438	131,107	109,297
All values USD Millions.	2,018	2,019	2,020	2,021	2,022

ST Debt & Current Portion LT Debt	4,491	4,494	2,946	8,914	4,476
Short Term Debt	-	-	575	664	-
Current Portion of Long Term Debt	4,491	4,494	2,371	825	3,749
Accounts Payable	529	580	637	745	1,317
Other Current Liabilities	14,104	13,556	13,617	14,505	13,718
Accrued Payroll	1,806	1,628	1,453	2,017	1,944
Miscellaneous Current Liabilities	12,298	11,928	12,164	12,488	11,774
Total Current Liabilities	19,124	18,630	17,200	24,164	19,511
Long-Term Debt	56,128	51,673	70,726	78,095	75,010
Long-Term Debt excl. Capitalized Leases	56,128	51,673	69,226	75,995	72,110
Non-Convertible Debt	56,128	51,673	69,226	75,995	72,110
Provision for Risks & Charges	25	23	1	-	-
Deferred Taxes	1,337	2,432	3,211	5,772	6,751
Deferred Taxes - Credit	58	264	41	7,864	6,031
Deferred Taxes - Debit	1,395	2,696	3,252	13,636	12,782
Other Liabilities	15,643	15,756	14,753	15,032	14,513
Other Liabilities (excl. Deferred Income)	15,018	15,087	14,156	14,353	1,376
Deferred Income	625	669	597	679	753
Total Liabilities	90,978	86,346	102,721	125,155	115,065
Common Equity (Total)	46,372	21,785	12,074	5,238	622
Common Stock Par/Carry Value	2,895	26,909	26,486	26,533	26,808
Retained Earnings	19,111	3,496	12,696	2,012	31,336
Cumulative Translation Adjustment/Unrealized For. Exch. Gain	1,027	1,176	1,254	775	1,482
Unrealized Gain/Loss Marketable Securities	-422	-90	1	-	-
Other Appropriated Reserves	240	362	463	400	210
Total Shareholders' Equity	46,372	21,785	12,074	5,238	-6,220
Accumulated Minority Interest	501	578	643	714	452
Total Equity	46,873	22,363	12,717	5,952	-5,768
Liabilities & Shareholders' Equity	137,851	108,709	115,438	131,107	109,297

APPENDIX 6 (ORACLE CORP. INCOME STATEMENT 2017-2021)

Fiscal year is June-May. All values USD Millions.	2017	2018	2019	2020	2021
Sales/Revenue	39383	39506	39068	40479	42440
Sales Growth	-	0.31%	-1.11%	3.61%	4.84%
Cost of Goods Sold (COGS) incl. D&A	9680	9684	9524	9234	10027
COGS excluding D&A	6895	6765	6556	6318	6905
Depreciation & Amortization Expense	2785	2919	2968	2916	3122
Depreciation	1165	123	1382	1537	1972
Amortization of Intangibles	162	1689	1586	1379	115
COGS Growth	-	0.04%	-1.65%	-3.04%	8.59%
Gross Income	29703	29822	29544	31245	32413
Gross Income Growth	-	0.40%	-0.93%	5.76%	3.74%
Gross Profit Margin	-	-	-	-	76.37%
SG&A Expense	15799	15767	15331	15463	16551
Research & Development	6084	6026	6067	6527	7219
Other SG&A	9715	9741	9264	8936	-
SGA Growth	-	-0.20%	-2.77%	0.86%	7.04%
EBIT	-	14055	14213	15782	15862
Unusual Expense	640	520	321	553	4936
Non Operating Income/Expense	117	-125	-197	345	-285
Non-Operating Interest Income	1203	1092	527	101	94
Equity in Affiliates (Pretax)	-	-	-	-	-147
Interest Expense	2025	2082	1995	2496	2755
Interest Expense Growth	-	2.81%	-4.18%	25.11%	10.38%
Gross Interest Expense	2025	2082	1995	2496	2755
Pretax Income	12559	12420	12227	13179	7833
Pretax Income Growth	-	-1.11%	-1.55%	7.79%	-40.56%

