

**Czech University of Life Sciences Prague**

**Faculty of Economics and Management**

**Department of Economics**



**Diploma Thesis**

**Economic analysis of Amazon.com Inc.**

**Aitmukhanbetova Aidana**

© Year 2018 CULS

## DIPLOMA THESIS ASSIGNMENT

Bc. Aidana Aitmukhanbetova

Economics and Management

Thesis title

**Economic analysis of Amazon.com Inc.**

---

### Objectives of thesis

The main objectives of this diploma thesis are to analyze the economic position of Amazon.com Inc, to evaluate the situation in the market, compared with main competitors in the same industry. To analyze the stocks if it is financially stable and profitable and make future predictions and recommendations for potential, future shareholders or investors.

### Methodology

The methodological tools used in this thesis are divided into two parts.

The first theoretical part is written as a descriptive literature review using different literature, books, publications, annual reports which contain secondary data. Using descriptive method, fundamental and technical analysis, financial ratios are introduced.

The second part of the thesis will be based on analytic research. The methods and analysis selected in theoretical part will be used in a practical way and applied for data 2012-2016. In conclusion, forecasting for shareholders or investors will be done.

## **The proposed extent of the thesis**

60 – 80 pages

## **Keywords**

financial analysis, fundamental analysis, horizontal analysis, Amazon.com Inc, stocks

---

## **Recommended information sources**

- Higson, C. (2006). Financial Statements: Economic Analysis and Interpretation. Rivington Publishing Ltd. 320pg. ISBN 978-1845780104
- Keith, C. (2004). Quantitative Financial Economics. Wiley. 736pg. ISBN: 978-0470091715
- M. Bragg, Steven (2014) Financial Analysis: Second Edition: A Business Decision Guide 2nd Edition. 342pg. ISBN 978-1938910463
- O’Neil, W. J. (2009). How to Make Money in Stocks: A Winning System in Good Times and Bad. McGraw-Hill Education; 4 Edition. 466pg. ISBN 978-0071614139
- Schabacker, R. S. (2005). Technical Analysis and Stock Market Profits. Harriman House Ltd; New Ed edition. 472pg. ISBN: 978-1897597569

---

## **Expected date of thesis defence**

2018/19 SS – FEM

## **The Diploma Thesis Supervisor**

Ing. Petr Procházka, Ph.D., MSc

## **Supervising department**

Department of Economics

Electronic approval: 15. 11. 2018

**prof. Ing. Miroslav Svatoš, CSc.**

Head of department

Electronic approval: 20. 11. 2018

**Ing. Martin Pelikán, Ph.D.**

Dean

Prague on 22. 11. 2018

### **Declaration**

I declare that I have worked on my diploma thesis titled “Economic analysis of Amazon.com Inc.” by myself and I have used only the sources mentioned at the end of the thesis.

In Prague on 27<sup>th</sup> of November

\_\_\_\_\_

Aidana Aitmukhanbetova

## **Acknowledgement**

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

**Ekonomická analýza Amazon.com Inc.**

**Economic analysis of Amazon.com Inc.**

## **Summary**

This diploma thesis analyzes the economic situation of Amazon.com Inc. The theoretical part of diploma thesis starts with the introduction of stocks and economic analysis. For these analyses, the main methods and tools of fundamental and technical analysis were provided.

In practical part all methods which were described in the theoretical part used for evaluation of Amazon.com Inc. The analysis of financial indicators and methods were gained from fundamental analysis and from technical analysis were used charts and technical indicators. The results of both analyses were reviewed and evaluated. To sum up, the results and possible future perspective of the company is used to form the conclusion and recommendations.

## **Keywords:**

Amazon.com Inc, stocks, fundamental analysis, technical analysis, financial indicators.

## **Shrnutí**

Tato diplomová práce analyzuje ekonomickou situaci Amazon.com Inc. Teoretická část diplomové práce začíná zavedením akcie a ekonomické analýzy. Pro tyto analýzy byly poskytnuty hlavní metody a nástroje fundamentální a technické analýzy.

V praktické části jsou popsány všechny metody popsané v teoretické části, které byly použity pro vyhodnocení Amazon.com Inc. Analýza finančních ukazatelů a metod byly získány z fundamentální analýzy a z technických analýz byly použity grafy a technické ukazatele. Výsledky obou analýz byly přezkoumány a vyhodnoceny. Shrnutí, výsledky a možné budoucí perspektivy společnosti se používají k vytvoření závěrů a doporučení.

### **Klíčová slova:**

Amazon.com Inc, akcie, fundamentální analýza, technická analýza, finanční ukazatele.



# Contents

<b>List of Graphs.....</b>	<b>10</b>
<b>List of Tables .....</b>	<b>10</b>
<b>1 Introduction.....</b>	<b>12</b>
<b>2 Aims and Methodology .....</b>	<b>13</b>
2.1 Aims.....	13
2.2 Methodology.....	14
<b>3 Theoretical part .....</b>	<b>15</b>
<b>3.1 Financial market .....</b>	<b>15</b>
3.1.1 Stocks .....	15
3.1.2 Types of stocks.....	16
3.1.3 Pros and cons of Investing in Stocks.....	19
3.1.4 Exchange of Stocks .....	20
3.1.5 Analysis of stocks .....	21
<b>3.3 Concept of economic analysis .....</b>	<b>34</b>
3.3.1 Financial analysis .....	35
3.3.1.1 Profitability indicators .....	38
3.3.1.2 Liquidity ratios .....	39
3.3.1.3 Indicators of Activity.....	41
3.3.1.4 Financial Leverage Ratios .....	42
3.3.1.5 Market Value Ratios.....	43
<b>4 Practical part .....</b>	<b>44</b>
<b>4.1 Description of Amazon.com Inc. ....</b>	<b>44</b>
<b>4.2 Fundamental analysis .....</b>	<b>47</b>
4.2.1 Horizontal analysis .....	47
4.2.1.1 Horizontal analysis of Balance Sheet .....	47
4.2.1.2 Horizontal analysis of Income Statement .....	50
4.3.2 Vertical analysis .....	51
4.3.2.1 Vertical analysis of Balance Sheet .....	51
4.3.2.2 Vertical analysis of Income Statement .....	53
4.3.3 Net working capital .....	54

4.3.4 Profitability analysis.....	54
4.3.5 Asset turnover analysis.....	55
4.3.6 Financial Leverage analysis.....	56
4.3.7 Liquidity analysis.....	56
4.3.8 Market Value analysis.....	57
4.3.9 Competitors of Amazon.com Inc. ....	57
<b>4.4 Technical analysis of Amazon.com Inc .....</b>	<b>59</b>
4.4.1 Charting methods.....	59
4.4.1.1 Stock Price Trend.....	59
4.4.1.2 Candlestick chart.....	60
4.4.2 Technical Indicators.....	61
4.4.2.1 Simple moving average.....	62
4.4.2.2 Bollinger Bands.....	62
4.4.2.3 Rate of change.....	63
4.4.3.4 RSI.....	64
4.4.3.5 Williams %R.....	65
4.4.3.6 Money flow index.....	66
<b>5 Results and discussions .....</b>	<b>66</b>
<b>5.1 Results of fundamental analysis .....</b>	<b>66</b>
<b>5.2 Results of technical analysis .....</b>	<b>68</b>
<b>5.3 Discussion.....</b>	<b>69</b>
<b>6 Conclusion .....</b>	<b>71</b>
<b>7 References.....</b>	<b>72</b>
<b>7.1 Books.....</b>	<b>72</b>
<b>7.2 Online sources.....</b>	<b>73</b>

