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



Bachelor Thesis

Financial Analysis of Microsoft Corporation

Author: Samal Adakhayeva

Supervisor: Ing. Petr Procházka, MSc. Ph.D.

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

BACHELOR THESIS ASSIGNMENT

Samal Adakhayeva

Economics and Management

Thesis title

Financial analysis of Microsoft Corporation

Objectives of thesis

The goal of this bachelor thesis is to study theoretical basis of financial analysis. To analyse Microsoft Corporation and provide financial information which can help to avoid company weaknesses in the future by analysing past and present condition of the company.

Methodology

The methodology of this work will be explained in detail in the text. But mainly thesis is divided into two parts: theoretical and practical. In theoretical part the history of Microsoft Corporation is given for deeper understanding of current conditions. The concept of financial analysis is examined.

Practical part consists of quantitative and qualitative methods. Moreover, horizontal and vertical analysis was used for analyzing financial statements such as balance sheet. SWOT analysis and Porter's Five Forces analysis are used to compare Microsoft with other similar companies.

The proposed extent of the thesis

40 pages

Keywords

Financial analysis, Microsoft Corparation, financial statements, financial data, horizontal analysis, vertical analysis

Recommended information sources

ČESKÁ ZEMĚDĚLSKÁ UNIVERZITA V PRAZE. KATEDRA OBCHODU A FINANCÍ, – STÁROVÁ, M. *Accounting theory* – *with practical applications*. V Praze: Česká zemědělská univerzita, Provozně ekonomická fakulta, 2015. ISBN 978-80-213-2588-3.

FRIDSON, M S. – ALVAREZ, F. *Financial statement analysis : a practitioner's guide.* New York: J. Wiley, 2002. ISBN 978-0-471-40917-5.

KELLER, K L. - KOTLER, P. Marketing management. Harlow: Pearson, 2015. ISBN 9781292092621.

Expected date of thesis defence

2017/18 SS - FEM

The Bachelor Thesis Supervisor

Ing. Petr Procházka, Ph.D., MSc

Supervising department

Department of Economics

Electronic approval: 12. 3. 2018

prof. Ing. Miroslav Svatoš, CSc.

Head of department

Electronic approval: 12. 3. 2018

Ing. Martin Pelikán, Ph.D.

Dean

Prague on 12. 03. 2018

Declaration	l	
I declare th	at I have worked on my bachel	or thesis titled "Financial analysis of
		only the sources mentioned at the en-
		clare that the thesis does not break
copyrights of any th	ir person.	
In Prague		

Acknowledgement I would like to thank my supervisor Ing. Petr Procházka, MSc. Ph.D., for his support during my valuable advice and work this thesis. on

Financial analysis of Microsoft Corporation

Summary:

The goal of this bachelor thesis is to provide financial analysis of Microsoft company.

To evaluate economical influence to the company.

The bachelor thesis is divided into two parts. In theoretical part introduces basic terms about finance, methods of financial analysis. The practical part evaluates results based on qualitative and quantitative research. To evaluate advantage and avoid weaknesses in the thesis were used SWOT analysis and Porter's Five Forces. Horizontal and vertical analysis of Balance sheet was held.

Key words: Financial analysis, Microsoft Corporation, financial statements, financial data, horizontal analysis, vertical analysis.

Finanční analýza společnosti Microsoft

Souhrn:

Cílem teto bakalářske práce je poskytnout finanční analýzu společnosti Microsoft. Posoudit ekonomický vliv společnosti.

Bakalářská práce je rozdělena do dvou částí. V teoretické části jsou uvedeny základní pojmy o financích, metody finanční analýzy. Praktická část hodnotí výsledky založené na kvalitativním a kvantitativním výzkumu. Za účelem vyhodnocení výhod a zamezení slabostí práce byla použita SWOT analýza a Porter's Five Forces. Byla provedena horizontální a vertikální analýza rozvahy.

Klíčová slova: Finanční analýza, Microsoft Corporation, finanční výkazy, finanční údaje, horizontální analýza, vertikální analýza.

TABLE OF CONTENTS

1.	Intro	oduction	10
2.	The	sis objectives and methodology.	11
2	2.1.	Objectives	11
2	2.2.	Methodology	11
3.	Lite	rature Review	12
	3.1.	Finance	12
	3.2.	The Financial analysis	12
	3.3.	Financial statements	12
3.4	. Т	he Financial analysis	14
	3.5.	Horizontal analysis	14
	3.6.	Vertical Analysis	14
	3.7.	SWOT analysis	14
	3.8.	Porter's Five Forces of Competition	15
	3.9.	Technology sector.	16
4.	Prac	tical part	17
4.1	. Ir	stroduction to the company	17
4	4.1.1.	History of MS	17
4	4.1.2.	History of Microsoft products:	18
4	4.2.	SWOT analysis of the company	20
4	4.3.	Porter's Five Forces of Competition	21
4	4.4.	Horizontal analysis	23
4	4.5.	Vertical analysis	27
4	4.6.	Fundamental analysis of Microsoft	32
5.	Con	clusion	35
6.	Refe	erences	36
7.	App	endices	38

LIST OF TABLES ANS FIGURES

Tables:

Table 1. Horizontal analysis of the balance sheet in millions	23
Table 2: Vertical analysis of balance sheet	27
Table 3. Calculation of Return of Asset	33
Table 4. Calculation of Return of Equity	34
Figures:	
Figure 1. Link between financial statements	13
Figure 2. Development of assets	26
Figure 3: Development of owner's equity and liabilities	26
Figure 4: Structure of current assets	30
Figure 5: Structure of non-current assets	31
Figure 6: Structure of assets	31
Figure 7: Structure of total liabilities	32
Figure 8. Structure of stock of Microsoft.	32
Figure 9. Structure of ROE.	34

1. Introduction

Financial analysis can help to evaluate situation of the company in the past, present and recommendation for the future. The topic of my bachelor thesis is *Financial analysis* of *Microsoft Corporation*.