Pretax Margin	-	-	-	-	18.46%
Income Tax	8837	1185	1928	-747	932
Income Tax - Current Domestic	8584	1279	1635	749	895
Income Tax - Current Foreign	11	1097	1144	929	1183
Income Tax - Deferred Domestic	853	455	933	8554	18
Income Tax - Deferred Foreign	6	1646	82	10979	654
Consolidated Net Income	3722	11235	10299	13926	6901
Minority Interest Expense	135	152	164	180	184
Net Income	3587	11083	10135	13746	6717
Net Income Growth	-	208.98%	-8.55%	35.63%	-51.13%
Net Margin	-	-	-	-	15.83%
Net Income After Extraordinaries	3587	11083	10135	13746	6717
Net Income Available to Common	3587	11083	10135	13746	6717
EPS (Basic)	0.85	2.97	3.08	4.55	2.41
EPS (Basic) Growth	-	250.90%	3.60%	47.84%	-46.99%
Basic Shares Outstanding	4121	3634	3211	2945	27
EPS (Diluted)	0.85	2.97	3.08	4.55	-
EPS (Diluted) Growth	-	250.87%	3.61%	47.84%	0.00%
Diluted Shares Outstanding	4238	3732	3294	3022	2786
EBITDA	16689	16974	17181	18698	18984
EBITDA Growth	-	1.71%	1.22%	8.83%	1.53%
EBITDA Margin	-	-	-	-	-
EBIT	-	14055	14213	15782	15862

APPENDIX 7 (SAP SE 2021 BALANCE SHEET)

€ millions	Notes	2021	2020
Cash and cash equivalents	(E.3)	8,898	5,311
Other financial assets	(D.6), (E.3)	2,758	1,635
Trade and other receivables	(A.2)	6,352	6,593
Other non-financial assets	(A.3), (G.1)	1,633	1,321
Tax assets		403	210
Total current assets		20,044	15,069
Goodwill	(D.2)	31,090	27,538
Intangible assets	(D.3)	3,966	3,784
Property, plant, and equipment	(D.4), (D.8)	4,977	5,041
Other financial assets	(D.6), (E.3)	6,275	3,512
Trade and other receivables	(A.2)	147	137
Other non-financial assets	(A.3), (G.1)	2,628	1,926
Tax assets		263	271
Deferred tax assets	(C.5)	1,779	1,188
Total non-current assets		51,125	43,395
Total assets		71,169	58,464
Trade and other payables		1,580	1,367
Tax liabilities		304	414
Financial liabilities	(E.3), (D.5)	4,528	2,348
Other non-financial liabilities	(B.3), (B.5), (G.2)	5,203	4,643
Provisions	(A.4), (B.4), (B.5), (B.6)	89	73
Contract liabilities	(A.1)	4,431	3,996
Total current liabilities		16,136	12,842
Trade and other payables		122	98
Tax liabilities		827	667
Financial liabilities	(E.3), (D.5)	11,042	13,605
Other non-financial liabilities	(B.3), (B.5), (G.2)	860	770
Provisions	(A.4), (B.4), (B.5), (B.6)	355	362
Deferred tax liabilities	(C.5)	291	158
Contract liabilities	(A.1)	13	36
Total non-current liabilities		13,510	15,696
Total liabilities		29,646	28,537
Issued capital		1,229	1,229
Share premium		1,918	545
Retained earnings		37,022	32,026
Other components of equity		1,757	-1,012
Treasury shares		-3,072	-3,072
Equity attributable to owners of parent		38,853	29,716
Non-controlling interests	(E.2)	2,670	211
Total equity	(E.2)	41,523	29,927
Total equity and liabilities		71,169	58,464

The accompanying Notes are an integral part of these Consolidated Financial Statements.