## List of Graphs

Figure 1: Trend Comparisons .....	25
Figure 2: Types of trends .....	26
Figure 3: Support and resistance level.....	27
Figure 4: Simple Moving Average (SMA) .....	29
Figure 5: Weighted Moving Average (WMA) .....	29
Figure 6: Chart of Moving Average Convergence / Divergence (MACD) .....	31
Figure 7: Relative Strength Index (RSI).....	33
Figure 8: Stochastic Oscillator.....	34
Figure 9: Total assets and liabilities of Amazon.com Inc (2012-2016) .....	49
Figure 10: Price development of Amazon.com Inc. competitors (October 2016- October 2018).....	58
Figure 11: Mountain type of chart – Amazon.com Inc. (October 2016- October 2018) ..	60
Figure 12: Candlestick chart of Amazon.com Inc. (October 2016 – October 2018) .....	61
Figure 13: Monthly candlestick chart of Amazon.com Inc. (October 2016 – October 2018).....	61
Figure 14: Simple Moving Average of Amazon.com Inc. (October 2016 – October 2018) .....	62
Figure 15: Bollinger bands of Amazon.com Inc. (October 2016 – October 2018) .....	63
Figure 16: Rate of Change of Amazon.com Inc. (October 2016 – October 2018).....	64
Figure 17: Relative Strength Index of Amazon.com Inc. (October 2016 – October 2018) .....	65
Figure 18: Williams % R of Amazon.com Inc. (October 2016 – October 2018) .....	65
Figure 19: Money Flow Index of Amazon.com Inc (October 2016 – October 2018) .....	66
Figure 20: Analyst recommendations, November 2018 .....	69

## List of Tables

Table 1: The main direct holders of Amazon.com Inc. shares on 14 November 2017 .....	45
Table 2: The top institutional holders of Amazon.com Inc. on 29 June 2018 .....	45
Table 3: Number of Amazon.com Inc. employees in 2013-2017 .....	45
Table 4: Horizontal analysis of Amazon.com Inc. Assets (2012-2016).....	48
Table 5: Horizontal analysis of Amazon.com Inc. Liabilities and Stockholder's equity..	49
Table 6: Horizontal analysis of Amazon.com Inc. Income Statement (2012-2016).....	50
Table 7: Vertical analysis of Amazon.com Inc. Balance Sheet (2012-2016).....	52
Table 8: Vertical analysis of Amazon.com Inc. Liabilities and Stockholder's equity (2012-2016).....	53

Table 9: Vertical analysis of Amazon.com Inc. Income Statement (2012-2016).....	53
Table 10: Net working capital of Amazon.com Inc. (in mln. USD) .....	54
Table 11: Profitability indicators of Amazon.com Inc. (2012-2016).....	55
Table 12: Asset turnover indicators of Amazon.com Inc. (2012-2016).....	56
Table 13: Financial Leverage indicators of Amazon.com Inc. (2012-2016).....	56
Table 14: Liquidity indicators of Amazon.com Inc. (2012-2016).....	57
Table 15: Market Value ratios of Amazon.com Inc. ....	57
Table 16: Main competitors of Amazon.com Inc. ....	58
Table 17 : Investment recommendations based on technical analysis .....	68

# 1 Introduction

In modern conditions, when there is a significant increase in competition in all sectors and spheres of the economy, enterprises and organizations are striving to constantly search for new ways and effective solutions for doing business that takes into account the general trends in the development of market relations. One of such trends is the active use of information technology in business processes. The rapid development of information technology, increasing the role of the global Internet, the overall automation of all sectors of the economy, has pushed the company to use different kinds of e-commerce in their activities. And it became important not only for expansion but even for maintaining the company's position in the market. Due to the rapid development of information technology, the Internet is not just a data transfer tool, but also an effective form of interaction between participants. The annual turnover of e-world trade is significantly increasing. In 2014, the volume of global e-commerce accounted for 1.5 trillion dollars. And in 2015 the volume of e-commerce increased by 17.7% compared to the 2014 year. (Onufrieva, 2016). E-commerce provides not only new ways of doing business. E-commerce changes the approach to the management and the perception of the business.

E-commerce is one way to e-business and are increasingly penetrating the business and the daily lives of consumers of goods and services. Electronic trade in goods and services is a development of existing methods of trade, increasing its efficiency by reducing costs and better meeting customer needs. E-commerce can significantly reduce the time in the selection of goods and services, as well as virtually eliminates "out" the distance between consumers and sellers.

The first e-shop «Amazon.com» was created in 1994 and became the first company that was able to make maximum use of the virtual reality of the Internet, which allowed simultaneously addressing many consumers, as well as offering them a wider range of products, not limiting those items that are available in the warehouse.

Amazon.com Inc. - an American company, one of the oldest online stores, the leader among the online stores on trade volumes. Amazon is one of the first companies to sell real goods through the Internet. The first products of the company were books. Due to the fact, that on the website it was possible to place an unlimited number of products and offer them the almost unlimited number of customers, the business model of Amazon not only caught on but also brought the huge success of the company.

The first entry into the stock market for Amazon.com happened in 1997, 15<sup>th</sup> of May and this thesis will be focusing on the development of its shares. In 1997, quotes reached the level of \$ 18

per share. (Perry, 2017) The success of the entry was overwhelming, the original stock price almost tripled in the very first days and current share price now is \$1,789.30.

To predict the direction of the stock market, every potential or future investor with the knowledge of valuation of share can count or predict for which shares it's better to invest or to sell. The number of investors who is trading on stock market is increasing nowadays.

Different types of stock analysis will help for investors to find out the right time for buying or selling. The widely used and popular stock analysis are fundamental and technical analysis.

The fundamental analysis is based on comparison of market value of share and its intrinsic value, whereas technical analysis looks for historical development of the trend and tries to forecast the direction of the prices. Based on this analysis gained the future development of Amazon.com Inc will be forecasted.

## **2 Aims and Methodology**

### **2.1 Aims**

The main aims of this diploma thesis are to analyze the economic position of Amazon.com Inc, to evaluate the situation in the market, compared with main competitors in the same industry. To analyze the stocks if it is financially stable and profitable and make future predictions and recommendations for potential, future shareholders or investors and to get an answer to the research question: *"If it is worth to invest into Amazon.com Inc."* This aim will be achieved by using technical analysis and fundamental analysis.

The aim of the theoretical part is to overview to financial market, to the economic analysis, tools, and methods of fundamental and technical analysis.

The aim of the practical part to analyze the economic situation of Amazon.com Inc and its stock market through the analysis of financial indicators and its price development. Based on gained results will be used to evaluate the financial situation of the company, market position and future recommendations for investors.

## **2.2 Methodology**

The methodological tools used in this thesis are divided into two big main parts. The first theoretical part is written as a descriptive literature review using different literature, books, publications, annual reports which contain secondary data.

The main parts of theory include the explanation of the stock analysis and economic analysis. The economic analysis focuses on financial analysis, where the horizontal analysis, vertical analysis, balance sheet rules, financial ratio indicators are introduced. Whereas the stock analysis is focusing on detailed introduction into fundamental and technical analysis.

In practical part of diploma thesis is expected to be done by quantitative and qualitative methods. The main methods and analysis explained in theoretical part will be used in the practical part of the thesis. The fundamental analysis of the company, which is based on the financial analysis, is the used as the purpose of this part. Financial analysis indicators such as profitability, liquidity, horizontal analysis and vertical analysis, earning per share (EPS), net working capital, discount cash flow methods are calculated and evaluated. The main data will be taken from the annual reports, such as balance sheet, income statements and cash flow of Amazon.com Inc. from period 2012-2016.

Another category of practical part is technical analysis, which is done by analysis of supply and demand in the market and where the stock price trend is heading. The main tools are used include the candlestick charts, Bollinger bands, the moving average, oscillators, relative strength index. Time period for technical analysis was chosen from October 2016- October 2018.

The section Results and discussion summarizes the results, which were gained through the analysis from practical part and focusing on recommendations regarding the Amazon's Inc. stock.

## **3 Theoretical part**

The theoretical part explains the definitions connected with the concept of stocks and economic analysis.