Microsoft Corporation is a technological company. Technological company is a type of business that focuses on the development and manufacturing of technology. Today you can get news from your pocket, connect to a network, send a message to a person who is thousands of miles away from you. Most of us cannot even image a single day without a computer. The more technology develops, the more affordable are the various devices that make life easier for people. In the technological industry a big competition between a big tech. companies such as Apple or Samsung. To be competitive a company needs a good feedback of their finance.

The thesis divided into two parts – theoretical and practical. The theoretical part describes basic principle of financial statement analysis, which horizontal and vertical analysis.

In the practical part I found information about Microsoft Corporation and analyze it. The analysis begins with horizontal and vertical analysis of financial statement – balance sheet. SWOT analysis is also the part of practical part; SWOT analysis identifies strength and weaknesses of the company. In this part, I described Microsoft Corporation's the competitive intensity of using Porter's Five Forces analysis.

2. Thesis objectives and methodology.

2.1. Objectives

The main focus of the thesis is to evaluate financial management of Microsoft Corporation. First of all, the author analyzed positive or negative influence from the economic situation and environmental factors to the Microsoft and their competitive advantage in technology business.

2.2. Methodology

In the theoretical part, all important data were gathered and explained. Definitions of finance, financial analysis, and financial statements. Definition of analysis which was used.

The practical part consists, qualitative research in the form of Porter's Five Force analysis and SWOT analysis. Both quantitative and qualitative methods were used in data which are in this thesis. Data for analysis is from June 30.2010 until June 30, 2017.

Microsoft Excel was used for analyze a data. For better understanding were created tables, graphs and figures.

3. Literature Review

3.1. Finance

Finance is one of the most important economic field that reflecting the process of using money. In fact, finance began development with the emergence of commodity-money relations, the establish states, currently finance is the part of the actions of people in all spheres of their activity. According to Cambridge Dictionary definition of finance is "to provide the money needed for something to happen"

3.2. The Financial analysis

Financial analysis is a process that evaluates financial area of a company and goal of the financial analysis is to make a decision that can help to develop a company. Also, financial analysis closely connects with financial accounting which is collect data and information that can help with financial decision – making through financial statements. Financial statements are written reports that define performance, the financial strength of a company. Four types of financial statements are the statement of financial position also known as the Balance Sheet, income statement, cash flow statement and statement of changes in equity. Those statements should be prepared properly in order to make a right decision. In spite of this, the accounting information cannot reflect a future financial situation of a company.

3.3. Financial statements

The financial statement reflects the financial effects of business transactions and events on the entity.¹ Every document must be done properly. Every document must be done properly. If it does not happen then our data and information will build wrong.

3.3.1. Main types of financial statements

- The Balance Sheet it includes three elements: assets, liability and owner's equity.
- The income statement also known as Profit or Loss statement reports about company's financial performance. Company's revenue, net profit or loss.
- The Statement of Changes in Equity shows the movement in owner's equity over a period of time.

¹ http://accounting-simplified.com/financial/statements/types.html

• Cash Flow Statement - the amount of money that moves into the company or out of the company. Cash flow represents a final indicator with a negative or positive sign, which is formed from receipts and payments. Obviously, a positive cash flow is better than a negative cash flow. After all, a company that has free funds on hand can quickly invest it in business and get even more money and profits. It is also a weighty argument for banks and lenders considering the possibility of a loan. The movement in cash flows we can describe into three:

Operating activities – money received or spent in internal the business process, cash inflow.

Investing activities – money received or spent on long-term assets the company sold or purchased.

Financing activities - money received from the provision of a loan paid in the form of dividends, repayment of a loan or repurchase of shares.

The following pictures show us the link brtween financial statments.

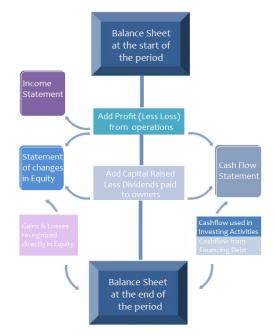


Figure 1. Link between financial statement

-

Source: Accounting – simplified [online]²

² http://accounting-simplified.com/financial/statements/types.html

3.4. The Financial analysis

Mostly I analyzed financial statement. Financial statement analysis is an essential skill in a variety of occupations including investment management, corporate finance, commercial lending, and the extension of credit (Fridson and Alvarez, 2002)

3.5. Horizontal analysis

Known as trend analysis, is a financial statement analysis method that shows changes in the total amounts of appropriate financial statement items over a period of time. To evaluate the trend situation horizontal analysis is useful. That analysis helps us to determine a percentage by this formula.

Percentage change = Amount of change/Previous year amount $x 100^3$

3.6. Vertical Analysis

Vertical analysis (also known as common-size analysis) is a method of financial statement analysis that shows each item as a percentage of a base. To conduct a vertical analysis of balance sheet, the total of assets and the total of liabilities and stockholders' equity are generally used as base figures. All individual assets are shown as a percentage of total assets. The current liabilities, long term debts and equities are shown as a percentage of the total liabilities and stockholders' equity.⁴

Formula for vertical analysis

Percentage of base = Amount of individual item /Amount of base x 100%

3.7. SWOT analysis

SWOT analysis is a process that identifies an organization's strengths, weaknesses, opportunities and threats. SWOT analysis is a basic frame that evaluate what an organization or company can or cannot do for internal which is the strengths and weaknesses, and external, opportunities and threats. In SWOT you also use environmental

³ http://www.yourarticlelibrary.com/accounting/financial-statements/horizontal-analysis-of-financial-statement-formula-and-calculation/53044

⁴ http://www.accountingformanagement.org/vertical-analysis-of-financial-statements/

data for analyzing company's position. That analysis can help a company identify weaknesses and avoid threats in the future and evaluate its opportunities and strengths to get a competitive advantage.