APPENDIX 8 (SAP SE 2021 INCOME STATEMENT)

Consolidated Income Statements of SAP Group for the Years Ended December 31

€ millions, unless otherwise stated	Notes	2021	2020	2019
Cloud		9,418	8,080	6,933
Software licenses		3,248	3,642	4,533
Software support		11,412	11,506	11,547
Software licenses and support		14,660	15,148	16,080
Cloud and software		24,078	23,228	23,012
Services		3,764	4,110	4,541
Total revenue	(A.1), (C.2)	27,842	27,338	27,553
Cost of cloud		-3,105	-2,699	-2,534
Cost of software licenses and support		-1,925	-2,008	-2,159
Cost of cloud and software		-5,030	-4,707	-4,692
Cost of services		-2,916	-3,178	-3,662
Total cost of revenue		-7,946	-7,886	-8,355
Gross profit		19,897	19,453	19,199
Research and development		-5,190	-4,454	-4,292
Sales and marketing		-7,505	-7,106	-7,693
General and administration		-2,431	-1,356	-1,629
Restructuring	(B.6)	-157	3	-1,130
Other operating income/expense, net		43	84	18
Total operating expenses		-23,186	-20,715	-23,081
Operating profit		4,656	6,623	4,473
Other non-operating income/expense, net	(C.3)	17	-179	-74
Finance income		3,123	1,473	787
Finance costs		-949	-697	-589
Financial income, net	(C.4)	2,174	776	198
Profit before tax	(C.2)	6,847	7,220	4,596
Income tax expense	(C.5)	-1,471	-1,938	-1,226
Profit after tax		5,376	5,283	3,370
Attributable to owners of parent		5,256	5,145	3,321
Attributable to non-controlling interests		121	138	50
Earnings per share, basic (in €)	(C.6)	4.46	4.35	2.78
Earnings per share, diluted (in €)	(C.6)	4.46	4.35	2.78

The accompanying Notes are an integral part of these Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income of SAP Group for the Years Ended December 31

€ millions	Notes	2021	2020	2019
Profit after tax		5,376	5,283	3,370
Items that will not be reclassified to profit or loss				
Remeasurements on defined benefit pension plans, before tax		43	39	-57
Income taxes relating to remeasurements on defined benefit pension plans		-9	-9	5
Remeasurements on defined benefit pension plans, net of tax		34	30	-52
Other comprehensive income for items that will not be reclassified to profit or loss, net of tax		34	30	-52
Items that will be reclassified subsequently to profit or loss				
Gains (losses) on exchange differences on translation, before tax		2,825	-2,793	537
Reclassification adjustments on exchange differences on translation, before tax		30	0	0
Exchange differences, before tax		2,855	-2,793	537
Income taxes relating to exchange differences on translation		-9	1	0
Exchange differences, net of tax	(E.2)	2,846	-2,792	537
Gains (losses) on cash flow hedges/cost of hedging, before tax		-39	20	-24
Reclassification adjustments on cash flow hedges/cost of hedging, before tax		4	-6	22
Cash flow hedges/cost of hedging, before tax	(F.1)	-35	14	-2
Income taxes relating to cash flow hedges/cost of hedging		9	-4	0
Cash flow hedges/cost of hedging, net of tax	(E.2)	-26	10	-1
Other comprehensive income for items that will be reclassified to profit or loss, net of tax		2,819	-2,782	536
Other comprehensive income, net of tax		2,853	-2,752	483
Total comprehensive income		8,230	2,531	3,854
Attributable to owners of parent		8,058	2,393	3,804
Attributable to non-controlling interests		172	138	50

The accompanying Notes are an integral part of these Consolidated Financial Statements.