### **3.1 Financial market**

#### **3.1.1 Stocks**

A stock is subscribed as the capital of a corporation or limited liability of the company, which is usually divided into shares and introduced by transferable certificates. The certificates can be specified as the contractual relationship between the company and its shareholders or the stockholders, as well as specified risk sharing, profit, and control over the business. (Encyclopaedia Britannica, 2014)

Investing in a company make people both an investor and a shareholder. The terms “shareholder” and "investor" allude to various connections.

The shareholder (also known as a stockholder) is an individual, company, organization or other institution, that owns one or more shares of a company’s stock or whose name is issued in the share certificate. (Business Dictionary, 2018)

The investor can be anyone who puts money or anything that has a value into a business or ventures for a financial return.

Shareholders or stockholder are more dependent on the growth of the company that declares dividends on its profit that are given to them. On the other hand, investor, can put in his money and even withdraw at any time he or she feels that they are not getting enough return on investment.

The share is an issue-grade security, which indicates the making of a share in the capital of the joint-stock company and assigns to its owner (shareholder) the right to:

- receive a certain income of the profit of the company in the form of dividends;
- participation in the management of a joint stock company, the right to vote when the affairs of the company;
- preferential acquisition of new share issues;
- receive part of the property remaining after its liquidation. (Horton, 2018)



### **3.1.2 Types of stocks**

There are two types of shares: common shares and preferred shares. In general, their main difference is that the common shares enable the shareholder to vote at the meeting, but their dividend may not be paid, while the holders of preferred shares will be able to vote only for a limited number of issues, but they are guaranteed to get their dividends. (Johnson, 2018)

#### **Common stocks**

Holders of ordinary shares are the true owners of the company, bearing responsibility for it and assuming the maximum risk. Ordinary shares are similar to an unlimited loan, which is given by a company in exchange for a share of profits. The company's charter lists all rights related to shares. One of the most important for the holder of ordinary shares is the right to vote at shareholders' meetings when it comes to the activities of the company, the appointment of directors, approval of dividends proposed by the management of the company, and, in addition, the right to a proportionate share of the assets of the stock company if it ceases to operate.

Among the rights that holders of ordinary shares receive are the following:

- the right to participate in the shareholders' meeting and also have the right to vote in all matters falling within the competence of the general meeting;
- entitled to the dividends paid, mainly in the case of company profits;
- the right to a part of the property (liquidation value) in the situation of liquidation of the company. (FAERBER, 2008)

However, the ordinary shares have a nominal value of identical and provide owners with an equal amount of rights.

Conversion of ordinary shares into preferred shares as well as bonds and other securities is prohibited.

Placement of ordinary shares by public subscription with the amount of more than 25% of previously placed shares is allowed only if this decision has collected three-quarters of the votes "yes" at the general meeting of shareholders.

The owner of ordinary shares receives the right to vote at the shareholders' meetings not earlier than will make a full payment for the value of the shares. The exception is shares acquired by the founders of the joint-stock company in its organization.

The right to vote is not granted:

- if the full payment of shares has not been made within the timeframe established during the placement;
- when the company redeems shares from shareholders.

### **Preferred stocks**

Preferred shares represent some degree of ownership of the company, but usually, they do not have the right to vote (this may vary depending on the company). Holders of preferred shares are entitled to a fixed dividend of fixed size. This is their difference from ordinary shares, the number of dividends for which may differ, and payment is not guaranteed. (FAERBER, 2008)

Another advantage is that in case of liquidation of a company, holders of preferred shares are entitled to payments to holders of ordinary shares (but after creditors). Preferred shares can also be revocable - the company has the opportunity at any time to buy them from holders at its discretion (usually with a premium payment).

Many consider preferred shares more a debt obligation, than a share in the capital. This type of shares can be considered as an intermediate link between bonds and ordinary shares.

### **Types of preferred shares**

Cumulative preferred shares suggest that if due to a difficult financial situation or any other factors, dividends are not paid this year, they accumulate in dividends and will be paid in subsequent years. All arrears must be paid before dividend payment on ordinary shares. Due to the fact, that the payment of the dividend is not a debt of the company, holders of preferred shares may not receive dividends, if the company does not intend to pay dividends on ordinary shares. (Investopedia, 2018)

The essence of the *convertible shares* is reflected in their name: they can be converted (exchanged) to other types of preferred shares and common shares. When issuing convertible preferred shares, the possibility and conditions for their conversion into ordinary shares or preference shares of other types should be determined (McClure, 2017). When issuing convertible shares, it is necessary to establish a period, proportionality and exchange rate. The exchange period for the convertible shares must be at least three years. The conversion rate is set at the time of issue of such shares and it slightly exceeds the current market rate of ordinary shares during that period. Therefore, if within the specified period of the current market rate of

exchange of common shares exceeds the conversion rate, the owner of the convertible preference share has the opportunity to earn additional income by exchanging their share at the rate of conversion and then selling it at a higher rate. Such a possibility allows the issuer to set a dividend on convertible preferred shares lower than other types of preferred shares. If the exchange period is completed and the owner of the convertible preferred share has not exchanged it for any other share, it is recognized as a direct (simple) preferred share. The shares also can be bearer and registered.

*Bearer share* - type of shares include the anonymous holders of which are legally recognized as full-fledged shareholders of the company that possesses the respective shareholders' rights. (Investopedia, 2018) This paper does not contain any reference to the name and surname of its owner. The paper-bearer has all the rights that it certifies. The shares certified by the certificate belong to the owner of the certificate itself. Neither the company, nor the chairman of the meeting of shareholders entered in the company's register, nor the director, nor any other official of the company or an authorized person is not obliged to clarify the circumstances under which the certificate was placed by its owner, or raise the question of the validity or eligibility of any actions of the owner certificate of such action. The shareholder is the one who actually owns the share (the document itself - the share certificate).

Transfer of shares to the bearer of the new owner is done simply by presenting a certificate. At the time of the sale of bearer shares do not need to carry out the transfer, the inscription on its certificate or constitute supporting documents deal: the transfer process is the physical transfer of the certificate by the seller (the certificate bearer) to the buyer. When transferring shares to the consumer, the corresponding rights to the company are simultaneously transferred.

*Registered share* - contains a sign of the personality of the investor: just this individual and nobody else can be an investor of the organization. The names of such persons are entered in the register of the company's shareholders (holders of bearer shares are not registered in this register), and any transfer of shares from one owner to another occurs on the basis of a written document. (Investopedia, 2018) Information about the change of owners of registered shares is also reflected in the share register.

The primary market for securities is the market where the primary placement of securities takes place.

In fact, the primary market is the stock exchange, where stocks or bonds are placed immediately after their issue - the goods come here directly from the manufacturer.

The main functions of the primary securities market are:

- the release of the organization;
- accommodation and accounting;
- to maintain a balance between supply and demand. (Investopedia, 2018)

Buyers can decide for themselves how to dispose of acquisitions: keep them for dividends or resell them for profit. In this case, the initial distribution of shares is never definitive, in fact, it is only a starting point for the further movement of capital. Since most investors are interested in the dynamic increase their own savings, sooner or later, all the assets fall in the secondary marketplace. Any member of the exchange that has recently bought securities has the right to put them on sale (unless the issuer specifies special terms of sale).

Primary placement is of two types - private and public.

The private placement, in this case, a package of securities sold to a limited number of persons (usually one-two-institutional investors). The peculiarity of the private placement is the closed nature of the transaction. There are no requirements for disclosure of financial documentation. (Pricoa Capital Group, 2017)

### **3.1.3 Pros and cons of Investing in Stocks**

#### **Pros of Investing in Stocks**

*Opportunity for a substantial return.* Stocks have given one of the highest historical returns over the long - term among the various asset classes.

*Easily diversified:* Shareholders can ability to invest in a number of stocks in different industries, sectors, countries that provide with the variety of growth opportunities and diversify their risk.