3.8. Porter's Five Forces of Competition

Porter's five forces⁵ is a one way how analyze a competitors. For effective strategic decision-making Porter considered understanding the competitive forces and also the overall industry structure as crucial is important. In Porter's model, the five forces that shape industry competition are:

- Competitive rivalry force explains how intense the competitors in the marketplace, which is determined by the number of existing competitors. Rivalry competitors are when in the marketplace there are a few competitors which equally produce or sell a product or services and when consumer easily can switch to a competitor's product for a little cost.
- Bargaining power of suppliers this force analyze a power of suppliers which means how suppliers can easily control prices, make a price higher or lower, and if in the market is a few suppliers and many buyers suppliers power is high.
- Bargaining power of customers explains that buyers can affect the competitive environment for the seller and affect for seller's profitability. Strong buyers can pressure sellers to lower prices and improve quality of a products or services which costs to the sellers.
- Threat of new entrants evaluates how easy or difficult it is for new competitors to join the marketplace in the industry being examined. If it is easy to enter the market for these new entrance this creates threat to the companies that is already competing in market. According to Porter's 5 forces, threat of new competitors is one of the forces that move the competitive structure of an industry.
- Threat of substitute products or services analyze the availability of a product that the consumer can buy instead of the company's product or service. A product from another industry that gives similar benefits to the consumer as the product produced by the company into the market known as a substitute product.

_

⁵ http://www.businessnewsdaily.com/5446-porters-five-forces.html

3.9. Technology sector.

According to Investopedia.com the technology sector is the category of stocks relating to the research, development and distribution of technologically based goods and services. The technology sector offers a wide arrange of products and services for both customers and other businesses. Consumer goods like personal computers, mobile devices, wearable technology, home appliances, televisions and so on are continually being improved and sold to consumers with new features.⁶

What is exactly technology company means. Todd Berkowitz, VP of Research, Gartner, notes that "It's generally a company whose primary business is selling tech or tech services. A more nuanced definition is a company with tech or tech services as a key part of its business. It's a hard question." (Inc Magazine, 2016)⁷

⁶ https://www.investopedia.com/terms/t/technology_sector.asp

⁷ https://www.inc.com/magazine/201605/marli-guzzetta/tech-company-definition.html

4. Practical part

4.1. Introduction to the company

Name of the company: Microsoft Corporation (abbreviated as MS)

Type: Public

Founded: April 4, 1975

Albuquerque, New Mexico, U.S.A

Founders: Bill Gates

Paul Allen

Headquarter: Redmond, Washington, U.S.A

Number of employees worldwide: 124,293⁸

Net revenue (June 30, 2017): \$89.50 billion

Net Income (same year): \$21.20 billion

Industry: Computer software

Computer hardware

Consumer electronics

Microsoft Corporation is the most famous technology company. It is the world's largest software maker by revenue. (The World's Biggest Public Companies". Forbes, 2017)

4.1.1. History of MS

Microsoft company's history starts with two friends who liked works with computers. The initial idea to own a software organization was depend to Allen who then contacted Gates. Together they started with a small firm, named Traf-O-Data, that created small applications for local clients. In 1972 they established their first company. When studying BASIC, a simple programming language, Gates realized the potential of the language to run on the kind of computers at that time with very low memory and slow processors. Both Gates and Allen worked hard on BASIC to make it work with MITS Altair, and they were successful and were able to sell the product to MITS. Initially "Micro-soft" was a partnership agreement until 1977 whereafter it was re-registered as a company named Microsoft Corporation. Gates was the President, Allen was appointed

_

⁸ https://news.microsoft.com/facts-about-microsoft/#About

Vice President of the company. Allen later left the post of Vice President but still he is the Board of Directors.

4.1.2. History of Microsoft products:

An operating system is the important software that allows a computer to work. As a new company, Microsoft's first operating system product that was released was a version of Unix called Xenix. The UNIX brand has traditionally been applied to the family of multitasking, multiuser computer operating systems.⁹

Windows:

Microsoft was created a famous windows operation system. Microsoft Windows was an operating system with a novel graphical user interface and a multitasking environment for IBM computers.¹⁰

Microsoft Office:

Office is a software package that is a collection of programs that you can use in the office. It includes spreadsheet, a mail program, business presentation software and more.

Internet Explorer:

In August of 1995, Microsoft released Windows 95, which includes technologies for connecting to the Internet such as built-in support for dial-up networking, TCP/IP (Transmission Control Protocol/Internet Protocol) and a web browser Internet Explorer 1.0.¹¹

Xbox:

Microsoft introduced their first gaming product, the Xbox system. In gaming market Xbox faced tough competition from Sony's PlayStation 2. However, in 2005, Microsoft creates their Xbox 360 gaming console which is still successful.

Microsoft Azure:

⁹ http://www.unix.org/what_is_unix.html

https://www.thoughtco.com/microsoft-history-of-a-computing-giant-1991140

¹¹ https://www.thoughtco.com/microsoft-history-of-a-computing-giant-1991140

Azure is a comprehensive set of cloud services that developers and IT professionals use to build, deploy, and manage applications through our global network of datacenters. Integrated tools, DevOps, and a marketplace support you in efficiently building anything from simple mobile apps to internet-scale solutions¹²

Microsoft in education:

Nowadays education is an important part of human life. Microsoft Company understands how education is important and they create products for people to get easier an education.

Rising demand for high school computer science courses in the United States has created pressure to increase the number of computer science (CS) teachers in a short amount of time. In this experience report, we present the TEALS program as a unique, high-touch, professional development model, pairing computing industry professionals with classroom teachers. By combining the relative strengths of the team (content and pedagogy) TEALS has been able to successfully train new CS teachers. We present the history of the TEALS program, the volunteer and teacher recruitment process, the volunteer training program, data from a study of the pedagogical content knowledge of the TEALS volunteers, and program growth and efficacy data. Additionally, we offer achievement of students on the AP CS A exam as an externally valid measurement of learning outcomes in TEALS classrooms. (TEALS: Teacher Professional Development Using Industry Volunteers)

A Skype Collaboration is organized by a teacher to collaborate with other classrooms on specific projects- can be ongoing or one-off.