APPENDIX 9 (SALESFORCE 2021 BALANCE SHEET)

salesforce.com, inc.
Consolidated Balance Sheets
(in millions)

	January 31, 2021	January 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 6,195	\$ 4,145
Marketable securities	5,771	3,802
Accounts receivable, net	7,786	6,174
Costs capitalized to obtain revenue contracts, net	1,146	926
Prepaid expenses and other current assets	991	916
Total current assets	21,889	15,963
Property and equipment, net	2,459	2,375
Operating lease right-of-use assets, net	3,204	3,040
Noncurrent costs capitalized to obtain revenue contracts, net	1,715	1,348
Strategic investments	3,909	1,963
Goodwill	26,318	25,134
Intangible assets acquired through business combinations, net	4,114	4,724
Deferred tax assets and other assets, net	2,693	579
Total assets	\$66,301	\$55,126
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable, accrued expenses and other liabilities	\$ 4,355	\$ 3,433
Operating lease liabilities, current	766	750
Unearned revenue	12,607	10,662
Total current liabilities	17,728	14,845
Noncurrent debt	2,673	2,673
Noncurrent operating lease liabilities	2,842	2,445
Other noncurrent liabilities	1,565	1,278
Total liabilities	24,808	21,241
Commitments and contingencies (See Notes 6 and 14)		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 5 shares authorized and none issued and outstanding	0	0
Common stock, \$0.001 par value; 1,600 shares authorized, 919 and 893 issued and outstanding at January 31, 2021 and 2020, respectively	1	1
Additional paid-in capital	35,601	32,116
Accumulated other comprehensive loss	(42)	(93)
Retained earnings	5,933	1,861
Total stockholders' equity	41,493	33,885
Total liabilities and stockholders' equity	\$66,301	\$55,126

APPENDIX 10 (SALESFORCE 2021 INCOME STATEMENT)

Revenues:			
Subscription and support	\$19,976	\$16,043	\$12,413
Professional services and other	1,276	1,055	869
Total revenues	21,252	17,098	13,282
Cost of revenues (1)(2):			
Subscription and support	4,154	3,198	2,604
Professional services and other	1,284	1,037	847
Total cost of revenues	5,438	4,235	3,451
Gross profit	15,814	12,863	9,831
Operating expenses (1)(2):			
Research and development	3,598	2,766	1,886
Marketing and sales	9,674	7,930	6,064
General and administrative	2,087	1,704	1,346
Loss on settlement of Salesforce.org reseller agreement	0	166	0
Total operating expenses	15,359	12,566	9,296
Income from operations	455	297	535
Gains on strategic investments, net (3)	2,170	427	542
Other expense	(64)	(18)	(94)
Income before benefit from (provision for) income taxes	2,561	706	983
Benefit from (provision for) income taxes (4)	1,511	(580)	127
Net income	\$ 4,072	\$ 126	\$ 1,110
Basic net income per share	\$ 4.48	\$ 0.15	\$ 1.48
Diluted net income per share	\$ 4.38	\$ 0.15	\$ 1.43
Shares used in computing basic net income per share	908	829	751
Shares used in computing diluted net income per share	930	850	775
	Fiscal Year Ended January 31,		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Net income	\$4,072	\$126	\$1,110
Other comprehensive income (loss), net of reclassification adjustments:			
Foreign currency translation and other gains (losses)	40	(59)	(26)
Unrealized gains (losses) on marketable securities and privately held debt securities	15	26	(12)
Other comprehensive income (loss), before tax	55	(33)	(38)
Tax effect	(4)	(2)	(1)
Other comprehensive income (loss), net	51	(35)	(39)
Comprehensive income	<u>\$4,123</u>	<u>\$ 91</u>	<u>\$1,071</u>

APPENDIX 11 (ORACLE CORP 2021 BALANCE SHEET)