*Income from dividends.* Profit from shares to investors comes through two main channels – income from capital gains and dividends. With the development of any company, the value of its shares, increases, and shareholders have an income from the capital increase. If the company receives unexpected profits, the investor receives dividends.

*Stocks are highly liquid.* Most of the stocks traded on the major exchanges can be easily bought and sold. The liquidity gives investors the flexibility to convert their shares into cash instantly. (AMADEO, 2018)

## **Cons of Investing in Stocks**

*Picking the wrong stock, high risk losing the value of your investment.* Investing in stocks is a risky tool for investing capital, and the degree of risk can be quite high. For example, in the case of bankruptcy of the company can lose 100% of invested funds.

*Volatile in the short term.* The stock market experiences violent up and down swings in prices, because of an overreaction of too good or bad news. The volatility makes stocks riskier.

*Investing can be time – consuming.* Analyzing the stock market simply takes more time an effort to pick the right stock as compared to choosing the right saving plan for the money. (AMADEO, 2018)

### **3.1.4 Exchange of Stocks**

The stock exchange is first and foremost a place where the seller and the buyer of securities find each other, where the prices for these securities are determined by the demand and supply for them, and the purchase and sale process are regulated by the rules and regulations, then there is a certain organized securities market. (KENNON, 2018)

As the goods in the market are securities – stocks, bonds, etc. and as costs of these goods – the rates of these securities. Total exchange in the market – goods pricing is depending on the demand and supply to them.

### **Members of Stock Exchange**

The main members in stock exchange are the following actors: issuers, investors, dealers, and brokers. (Money Matters, 2018) The issuer is a joint – stock company or a state (represented by the Republican or local authorities) that issues securities. Investor – a legal entity or an individual investing in securities. The broker is the intermediary at the conclusion of a transaction between buyers and sellers of securities, goods, currencies and other valuables. They act on behalf and for the account of customers, receiving payment for mediation a certain percentage of the transaction value. The dealer is a member of a stock exchange (person or firm) or a bank engaged in the purchase and sale of securities. Unlike brokers who perform transactions intermediation, the dealer acts on his own behalf and at his own expense. The dealer's income is formed due to the difference in rates of the seller and the buyer, and also due to changes in the exchange rates and securities in time. Dealers can also execute customer orders, informing them about the state of the market, issuing securities, etc.

### 3.1.5 Analysis of stocks

The movement of stock prices attracts analysts and investors for centuries. Analysts are trying to explain the past and the current market situation and movements of share prices while trying to predict the most accurate future value. The aim is to achieve profits through quality timing purchase and sale and the early detection of overvalued and undervalued titles.

Two basic approaches have been developed to examine and analyze the development of stock exchange rates:

- Fundamental analysis
- Technical analysis

*Fundamental analysis* is the most comprehensive and largest analytical approach that attempts to explain the movement of stock exchange rates. It deals with detailed exploration of basic and essential economic, political, social, geographic, demographic, factors and events that determine the development of stock exchange rates. (Drakopoulou, 2015) It does not only rely on business fundamental factors, but it also emphasizes the significant global and sectoral factors that they show the fact that each company is within a particular industry and within a certain economy, which is what affects the value of the company and also the value of its shares. Therefore, the fundamental analysis is to be carried out in three basic levels:

- Global Fundamental Analysis
- Sectoral Fundamental Analysis
- Company fundamental analysis

There are two procedures that a stock analyst can do if an analyst moves in the order in which the individual levels above are described, performs a fundamental analysis from above. If it does the opposite, it's bottom-up analysis. The advantage of this analysis is that it gives an answer to the question whether stocks are overvalued, undervalued or properly valued, but they are also trying to explain a much more important question. Why stocks are overstated, underestimated or correct award winning. As the only one, he tries to identify this and thus allows the selection of attractive titles to the stock picking portfolio.

*The global Fundamental analysis* aims to examine the influence of the whole economy and the market value analyzed shares. The sectoral fundamental analysis is primarily focused on examining the factors determining internal the value of the share in the sector.

This diploma thesis will deal with company analysis, which is the most important analysis of fundamental analysis. Company fundamental analysis focuses on the evaluation of critical business fundamentals characteristics that are relevant to the action and which create the intrinsic value of the share. Based on these calculations after analysts compare its value calculated with the current exchange rate on the market categorize shares for undervalued, overvalued or correctly valued. In the calculation, it's important to remember that almost every analyst will come out the other intrinsic value of the shares. It is due to the fact, that everyone used different assumptions in his calculation. In addition, the intrinsic value of the stock is variable and varies in time. In the medium to long term investment horizon is, therefore, necessary to change intrinsic share values. Conversely, short-term investment horizon can be considered a calculated intrinsic value stock for constant. Thus, intrinsic value is the correct price at which it should be at that time the shares traded. (Palat, 2010)

*Technical analysis* is a generally accepted approach to market research aimed at predicting the movement of prices (rates) and assuming that, the market has a memory, and therefore the future trends of the course are greatly influenced by the observed patterns in its past and present behavior.

The main prerequisites on which technical analysis is based are formulated in the form of the following three postulates (from the Dow theory):

- The market takes into account everything. In other words, the current price in the market is a consequence and an exhaustive reflection of all the driving impulses of the market.
- The movement of prices is subject to trends. The life of the market consists of alternating periods of growth and decline. Within each such period, the prevailing tendency develops, which acts until the movement in the opposite direction begins.
- History repeats itself. The fact that certain configurations on price charts have the property of appearing steadily and repeatedly, in different markets and at different time scales, is a consequence of the action of certain behavior stereotypes peculiar to the human psyche.

The forecast of the market movement, built with the help of technical analysis, is the first component of the market participant's behavior strategy. Based on the forecast made, a decision is made to open the position and how much to invest in it. Forecasting the price tells the trader what to do (buy or sell) strategy helps to determine when to do it, and the rules of money management suggest some of the funds invested in the deal. (J. Murphy, 1999).

*Dow's theory:*

The author of this theory is Charles Henry Dow. This is the first comprehensive theory involved in determining development trends of global stock markets. (Lim, 2015) Dow developed this theory at the turn of the 19th and 20th centuries. Later this method was developed and peaked in the 20s and 30s the 20th century. Dow's theory assumes that most shares behave in a similar way, while only a small sample of shares shows a different behavior. This idea makes it possible to represent the overall market with indexes. If the index enhances it by strengthening the odds of most of the shares, and vice versa. This results in technical analysts' assertion that determining the future trend of stock titles is the basis for successful investment. (Wiley, 2016)

Here are some of the basic ideas of Dow's theory:

- Indices reflect all relevant information. New messages that cannot be predicted in advance, the market is rapidly absorbed, and a new supply and demand are created.
- The indices, therefore, reflect the true state of the market situation.
- The future behavior of the stock market can be deduced from the past market situation.
- If each successive bottom and peak reach a higher level in the future, then we are talking about the upward primary trend (the bull market). Conversely, a bear market is called a market situation where each successive bottom and the top is at a lower level than the previous ones (downtrend).

*Bull market* - the first phase is triggered by transactions that are based on non-public information. The second phase involves sophisticated investors using publicly available information. In the third phase, a broad investment audience is involved as well, because there are enough optimistic reports.

*Bear market* 'the first phase is when the investment public is still buying, but well-informed investors are already sold in the second phase of declining stock prices and selling by institutional investors. The third phase is a phase in which stock exchange decreases and extensive sales orders are also being realized by the investment public.

Changing the Bull or Bear Market - if the next peak or bottom does not reach the level of the current one, the direction of the bull / bear trend is reversed. Trading volume should confirm the trend. If rates move in the direction of the primary trend, trading volumes should rise, and vice versa if the trend is weakening and there is a decrease in volumes. Dow's line is an important element in Dow's theory. This is a fluctuation of the exchange rate of maximum 5% from the mean value for at least 14 days. This fluctuation indicates the direction the course should move in the future. Changing trend must be confirmed by industrial and railway index, if not confirmed, so the situation must continue to analyze.