A Virtual Field Trip is given by a presenter who is 'out in the field' - this may be at a museum, zoo, or expedition- wherever you can connect to Skype from. This is a virtual experience for the students who join - visiting via Skype opens up endless possibilities for where you can go with your students- we've had field trips everywhere from Antarctica to the Arctic.¹³

_

¹² azure.microsoft.com

¹³ education.microsoft.com/createskypecontent

4.1.3. Nowadays situation of Microsoft Company

Given the large number of customers Microsoft serves around the world. We believe that nothing spurs economic growth and creates jobs like innovations that pave the way for new products and services. We also know investments that advance information technology can help societies address some of their most pressing problems, from reducing the cost of health care to improving education and protecting the environment. ¹⁴ Microsoft continues to progress. Microsoft did not create 3D scanning or a "virtual reality", but they found a way to merger those technologies into Windows and Xbox in a way that makes sense. As Mar Gonzalez Franco, researcher with Microsoft Research's New Experiences and Technologies group said that "By 2027 Microsoft will have ubiquitous virtual reality systems that will provide such rich multi sensorial experiences that will be capable of producing hallucinations which blend or alter perceived reality". (Mail Online, 2016)

4.2. SWOT analysis of the company

In this analysis it is described strengths, weaknesses, opportunities, threats of the company.

4.2.1. Strengths:

Brand

Microsoft provides software, hardware products, and services. They are one of the leading producers. The company develops their products and services, focuses on manufacturing, licensing, marketing software products worldwide.

Research organization

Microsoft is known for their innovative ideas. Thanks to Microsoft Research which is larger computer science organization, Microsoft Research works with the top universities in the world to progress computer science.

World leading Operation System

One of the strengths of Microsoft is its Operation systems. Microsoft operation systems are one of the best computer operating systems even though people like to talk about glitches in operating system.

 $^{^{14}\,\}text{https://blogs.microsoft.com/on-the-issues/2009/07/15/how-will-windows-7-impact-the-global-economy/}$

Easy use of software

Microsoft products are of great quality and really easy to use.

4.2.2. Weaknesses

Legal Proceedings

Microsoft is the defendant in different unresolved cases against the company. Microsoft entangled in various legal proceeds.

Control counterfeits

Microsoft is not able to control illegal use of their software in developing countries.

4.2.3. Opportunities

Smartphones

Microsoft can get its attention on the growing demand for smartphones, which is the appearance of a major growth opportunity

Partnerships

The company can focus on new partnerships for the development of innovative and technologically advanced products. Such partnerships provide Microsoft a competitive edge.

4.2.4. Threats

Competition

Software market is highly competitive, which may impact not good of company's performance.

Technological changes

The world of technology is continuously changing that leads to a development of consumer needs and habits.

Pirated Market

Every year company loses billions of dollars due to pirated versions in the world.

4.3. Porter's Five Forces of Competition

This analysis is a simple but powerful tool for understanding the competitiveness of your business environment.

4.3.1. Competitive Rivalry

Microsoft is a computer technology corporation. In the technology industry, there is the high diversity of firms. These technology companies are very aggressive in the market. The main competitors of the Microsoft Corporation are well-known brands worldwide. Such as Apple, Google, Oracle. In entertainment services competitors are Sony and Nintendo companies. Those companies have very similar products. Even though there is a higher level of competition Microsoft Company is in very good position in the market.

4.3.2. Threat of New Entrants

The threat of new entrance is low for nowadays because of reputation and new entrance should invest in the market for developing their products. Investing and reputation are required for operating systems industry.

4.3.3. Bargaining Power of Suppliers.

Bargaining power of suppliers is low because of a large number of suppliers which provides services for the company. The larger supplier to Microsoft is Yahoo! Inc., big data platform supplier Hortonwork, Inc., supplier of video gaming is Activision Blizzard, Inc.

4.3.4. Bargaining Power of Customers.

Power of buyers in IT industry is very high because of many companies which are offering progressive operating systems and better options. But still a lot of customers prefer Microsoft's products.

4.3.5. Threat of Substitutes

Threat of substitutes in operating systems is low but in other products of Microsoft is high. Such as Xbox can be substitute by PlayStation of Sony Corporation. But there is still discussion about that.

4.4. Horizontal analysis

The horizontal analysis shows changes between years in currency and percentage form. It compares the financial data over the several periods or the ratios derived from those financial data. In order to create the horizontal analysis, the financial information for at least two years should be used and compared to each other.

4.4.1. Horizontal analysis of the balance sheet.

The balance sheet is the remarkable invention, yet it has two fundamental shortcomings. First, although it is in theory useful to have a summary of the value of all the assets owned by an enterprise, these values frequently prove elusive in practice. Second, many kinds of things have value and could be constructed, at least by the layperson, as assets. Not all of them recorded on the balance sheet. (Fridson and Alvarez, 2002)

The author uses horizontal analysis of the balance sheet. Results are seen in table 1. Microsoft company publish financial reports on a yearly basis on 30th of June. Data shown in the table below represents financial statistics of Microsoft activities covering a period of 2010 - 2017. On the table there is already calculated data. Table 1 shows my own calculation. Those items are in absolute values (in USD) and in percentage.