(in millions, except per share data)	2021	2020
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 30,098	\$ 37,239
Marketable securities	16,456	5,818
Trade receivables, net of allowances for doubtful accounts of \$373 and \$409 as of May 31, 2021 and May 31, 2020, respectively	5,409	5,551
Prepaid expenses and other current assets	3,604	3,532
Total current assets	<u>55,567</u>	<u>52,140</u>
Non-current assets:		
Property, plant and equipment, net	7,049	6,244
Intangible assets, net	2,430	3,738
Goodwill, net	43,935	43,769
Deferred tax assets	13,636	3,252
Other non-current assets	8,490	6,295
Total non-current assets	<u>75,540</u>	<u>63,298</u>
Total assets	<u>\$ 131,107</u>	<u>\$ 115,438</u>
LIABILITIES AND EQUITY		
Current liabilities:		
Notes payable, current	\$ 8,250	\$ 2,371
Accounts payable	745	637
Accrued compensation and related benefits	2,017	1,453
Deferred revenues	8,775	8,002
Other current liabilities	4,377	4,737
Total current liabilities	<u>24,164</u>	<u>17,200</u>
Non-current liabilities:		
Notes payable and other borrowings, non-current	75,995	69,226
Income taxes payable	12,345	12,463
Deferred tax liabilities	7,864	41
Other non-current liabilities	4,787	3,791
Total non-current liabilities	<u>100,991</u>	<u>85,521</u>
Commitments and contingencies		
Oracle Corporation stockholders' equity:		
Preferred stock, \$0.01 par value—authorized: 1.0 shares; outstanding: none	—	—
Common stock, \$0.01 par value and additional paid in capital—authorized: 11,000 shares; outstanding: 2,814 shares and 3,067 shares as of May 31, 2021 and 2020, respectively	26,533	26,486
Accumulated deficit	(20,120)	(12,696)
Accumulated other comprehensive loss	(1,175)	(1,716)
Total Oracle Corporation stockholders' equity	<u>5,238</u>	<u>12,074</u>
Noncontrolling interests		
Total equity	<u>5,952</u>	<u>12,717</u>
Total liabilities and equity	<u>\$ 131,107</u>	<u>\$ 115,438</u>

APPENDIX 12 (ORACLE CORP 2021 INCOME STATEMENT)

(in millions, except per share data)	2021	2020	2019
Revenues:			
Cloud services and license support	\$ 28,700	\$ 27,392	\$ 26,707
Cloud license and on-premise license	5,399	5,127	5,855
Hardware	3,359	3,443	3,704
Services	3,021	3,106	3,240
Total revenues	<u>40,479</u>	<u>39,068</u>	<u>39,506</u>
Operating expenses:			
Cloud services and license support ⁽¹⁾	4,353	4,006	3,782
Hardware ⁽¹⁾	972	1,116	1,360
Services	2,530	2,816	2,853
Sales and marketing ⁽¹⁾	7,682	8,094	8,509
Research and development	6,527	6,067	6,026
General and administrative	1,254	1,181	1,265
Amortization of intangible assets	1,379	1,586	1,689
Acquisition related and other	138	56	44
Restructuring	431	250	443
Total operating expenses	<u>25,266</u>	<u>25,172</u>	<u>25,971</u>
Operating income	15,213	13,896	13,535
Interest expense	(2,496)	(1,995)	(2,082)
Non-operating income, net	282	162	815
Income before benefit from (provision for) income taxes	12,999	12,063	12,268
Benefit from (provision for) income taxes	747	(1,928)	(1,185)
Net income	<u>\$ 13,746</u>	<u>\$ 10,135</u>	<u>\$ 11,083</u>
Earnings per share:			
Basic	\$ 4.67	\$ 3.16	\$ 3.05
Diluted	\$ 4.55	\$ 3.08	\$ 2.97
Weighted average common shares outstanding:			
Basic	2,945	3,211	3,634
Diluted	<u>3,022</u>	<u>3,294</u>	<u>3,732</u>
(in millions)			
Net income	\$ 13,746	\$ 10,135	\$ 11,083
Other comprehensive income (loss), net of tax:			
Net foreign currency translation gains (losses)	479	(78)	(149)
Net unrealized gains (losses) on defined benefit plans	71	(79)	(70)
Net unrealized (losses) gains on marketable securities	(1)	91	332
Net unrealized losses on cash flow hedges	(8)	(22)	(52)
Total other comprehensive income (loss), net	<u>541</u>	<u>(88)</u>	<u>61</u>
Comprehensive income	<u>\$ 14,287</u>	<u>\$ 10,047</u>	<u>\$ 11,144</u>