Dow's theory was the pioneer of technical analysis, and it also took into account factors of non-standard type. Current stock markets are fundamentally different from those analyzed by Dow. Dow's theory is currently unsuccessful in predicting the primary trend. The reason may signal that are coming too late, thus losing part of the gains from the initial phase. Furthermore, signals are not always infallible and cannot always be interpreted clearly, so this theory can provide poor and ambiguous information for decision making. Dow's theory applies primarily to the overall market and only analyzes the primary trend, with secondary and tertiary trends giving high risk to high-risk investors.

A modern technical analysis is divided into two basic groups of methods and instruments, namely graphical methods and methods based on technical indicators.

A trend is a general tendency for the development of the phenomenon to be explored over a long period of time. It is the result of long-lasting and permanent processes.

Price movements can be broken down by duration into short, medium and long-term trends.

Definition of individual trends:

**Long-term trend** (primary trend or major trend) - a crucial element of exchange rate movements. It is a long-lasting large upward or downward fluctuation that lasts from one to several years.

**Medium-term trend** (secondary trend or intermediate trend) - this trend lasts from 3 months to one year. During this trend, fewer transactions occur and therefore require lower transaction costs. In this trend, turning points occur several times a year. If these turning points are interpreted correctly, they allow a relatively high yield.

**Short-term trend** (tertiary trend or minor trend) - occurs in the time horizon of several days to four weeks. This is a short-term fluctuation of the stock exchange rate. This trend is difficult to identify against other trends. It is mostly influenced by random events. According to Dow, this trend is of no importance. (Murphy, 2018)

**Figure 1: Trend Comparisons**



**Source: StockCharts.com, 2018**

The primary trend can be divided by the evolution of the capital market price into the bull and bear market. These bull and bear markets have been further characterized in Dow's Theory Chapter. All market participants should have some information on all three trends in capital markets. Depending on the orientation for investments more or less focus on individual trends.

The trend line is a straight line connecting local maxima, respectively. local minima in price sequence. Perhaps a necessary condition is the existence of at least two local minimums, respectively two local maxima.

This is one of the basic techniques of graphical analysis and one of the most understandable techniques of technical analysis. Compared to its easy comprehension, a lot of practical experience is needed to use it properly. Correctly constructed trend lines reflect the price trend of the instrument and identify the support zone and the price movement resistance zone. These two zones are important for determining when to buy the instrument and when to sell it. If the price of the support line crosses, we sell the given instrument and vice versa, if the price crosses the resistance zone, then we buy the instrument. The break between the bull and bear market shows us consolidation region (where the reverse movement takes place).

***The upward trend line*** - it is a rising straight line connecting the first and last local minimum sequence prices.

**The downward trend line** - is declining line connecting the first and the last local maximum prices succession. (Yioryalis, 2005)

Side or horizontal trend occurs between two prices. It moves up from its low price to its high price and then it starts drifting down again. The most important thing to remember and the longer a stock spends in the sideways, the more powerful the trend is going to be after the stock breaks out.

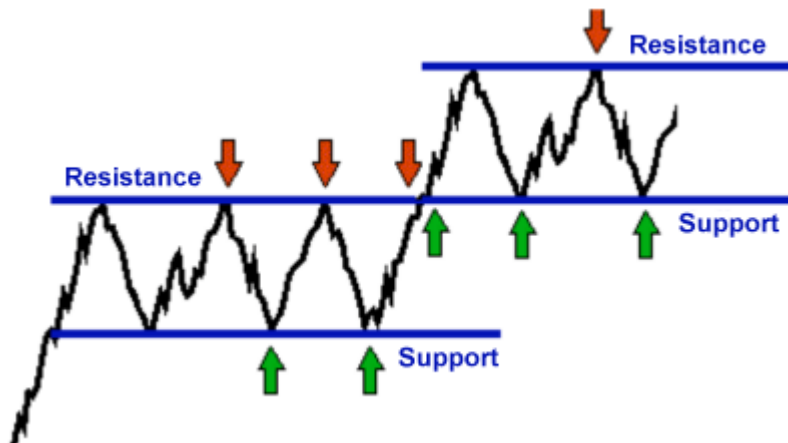
**Figure 2: Types of trends**



**Source: Gsimarkets.com, 2018**

A **support / resistance level** is in a technical analysis, where analysts are also working with the support level. This is a situation where investors in the market interrupt their sales of securities due to a large drop in their exchange rate. Securities exchange rate at the level of support boundaries is very cheap. Their offer is significantly higher than demand. An oversold market is characterized by the fact that it occurs near its border support. As soon as investors start to buy cheap securities, the exchange rate rises and continues to change over the course of time, from falling to rising. The opposite of the level of support is the resistance level. It is a certain ceiling that stops the rise of the exchange rate due to the large rate of growth and the high price of securities. Demand fell into a state where it is much higher than supply. An overbought market is in such a market, which is close to its level of resistance. Always after a while there is a mutual exchange of roles between the two boundaries after their breakthrough. (Wiley, 2016)

**Figure 3: Support and resistance level**



**Source: Investtech.com, 2018**

Technical indicator is a function that is based on the values of statistical indicators of trading (trading volume, prices, etc.), which is designed to analyze the behavior and intended to answer the question to continue or change the current trend in the market. Methods based on technical indicators can be divided according to different criteria. They can also use different prices, such as the opening price (open), the closing price (close). In this case, the technical indicators are commonly used in the form of graphs, superimposed or combined with price charts / instruments traded volumes. As intended technical indicators can be divided into two groups: trend indicators (confirms the trend) and oscillators (predicting the trend turns).

1) Trend indicators allow to define the direction and warn of a trend reversal. They are usually based on averaging and smoothing of price values. These indicators are not recommended for market forecasting, as their values are late. These indicators are good for determining the sustainability of an existing trend.

- Moving Average (MA)
- Bollinger Bands
- Alligator

Moving averages are one of the most used technical indicators. Moving averages are used to detect trends and serves to smooth out sharp fluctuations in the data. The disadvantage of moving averages is their delay behind the current data development. Generally, six types of moving averages are distinguished: simple, triangular, weighted, exponential, variable and

gliding regressions. We will find the indicator by comparing the average rate and the current rate. According to the long-term investment we choose the sample size. To determine the primary trend takes into account the pattern of the 200 business days, for analyzing medium trend is that a sample of 50 business days and short-term trend to analyze data from very few days.

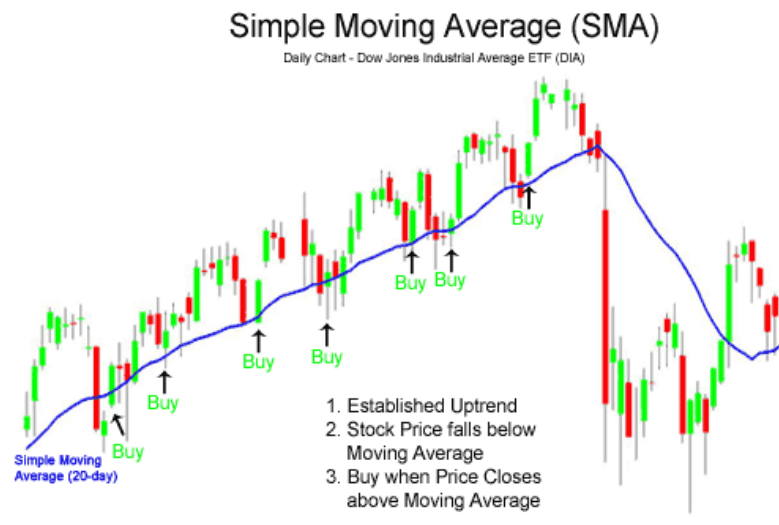
When detecting signals for sale or how to deal with the selected title, we study the behavior of the moving average and the current rate. We should not forget trading volume, because this is also important for the prediction of the course. If the daily curve crosses the average bottom-up curve, it is a buying signal. The course should continue to rise. If the daily curve crosses the average curve from top to bottom, it is a sales signal, so the rate should continue to decrease. As far as the decline in trade is concerned, accompanied by a slight increase in trade volumes, this decline is not very important. If the exchange rate drops to a large increase in business volumes, it is a warning signal where a large drop in the exchange rate is expected. Most experts, however, warn that moving-average investment is not to determine the exact moment when you sell or buy. Rather, it is an indicator that reassures investors about the trend. For finding the right moment to buy or sell it is necessary to use other indicators. In general, several indicators should be used to determine the optimum purchase time.