Table 1. Horizontal analysis of the balance sheet in millions

	2010-	Change	2012-	Change	2014-	Change	2016 -	Change
	11	%	13	%	15	0/0	17	0/0
Assets								
Current assets:								
Cash and cash equivalents	4105	75%	-3134	-45%	-3074	-35%	1153	18%
Short-term investments (including securities	11879	38%	17116	31%	13891	18%	18588	17%
loaned)								
Total cash, cash equivalents, and short- term investments	15984	43%	13982	22%	10817	13%	19741	17%
Accounts receivable, net of allowance for doubtful accounts	1973	15%	1706	11%	-1636	-8%	1515	8%
Inventories	632	85%	801	70%	242	9%	-70	-3%

Deferred income taxes	283	13%	-403	-20%	-26	-1%		
Other current assets	370	13%	296	10%	1069	24%	-995	-17%
Total current assets	19242	35%	16382	19%	10466	9%	20191	14%
Property and equipment,	532	7%	1722	21%	1720	13%	5378	29%
net of accumulated								
depreciation								
Equity and other	3111	40%	1068	11%	-2544	-17%	-4408	-42%
investments								
Goodwill	187	2%	1203	9%	-3188	-16%	17250	97%
Intangible assets, net	-414	-36%	-87	-3%	-2146	-31%	6373	171%
Other long-term assets	-67	-4%	872	57%	-469	-14%	2834	83%
Non-current assets	3349	11%	4778	13%	-6627	-11%	27427	51%
Total assets	22591	26%	21160	17%	3839	2%	47618	25%
Liabilities and								
stockholders' equity								
Current liabilities:								
Accounts payable	172	4%	653	16%	-841	-11%	492	7%
Current portion of long-			1768	144%	2499		1049	
term debt								
Short-term debt	-1000	-100%			2985	149%	-3832	-30%
Accrued compensation	292	9%	242	6%	299	6%	555	11%
Income taxes	-494	-46%	-197	-25%	-176	-23%	138	24%
Short-term unearned	2070	15%	1986	11%	73	0%	6634	24%
revenue								
Securities lending	1026	564%	-169	-21%	-466	-84%	-197	-67%
payable								
Other current liabilities	561	19%	446	14%	-140	-2%	331	6%
Total current liabilities	2627	10%	4729	14%	4233	9%	5170	9%
Long-term debt	6982	141%	1888	18%	7163	35%	35516	88%
Long-term unearned	220	19%	354	25%	87	4%	3936	61%
revenue								
Deferred income taxes	1227	536%	-184	-10%	107	4%	-945	-64%
Other long-term liabilities	627	8%	1792	22%	1950	17%	3544	26%
Total liabilities	11683	29%	8579	16%	13540	16%	47221	39%
Commitments and								
contingencies								
Stockholders' equity:								
Common stock and paid-	559	1%	1509	2%	99	0%	1137	2%

in capital - shares authorized 24,000								
Retained deficit	9541	-54%	10751	-1256%	-8614	-49%	366	16%
Accumulated other	808	77%	321	23%	-1186	-32%	-1106	-72%
comprehensive income								
Total stockholders' equity	10908	24%	12581	19%	-9701	-11%	397	1%
Total liabilities and	22591	26%	21160	17%	3839	2%	47618	25%
stockholders' equity								

Source: Own calculation based on appendix 1

In appendix 1 it may found full financial statistics on Microsoft Corporation over period of time 2010-2017. Total current assets in the table 1 shows that there was a significant increase of company's assets during years 2010 and 2011 about 26 % (108704mil.USD), especially thanks to current assets Microsoft grew in these years about 35% (74981mil.USD), further years increased of current assets by 19% and 9% and 14%. From the current assets, accounts receivable had increased about 15% (14987mil.USD) in the year 2010-2011.

The inventory item in years 2010 and 2011 was increase by 85% (1372mil.USD). The increase in inventory is connected with growing volume of production and company launches general availability of Office 2010. Inventory is the most important item in the business. The increase of the inventory depends on growing of production and with launches Microsoft Azure. An item inventory decreases in the year 2017 by -3%. Inventories are stated at an average cost, subject to the lower cost or market. Cost includes materials, labor and purchase and production of inventory. If Microsoft review indicates reduction in value, they decrease their inventory to a new cost basis. On the graph the total assets were created from non-current assets and the current assets. You can see that majority is composed of the current assets.

■ Total assets ■ Non-current assets Current assets

Figure 2. Development of assets

Source: own calculation based on appendix 1

Increase of total current liability was 14% in year 2012-2013. But main increase of total liability was in the last year of observation period about 39%. Nonetheless on the Table 1 there is the main increase in total liability and stockholders' equity was in year 2010 by 26% in amount of 108704 mil.USD. Because by growing of stockholders' equity by 24% in amount of 57083 mil. USD. The main increase of long-term debt was 141% also in years 2010-2011. Liability slightly increased for the whole examined period.

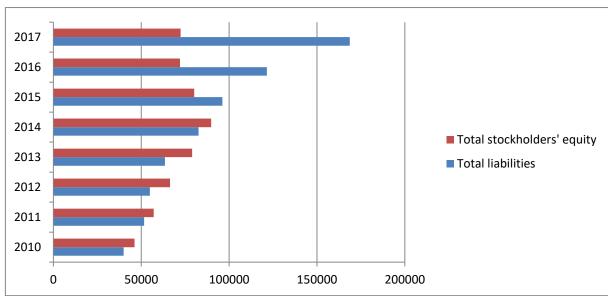


Figure 3: Development of owner's equity and liabilities.

Source: Own calculation based on appendix 1

4.5. Vertical analysis

Vertical analysis also known as common-size analysis is technique for identifying relationship between items in the same financial statement by expressing all amounts as the percentage of the total amount taken as 100. (Bussines Dictionary, 2017) ¹⁵

4.5.1. Vertical analysis of Balance sheet

Table 2: Vertical analysis of balance sheet

	2010	2011	2012	2013	2014	2015	2016	2017
Assets								
Current assets:								
Cash and cash	6,39%	8,84%	5,72%	2,67%	5,03%	3,17%	3,36%	3,18%
equivalents								
Short-term	36,33	39,71	46,26	51,41	44,69	51,60	55,17	51,98
investments (including	%	%	%	%	%	%	%	%
securities loaned)								
Total cash, cash	42,72	48,55	51,98	54,08	49,72	54,77	58,53	55,16
equivalents, and	%	%	%	%	%	%	%	%
short-								
term investments								
Accounts receivable,	15,11	13,79	13,01	12,28	11,34	10,16	9,45%	8,21%
net of allowance for	%	%	%	%	%	%		
doubtful accounts								
Inventories	0,86%	1,26%	0,94%	1,36%	1,54%	1,65%	1,16%	0,90%
Deferred income	2,54%	2,27%	1,68%	1,15%	1,13%	1,09%	X	X
taxes								
Other current assets	3,43%	3,05%	2,55%	2,38%	2,55%	3,10%	3,05%	2,03%
Total current assets	64,65	68,92	70,16	71,24	66,27	70,77	72,19	66,30
	%	%	%	%	%	%	%	%
Property and	8,86%	7,51%	6,82%	7,01%	7,55%	8,36%	9,49%	9,84%
equipment, net of								
accumulated								

 $^{^{15}\} http://www.business dictionary.com/definition/vertical-analysis.html$

27

depreciation								
Equity and other	9,00%	10,00	8,06%	7,61%	8,47%	6,84%	5,39%	2,50%
investments		%						
Goodwill	14,39	11,57	11,09	10,29	11,68	9,61%	9,24%	14,57
	%	%	%	%	%			%
Intangible assets, net	1,34%	0,68%	2,61%	2,16%	4,05%	2,74%	1,93%	4,19%
Other long-term	1,74%	1,32%	1,25%	1,68%	1,99%	1,68%	1,77%	2,59%
assets								
Total non-current	35,35	31,08	29,84	28,76	33,73	29,23	27,81	33,70
assets	%	%	%	%	%	%	%	%
Total assets	100%	100%	100%	100%	100%	100%	100%	100%
Liabilities and								
stockholders' equity								
Current liabilities:								
Accounts payable	4,67%	3,86%	3,44%	3,39%	4,31%	3,74%	3,57%	3,07%
Current portion of	X	X	1,02%	2,11%	0,00%	1,42%	0,00%	0,44%
long-term debt								
Short-term debt	1,16%	0,00%	X	X	1,16%	2,83%	6,67%	3,76%
Accrued	3,81%	3,29%	3,20%	2,89%	2,78%	2,89%	2,72%	2,41%
compensation								
Income taxes	1,25%	0,53%	0,65%	0,42%	0,45%	0,34%	0,30%	0,30%
Short-term unearned	15,85	14,46	15,38	14,49	13,43	13,18	14,20	14,15
revenue	%	%	%	%	%	%	%	%
Securities lending	0,21%	1,11%	0,67%	0,45%	0,32%	0,05%	0,15%	0,04%
payable								
Other current	3,40%	3,21%	2,60%	2,53%	4,01%	3,84%	3,07%	2,60%
liabilities								
Total current	30,36	26,47	26,95	26,27	26,47	28,29	30,68	26,77
liabilities	%	%	%	%	%	%	%	%
Long-term debt	5,74%	10,97	8,83%	8,85%	11,98	15,78	20,96	31,55
		%			%	%	%	%
Long-term unearned	1,37%	1,29%	1,16%	1,24%	1,16%	1,19%	3,33%	4,30%
revenue								
Deferred income taxes	0,27%	1,34%	1,56%	1,20%	1,58%	1,61%	0,76%	0,22%
Other long-term	8,65%	7,43%	6,77%	7,02%	6,73%	7,69%	7,05%	7,13%

liabilities								
Total liabilities	46,38	47,49	45,28	44,57	47,92	54,56	62,79	69,97
	%	%	%	%	%	%	%	%
Commitments and								
contingencies								
Stockholders' equity:								
Common stock and	72,99	58,34	54,26	47,26	39,66	38,85	35,24	28,75
paid-in capital -	%	%	%	%	%	%	%	%
shares authorized								
24,000								
Retained deficit	-	-	-	6,95%	10,27	5,16%	1,18%	1,10%
	20,60	7,54%	0,71%		%			
	%							
Accumulated other	1,23%	1,71%	1,17%	1,22%	2,15%	1,43%	0,79%	0,18%
comprehensive								
income								
Total stockholders'	53,62	52,51	54,72	55,43	52,08	45,44	37,21	30,03
equity	%	%	%	%	%	%	%	%
Total liabilities and	100%	100%	100%	100%	100%	100%	100%	100%
stockholders' equity								

Source: Own calculation based on appendix 1

100% 90% ■ Total current assets 80% 70% Other current assets 60% 50% Inventories 40% Accounts receivable, net of 30% allowance for doubtful accounts 20% ■ Short-term investments (including securities loaned) 10% 0% 2010 2011 2012 2013 2014 2015 2016

Figure 4: Structure of current assets

Source: Own calculation based on table 2

Based at the figure 3, we can see that in current assets structure most significant item is short-term investments. The main increase was in the year 2016 by 55.17% (106 730 mil. USD). On the other hand the lowest percentage was 36.33% in year 2010. The highest percentage of account receivables was 15.11% (13 014 mil. USD) in the year 2010, the lowest was 8.21% in the year 2017. The highest percentage of inventory was in the year 2015 by 1.65% (2251mil.USD) but lower was in year 2010 about 0.86%. In item other current assets high percentage was 3.43% in 2010, and lower was 2.03% in 2017.

40,00% ■ Property and equipment, net of 35,00% accumulated depreciation 30,00% ■ Goodwill 25,00% 20,00% ■ Intangible assets, net 15,00% ■ Other long-term assets 10,00% 5,00% ■ Total non-current assets 0,00% 2010 2012 2011 2013 2014 2015 2016 2017

Figure 5: Structure of non-current assets.