We can define different moving averages.

***Simple Moving Average*** - this is one of the simplest technical indicators with respect to the calculation. It is calculated as the sum of the sum of individual exchange rates for a predetermined period by the number of these values.

A disadvantage of this indicator is compared to considerations of ease of calculation data occurring before the selected period and assigning equal weight to old and new data, although the significance of these data is different. (Bauer, 1999)

**Figure 4: Simple Moving Average (SMA)**



**Source: Commodity.com, 2018**

**Weighted moving average** - a type of moving average linear distribution of weights. The current values have the highest weight, and the older the data is the weight decreases. The weighted moving average is the weighted arithmetic average of the exchange rates over a fixed period. This diameter always slides forward by one increment. This indicator, like the previous one, has a problem with not including data before the selected period. This indicator is one of the most responsive moving averages. (Bauer, 1999)

**Figure 5: Weighted Moving Average (WMA)**



**Source: Commodity.com, 2018**

**Exponential moving average** - this type of moving average is a weighted moving average. Compared to the previous moving average, it is spread exponentially, not linearly. The value assigned to the last rate is called the smoothing value. It follows from the above moving average period length, or it may provide the analyst. Thus, the sensitivity of the indicator can be influenced by the input parameters.

**Bollinger's bands** eliminate the serious lack of constant bands in percentage bands. For BB, bandwidth changes depending on stock volatility, and we can influence it by changing the multiple standard deviations. For Bollinger Bands are most commonly used simple moving average but can use other moving averages using the closing price. Bollinger bands are graphically represented as deviations above and below average stock prices. (Hartman, 2014) The prices at the bottom of the border indicate the overdue market and the prices at the upper limit mean the over-market.

2) **Oscillators** are indicators which monitor the market, current market overbuying or overselling and help us find turning points. Oscillators primarily give us impulses to buy or sell the stock if we have already determined its trend. Generally, oscillators are defined to perform oscillatory movement between two limiting points or states. Before to apply the oscillator to the market, better to clarify the limitations of the oscillator and what the oscillator says.

- MACD
- RSI
- Stochastic Oscillator

Moving Average Convergence / Divergence (MACD) - this is a trend indicator that tracks the convergence and divergence of moving averages. For this indicator using an exponential moving average. MACD is defined as:

$$\text{MACD}_t(n_1, n_2) = E_t(n_1) - E_t(n_2)$$

$\text{MACD}_t$  is an indicator of MACD at time  $t$

$E_t(n_i)$  is the exponential average of length  $n_i$  at time  $t$  calculated from the stock price,  $i = 1, 2$ .

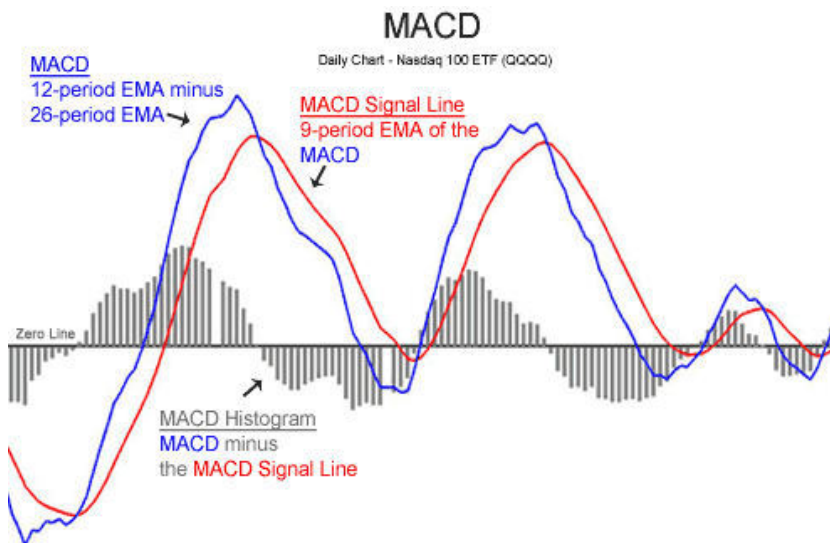
Furthermore, the signal curve is constructed by  $S_t = E_t(n_3)$

The histogram is calculated in a simple way.

$$\text{Histogram} = \text{MACD}_t - \text{St}$$

The length of the period is most often used for  $n_1 = 12$ ,  $n_2 = 26$  and the signal curve is constructed for a period of nine days. (Zex) MACD gives us a very high-quality signal a change in trend, but experts do not recommend using it in part trend manner. MACD generates two types of signals. The first signal is the growth or decrease of the MACD histogram. If the MACD histogram grows with price rises, the growing trend is confirmed. Conversely, if the stock price decreases while the histogram drops, the declining trend is confirmed. Purchase or sales signals are generated when the histogram grows or decreases. If the MACD histogram changes from descending to growing, a purchase signal is created. When changing the growing histogram to a declining, a sales signal is created.

**Figure 6: Chart of Moving Average Convergence / Divergence (MACD)**



**Source: Commodity.com, 2018**

Another MACD signal is a divergence signal. This is a divergence between price movements and histogram movement. This signal is considered by most analysts to be one of the strongest signals of technical analysis. MACD divergence and prices can be divided into bull and bear divergence. Bear's divergence is characterized by two price peaks where the second peak is higher than the first, but with the MACD histogram, the second peak is lower than the first. This situation is a signal to change the trend from bull to bear and create a sales signal. Conversely,



bullish divergence characterizes the fact that prices create new lows but the MACD does not create a new low. This signal marks the end of the bear market and the market is starting to grow.

**Relative Strength Index (RSI)** - This is one of the most well-known and most used oscillators. It is very popular mainly on the commodity market, but it can be used in other markets as well. This is a more complex type of oscillator to remove the three main oscillator deficiencies. (Bauer, 1999)

They are: oscillators require a dense time series. There is a problem with the correct choice of upper and lower boundaries, where a signal is made for purchase or sale when it is exceeded; Another problem is that most oscillators are often influenced by past data. These data can be the misleading indicator and then create the wrong signals. The RSI indicator is one of the slower indicators. Most often used as a signal to exit the market, but also can be used to identify trends and to provide signals for market entry. RSI indicator is defined by:

$RSI = 100 - [100 / (1 + (U / D))]$ , where

U = average positive change in price for x-days

D = average negative value changes in x-days.

RSI ranges from 0-100. RSI most commonly ranges between 30 and 70. These values are also overbought and oversold, but these values do not signal the purchase or sale of the share. They report the approaching bottom or peak and thus the trend change signal. RSI must be confirmed by other signals, so we can judge whether to sell or buy.

RSI indicator gives three types of trading signals. By importance, they are so-called bull and bear divergence, graph formation and level of RSI. The divergence between RSI and prices gives us the strongest RSI signal. They indicate when the trend is weak and ready for the reversal. Bullish divergence (buy signal) occurs when prices fall to a new lower down, but the indicator creates a shallow bottom. Analogously applies to bear divergence. Other signals are formations on the charts. Graphic formation on the charts served better results than band applied to the development of the course. Trend lines, head and shoulders formations and other graphics work well together with RSI. These formations generally one or two days in advance before the price

signal changes trendy lines. As a final signal level, RSI indicates an overbought / oversold market. If the RSI rises above its upper reference line, the market is overbought and enter the sales stage. If the RSI falls below its lower reference line, the market is oversold, and we can expect a reversal upwards. Buying according to this signal is worthwhile only if the signal appears in the weekly bull or bear market. Purchases should be made in a period when the RSI exits the border below the lower reference line or the border above the top reference line.

**Figure 7: Relative Strength Index (RSI)**



**Source: Commodity.com, 2018**

*Stochastic oscillator* follows the relationship of each closing price of the current high-low range. It consists of two curves: fast curves, called % K and slow curves, % D. Stochastic has a similar drawing as RSI, it is designed to move between 0 and 100, with reference lines plotted at levels 20 and 80. Stochastic emits similar signals as RSI: pre-ordering and pre-acquisition along with crossing curves and divergence.

**Figure 8: Stochastic Oscillator**



*Source: Commodity.com, 2018*

### **3.3 Concept of economic analysis**

Economic analysis plays an important role in improving and increasing the economic efficiency of the company or organization in strengthening its financial condition. It is an economic science that studies the economics of organization, its activities from the point of view of evaluating their work in carrying out business plans, evaluating the property and financial situation and in order to identify unused reserves for increasing the efficiency of the organization.

*The purpose of the economic analysis* is to give guidance picture of the true state of the company and the persons who are not directly employed in the enterprise, but interested in the financial condition, - the information necessary for impartial judgments, such as the rational use of invested in the enterprise additional investments.

Depending on the management functions, the analysis is divided into:

- Internal management analysis which is an integral part of management accounting, i.e. information and analytical support of enterprise management.
- External financial analysis is an integral part of financial accounting, which serves external users with information about the company's data by reporting public.

Analysis of economic activity of the enterprise is not confined to managers and related service enterprises, but also its shareholders, investors - to study the efficiency of resource use; banks - to assess credit conditions and determine the degree of risk; suppliers - for timely receipt of payments; tax services - for the implementation of the plan of receipt of funds in the budget.

### **3.3.1 Financial analysis**

The main sources of information for financial analysis are balance sheet, income statement and cash flow.

*The balance sheet* is a financial statement that shows the status of the assets in the company (assets) on one side and the sources of its coverage (liabilities) on the other by a certain date in monetary terms. It is based on the principle of equilibrium, which means that the item the sum of assets must equal the sum of liabilities, or that the assets consist of the sum of equity and debt. The balance sheet is prepared at a certain point in time, usually on the last day of the accounting period. (Gibson, 2009)

*The income statement* summarizes the successful work of the company. It is an overview of the costs, revenues and profit or loss of the company assembled a certain date. It gives us an overview of the financial, operating and an extraordinary result of the business, the profit before tax and, last but not least of the profit or loss. The data obtained from this report is an important basis for assessing corporate profitability. (Gibson, 2009)

*The cash flow statement* is an overview of cash (income) and its use (expense) compiled on a certain date. In practice, different accounting methods are used, but it is always necessary to realize that there is a difference between costs and expenses and between revenue and earnings. This statement can be assembled either by the direct or indirect way. (Gibson, 2009)

The direct form is calculated from the difference between all income funds produced and consumed all expenditure funds. In the indirect form, the starting point is the economic outturn and is further adjusted for expenditure and revenue.

The cash flow profile distinguishes between three core activities:

- operating activities,

- investment activity,
- financial activity.

### **Methods of financial analysis**

Financial analysis can be used by a wide variety of methods. They are determined on the basis of certain criteria:

- Effectiveness - Financial analysis must have a predetermined purpose,
- Costly - it is necessary to work out the work and also needs time,
- Reliability – to draw on reliable information and also depend on the quality of its use.

The better method is chosen, the more reliable conclusions are, the less the risk of erroneous decisions and most importantly there is a greater chance of success.

In the analysis of absolute indicators are used data from the financial statements. Comparing the data for the financial year to last year. In these figures, it follows the relative percentage changes. Analysis of absolute indicators included horizontal analysis and vertical analysis.

Horizontal analysis - a comparative analysis of annual changes in the financial statements in time series. This method is also known as "Trend Analysis". The horizontal one is called because the items of the financial statements are compared by the line between years. (Bernstein, 2000)

In the horizontal analysis (e.g. balance), it takes the pointer (line) and we will track its changes in two or more periods.

In the financial statements, the most common horizontal analysis of the balance sheet, profit and loss statement, cash flow report, changes in equity. When analyzing the balance, changes in the value of some assets and liabilities are monitored over the reporting period. In an analysis of profit and loss are considering changes in revenues, expenses and financial results.

The horizontal analysis uses two approaches:

- comparing changes in absolute terms (e.g. in USD),

- comparing changes in relative values (percentages).

The absolute indicator is the difference between the two items in the two comparative periods.

- absolute change = pointer (t) - pointer (t-1)

The percentage indicator is obtained by the ratio of the absolute indicator with the value for the initial period and the whole multiplied by 100.

t ..... end of the period,

(t-1) ..... beginning of the period.

A vertical analysis aims to study the structure of assets, liabilities, revenues, and costs of the enterprise. For example, the analysis of balance sheet assets reflects the share of fixed assets, intangible assets, inventories, receivables, and other assets in total assets of the company (vertical balance sheet analysis). After determining the percentage of each index in the total, the analyst has the opportunity to compare the company with other companies according to these indicators. (Bernstein, 2000)

For liabilities, structural analysis of own and external sources and maturity structure (long-term and short-term liabilities) is performed.

In an analysis of profit and loss, the vertical analysis used to identify the structure of costs and revenues, and the determination of net profit or revenue from sales and cost of sales.

**Net working capital characterizes** the value of working capital, free from short-term (current) liabilities, i.e. The proportion of working capital which is financed by long-term resources, which need not be used to pay off existing debt. The increase in net working capital means improving its liquidity and increasing its creditworthiness.

Net working capital=Current assets - Short - term liabilities.

### **Ratio indicators:**

In the process of financial analysis, the system of performance indicators is used. They can be systematized by some characteristics:

- based on the provision of framework measures - cost and natural,
- Depending on how the phenomena and operations are measured - both quantitative and qualitative,
- based on the use of individual performance or their relationship - volume and specific.

Specific financial indicators include financial ratios that are widely used in analytical work. They are divided into five groups, each of which includes several common key parameters. Each group evaluates the enterprise from another perspective:

- Profitability,
- Liquidity,
- Asset turnover,
- Financial leverage. (Peterson, 1999)

### **3.3.1.1 Profitability indicators**

Profitability is a measure of profit. This is measured by the whole system of ratios that characterize the performance of the enterprise as a whole, the profitability of individual activities (production, business, investment). Profitability can be determined as an indicator of the company's performance, it is expressed in the amount of profit and characterizes the rate of return of the means used in the production. (Gibson, 2009)

- **Return on Assets (ROA)**

Return on Assets characterizes the ability of an enterprise to effectively use its assets to generate profits. In addition, this ratio reflects the average return received from all sources of equity (equity and debt). (Higson, 2006)

**Return on Assets = Net profit / Assets**

- **Return on Equity (ROE)**

Return on equity (ROE) - Net profit compared to the equity of an enterprise is an important indicator of the financial impact for each investor, the owner of the business, showing how the capital invested in the enterprise was effectively utilized. Unlike similar indicators "return on assets", which shows the efficiency of capital (or assets) organization, but only the part that belongs to the owners of the company. (Higson, 2006)

**Return on Equity = EBIT / Assets**

- **Return on Sales (ROS)**

Return on sales is the financial measure that characterizes the share of profit in the company's income. This ratio shows what percentage of income brings profit. To calculate this indicator, you need to divide the net profit of the company's sales. (Higson, 2006)

This indicator shows how much USD earned the company from 1 USD of sales.