Source: Own calculation based on table 2

The figure 4 shows that the main part of non-current assets structure in the period from 2010 to 2017 is an item of goodwill. The higher percentage is in the year 2017 about 14,57%. (35–122 mil. USD), but lower percentage is in previous year about 9,24% (17872mil.USD). In property and equipment item main percentage is 9.84% in the year 2017 (27734mil.USD). The lowest is in the year 2012 abut 6,82%. Other long-term assets were high 33.70% in the year 2017.

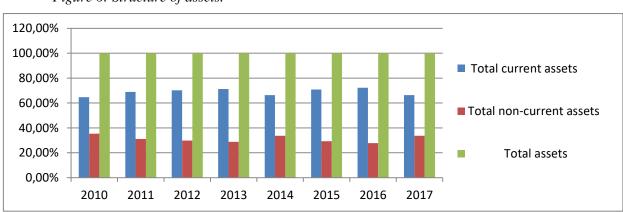


Figure 6: Structure of assets.

Source: Own calculation based on table 2

Based at the Figure 5 significant part of total asset is current asset. The highest percentage is in the year 2016 about 72,19%.

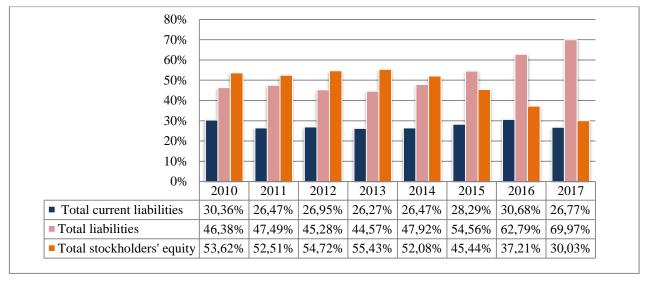


Figure 7: Structure of total liabilities.

Source: Own calculation based on table 2

The graph shows the structure of total liabilities from 2010 to 2017. In this figure total liability had increased except the year 2012 where percentage was 45.28%.

4.6. Fundamental analysis of Microsoft

Figure 8. Structure of stock of Microsoft.



Source: Nasdaq, 2018

As it can be seen from the figure 8, for the period between the beginning of March 2017 until February 2018 company's stock price has increased in a stable manner, where starting February 2018 stock price has dropped sharply from \$97 to \$86. Microsoft growth rate increased by 33,08% in II quarter of 2017 compared to II quarter from a year before. According to money.usnews.com the Microsoft Corporation is expecting a great success in 2018. In the recent quarter Microsoft reported an 89% increase in Azure revenue.¹⁶

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets.¹⁷

The main formula of ROA is:

ROA = Net Income/Total Asset

In basic terms, ROA tells you what earnings were generated from invested capital. ROA for public companies can vary substantially and will be highly dependent on the industry. This is why when using ROA as a comparative measure, it is best to compare it against a company's previous ROA numbers or against a similar company's ROA. For compare ROA was chosen information about The Apple Company.

Table 3. Calculation of Return of Asset

Company	Net Income	Total Asset	ROA
Microsoft	21204	241086	0.088%
Apple	48351 ¹⁸	375319	0.128 %

Source: Own calculation based on official data online.

The higher the ratio, the more income a company generates to total assets. Data were used from period 2017. In calculation was used net income after tax which is \$21,204 for Microsoft in period of 30 June 2017. Net income after tax for Apple is \$48,351 in a period September 30, 2017. Data were found on official page of Apple Inc. and Microsoft Corporation.

¹⁸ https://www.apple.com/newsroom/pdfs/fy17-q4/Q4FY17ConsolidatedFinancialStatements.pdf

 $[\]frac{\text{16}}{\text{mttps://money.usnews.com/investing/stock-market-news/articles/2017-12-06/microsoft-corporation-msft-stock}$

¹⁷ https://www.investopedia.com/terms/r/returnonassets.asp

Return on equity is the amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders has invested.¹⁹ ROE is expressed as a percentage and calculated as:

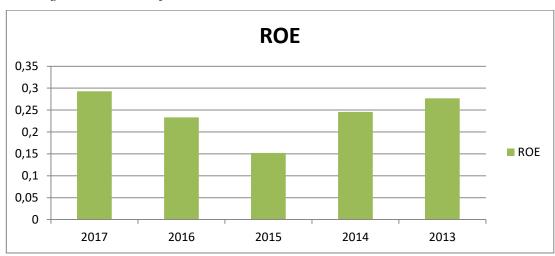
Return on Equity = Net Income / Shareholder's Equity

Table 4. Calculation of Return of Equity

Year	Net Income	Shareholder's Equity	ROE
2017	21204	72394	0.29
2016	16798	71997	0.23
2015	12193	80083	0.15
2014	22074	89784	0.24
2013	21863	78944	0.27

Source: Own calculation based o appendix 1

Figure 9. Structure of ROE



Source: Own Calculation based on table 4

On the table 4 were used data for period of time from 2013-2017. ROE over the past 5 to 10 years can give you understanding of the historical growth.

-

¹⁹ www.investopedia.com/terms/r/returnonequity.asp

5. Conclusion

Results of conducted analysis suggest that Microsoft Company is moving in the right direction. Since its inception, the company has made a great discovery in the technology world and made work easier for users around the world thanks to Office. Microsoft has always striven and strives to create something new. According to Microsoft's official web page their strategy is to build best-in-class platforms. The conducted analysis also indicates that Microsoft is moving in the right direction, slowly, but surely. Microsoft Corporation is a technology company which produces software, electronic devices and platforms. But in tech market there are other competitors such as famous Apple Inc. or Google. Microsoft is one of the famous companies in the world. But compare Microsoft with other companies Microsoft has to be more innovative.

6. References

LITERATURE

- ČESKÁ ZEMĚDĚLSKÁ UNIVERZITA V PRAZE. KATEDRA OBCHODU A FINANCÍ, -- STÁROVÁ, M. Accounting theory - with practical applications. V Praze: Česká zemědělská univerzita, Provozně ekonomická fakulta, 2015. ISBN 978-80-213-2588-3.
- 2. FRIDSON, M S. -- ALVAREZ, F. Financial statement analysis: a practitioner's guide. New York: J. Wiley, 2002. ISBN 978-0-471-40917-5.
- 3. KELLER, K L. -- KOTLER, P. Marketing management. Harlow: Pearson, 2015. ISBN 9781292092621

ONLINE SOURCES

Forbes.com, (2017) The World's Biggest Public [online] Available at: https://www.forbes.com/companies/microsoft/ [Accessed 5 Sept., 2017]

Dailymail.co.uk, (2016) Microsoft says virtual reality could make you HALLUCINATE in the same way as LSD [online] Available at: http://www.dailymail.co.uk/sciencetech/article-4009802/Microsoft-says-virtual-reality-headsets-make-HALLUCINATE-way-LSD.html [Accessed 10 Sept, 2017]

Businessbictionary.com, (2017) Definition of Vertical analysis [online] Available at: http://www.businessdictionary.com/definition/vertical-analysis.html [Accessed 26 Sept.,2017]

Accounting-simplified.com, (2015) What are Financial Statements? [online]
Available at: http://accounting-simplified.com/financial/statements/types.html [Accessed 27 Sept., 2017]

Money.usnews.com (2017). *Microsoft Stock market* [online] Available at: https://money.usnews.com/investing/stock-market-news/articles/2017-12-06/microsoft-corporation-msft-stock [Accessed 17 Feb. 2018]

Investopedia.com (2013) Technology Sector [online] Available at:

https://www.investopedia.com/terms/t/technology_sector.asp#ixzz59dZRZrT3 [Accessed 5 Mar., 2018]

Investopedia.com. *Return on Assets* [online] Available at: https://www.investopedia.com/terms/r/returnonassets.asp [Accessed 16 Feb., 2018]

Blogs.microsoft.com (2009) *How Will Windows 7 Impact the Global Economy?* [online] Available at: https://blogs.microsoft.com/on-the-issues/2009/07/15/how-will-windows-7-impact-the-global-economy/ [Accessed 10 Sep., 2017]

Consolidated financial statements, 2017. [PDF] *Apple Reports Fourth Quarter Results*. Available at: https://www.apple.com/newsroom/pdfs/fy17-q4/Q4FY17ConsolidatedFinancialStatements.pdf [Accessed 15 Feb., 2018)

Microsoft.com, (2017) *Annual Report 2017* [online] Available at: https://www.microsoft.com/investor/reports/ar17/index.html [Accessed 15 Sept., 2017]

7. Appendices

Appendix 1. Balance sheet over period 2010-2017

	2010	2011	2012	2013	2014	2015	2016	2017
Assets								
Current assets:								
Cash and cash equivalents	5505	9610	6938	3804	8669	5595	6510	7663
Short-term investments	3128	43	56102	73218	77040	90931	106730	12538
(including securities loaned)	3	162						1
Total cash, cash equivalents,	3678	52772	6304	77022	85709	96256	11324	13298
and short-term investments	8							1
Accounts receivable, net of	1301	14987	1578	17486	19544	17908	18277	19792
allowance for doubtful	4							
accounts								
Inventories	740	1372	1 137	1938	266	2902	2251	2181
Deferred income taxes	2184	2467	2035	1632	1941	1915	X	X
Other current assets	2	3320	3092	3388	4392	5461	5892	4897
	950							
Total current assets	5567	74918	85084	10146	11424	12471	13966,00	15985
	6			6	6	2	0	1
Property and equipment, net	763	8162	8269	9991	13011	14731	18356	23734
of accumulated depreciation								
Equity and other investments	7754	10865	9776	10844	14597	12053	10431	6023
Goodwill	1239	12581	13452	14655	20127	16939	17872	35122
	4							
Intangible assets, net	1158	744	317	3083	6981	4835	3733	10106
Other long-term assets	1501	1434	1 520	2392	3422	2953	3416	625
Total assets	8611	10870	12027	14243	17238	17622	193468	24108
	3	4	1	1	4	3		6
Liabilities and stockholders'								
equity								
Current liabilities:								
Accounts payable	4025	4197	4175	4820	7432	6591	6898	7390
Current portion of long-term	X	X	1231	299	0	2499	0	1049

debt								
Short-term debt	1	0	X	X	2,000	4985	12904	9072
Accrued compensation	3283	3575	3875	4117	4797	5096	5264	5819
Income taxes	1074	580	789	592	782	606	580	718
Short-term unearned revenue	1365	15722	19653	20639	2315	23223	27468	34102
	2							
Securities lending payable	182	1208	814	645	558	92	294	97
Other current liabilities	2931	3492	3151	3597	6906	6766	5949	628
Total current liabilities	2614	28774	32688	37417	45625	49858	59357	64527
	7							
Long-term debt	4939	11921	10713	12601	20625	27808	40557	76073
Long-term unearned revenue	1178	1398	1406	176	2008	2095	6441	10377
Deferred income taxes	229	1456	1893	1709	2728	2835	1476	531
Other long-term liabilities	7445	8072	8208	10,00	11594	13544	1364	17184
				0				
Total liabilities	3993	51621	54908	63487	826	9614	121471	16869
	8							2
Commitments and								
contingencies								
Stockholders' equity:								
Common stock and paid-in	6285	63415	65797	67306	68366	68465	68178	69315
capital - shares authorized	6							
24,000								
Retained deficit	-	-	-856	9895	1771	9096	2282	2648
	4469	16681						
Accumulated other	1055	1863	1422	1743	3708	2522	1537	431
comprehensive income								
Total stockholders' equity	4617	57083	66363	78944	89784	80083	71997	72394
	5							
Total liabilities and	8611	10870	12127	14243	17238	17622	193468	24108
stockholders' equity	3	4	1	1	4	3		6

Source: http://www.microsoft.com/, Annual Reports