**Return on Sales = EBIT / Sales**

### **3.3.1.2 Liquidity ratios**

The financial status of the company in terms of short-term estimates in terms of liquidity, in the most general form, is characterized by whether the timely and full payments are made for short-term obligations to the contracting parties. Companies repay the short-term debt in different ways. However, the situation where part of the assets sold is used to repay short-term liabilities is not normal. That is why it is sensible to compare short-term assets and short-term liabilities when we talk about the liquidity of an enterprise as a characteristic of its current financial situation and we assess its potential ability to pay to its creditors through current operations. (Chowdhry, 2007) The main feature of liquidity is the surplus (in value) of current assets over short-term liabilities. The higher the surplus, the better the financial situation of the company.

For each of the indicators are given "recognized" the value that professional publications often given as recommended or desirable.



- **Cash ratio**

The liquidity ratio (cash ratio) indicates the ratio of the company's most liquid assets - short-term financial assets to short-term liabilities. The ratio expresses sufficient liquid assets for a quick settlement of current liabilities, which characterizes the "immediate" payment capability of the organization. (Chowdhry, 2007)

The most common value for instant pointers is the reference value of 0.2 or more. However, too high ratio indicates a disproportionately high amount of free cash that could be used for business development.

**Cash liquidity = Cash / Short-term liabilities**

- **Quick liquidity ratio**

The financial ratio is the ratio of highly liquid assets to short - term liabilities (current liabilities). The data source is the company's balance sheet, is similar to current liquidity, but the composition of the assets does not include supplies. The higher the quick ratio, the better the company's financial situation. If the value of the coefficient is less than 1, liquid assets do not cover short-term liabilities and hence there is a risk of loss of ability to repay, which is a negative signal to investors. But the range may be varied for different sectors. (Chowdhry, 2007)

**Quick liquidity = (Curr. Assets – Inventories) / Liabilities (Short-term)**

- **Current ratio**

Expresses the ratio of current assets to short - term liabilities. This allows to determine how many times the current assets cover short-term liabilities of the enterprise, or even how many units of current assets is covered by one-unit short-term liabilities. (Chowdhry, 2007) The value of the under-norm coefficient (less than 1) indicates that the organization is likely to have difficulty paying its current liabilities.

Too high a ratio of current ratio is also not desirable as it may reflect the lack of effective utilization of current assets. In any case, lenders prefer to see a higher rate as a sign of a stable position of the company.

**Current liquidity = Curr. Assets / Liabilities (short-term)**

### **3.3.1.3 Indicators of Activity**

Activity indicators enable us to analyze how effectively the company uses its financial resources.

Among the activities include indicators of total assets turnover, inventory turnover, receivables turnover, the turnover period of receivables, payables turnover. (Peterson, 1999)

- **Total asset turnover ratio**

It shows how many times during the reporting period a complete cycle of production and circulation took place, resulting in a corresponding profit in the form of profit or how many sales units each currency brought to the asset. This ratio varies depending on the industry because it reflects the characteristics of the production process.

**Turnover of Assets = Revenues / Assets**

- **Inventory turnover**

The inventory turnover period is the time that elapses between the purchase of the material and the sale of the product. Represents the average number of days that inventories are tied to the stock. It is calculated as a proportion of inventories and average daily sales. A reasonable value is 30 days (1 month). (Peterson, 1999)

**Inventory turnover = Revenues / Inventories**

- **Receivables turnover ratio**

Indicators of the rate of turnover of receivables are obtained by dividing the proceeds from the sale of products by the average amount of the receivable. The value of the receivable turnover rate determines how many times the average receivables are converted into cash proceeds. (Peterson, 1999)

**Receivable turnover = Sales / Average Account Receivable**

### **3.3.1.4 Financial Leverage Ratios**

Financial leverage ratios sometimes called debt ratio or equity ratio, which measures the value of equity by analyzing the total debt of the company. In other words, it shows how much of the company's assets are belong to shareholders than to creditors. If the shareholders own more assets, the company is less leveraged, hence when creditors hold more assets then its highly leveraged. This measurement is very important for investors and gives and better understanding if it is worth to invest in the company. (Peterson, 1999)

- **Total debt to total assets**

Total debt is calculated by dividing foreign capital by total assets. The total indebtedness indicator indicates whether an entity prefers own or foreign funding sources. Values exceeding 1 means that an enterprise prefers foreign sources of funding, while low ratio shows that company's asset funding from equity. (Peterson, 1999)

**Debt ratio = Total Liabilities / Total Assets**

- **Debt to Equity Ratio**

It measures the company's financial leverage and expresses how many times the size of the debt exceeds the value of total capital. With a large value, the organization loses financial independence, and its financial situation is very unstable. The higher debt to equity ratio shows that more creditor financing and fewer investors. For these organizations, it is more difficult to obtain additional credits. (Peterson, 1999)

**Debt equity ratio = Liabilities / Equity**

- **Equity Ratio**

The equity ratio shows how much of the total assets are owned by the investors. The higher ratio of equity indicates that the company is worth to invest, as other investors are willing to invest, and for creditors it shows that its less risky and tenable for loans.

**Equity Ratio = Equity / Total Assets**

### 3.3.1.5 Market Value Ratios

Market value ratios are used to evaluate the share price of the company's stock market. The ratio of the market value demonstrates how the market evaluates the past and future outlook of the company. They are particularly important for both current and potential investors, which wants to know of any rate of return is expected in the future from the investment. (Bragg, 2014)

The ratios used will give to investors a better understanding of if share prices are underpriced or overpriced.

- **Book value**

Book value is calculated as a stockholders' equity, divided by the number of outstanding shares.

The value shows the profit achievement of the company which is split between dividends, taxes, and reinvestment. The high book value comparing to stock price occurs it shows that stock is under - valued. When the low book value compared to stock price occurs it seems that stock price is over - valued.

**Book Value = Equity / number of Outstanding shares**

- **Earnings Per Share (EPS)**

Earnings Per Share is a measurement of the profit that company has generated. The higher EPS shows that company is more profitable and has enough profits to distribute among stakeholders.

**Earnings per share = (Net Income – Preferred dividends) / Number of issues ordinary shares.**

- **Price earnings ratio (P/E)**

It shows the relationship of company's market price and earning per share. Price earning is important for investors while valuing the company, as it shows how profitable company is currently and how it's going to be in the future. If the P/E remains constant, it can be interpreted as number of years to pay back the amount paid for the share.

**Price earnings ratio = Share price / Earnings per Share**

## 4 Practical part

### 4.1 Description of Amazon.com Inc.

Amazon is one of the first Internet services aimed at selling real goods of mass demand, the world's largest turnover company selling a variety of goods and services via the Internet.

The company was founded in July 1995 by American entrepreneur Jeff Bezos and specialized in the sale of books. Now Amazon offers 34 categories of products, including e-books, consumer electronics, children's toys, food, household goods, sports goods, auto parts and much more.

At the moment there are 8 branches of Amazon: in Canada, China, Japan, Germany, France, Spain, Italy, and the UK. They differ from each other in the cost of delivery, the assortment of products and the interface language. Amazon remains the largest and most popular in the US, but in the last few years, branches in Germany and the UK have begun to gain popularity no less than the main unit. In general, such popularity is growing among the CIS countries (first of all, this is due to the cheaper delivery of purchased goods than from the US).

Today, Amazon is the main competitor of the eBay auction, both on the assortment of goods, and at prices.

The seller of goods can be, as the company Amazon, and merchants, for a fee exhibiting their goods on its sites. The guarantor in these cases is Amazon: they comprehensively check the sellers, accept payments, track the fulfillment by the seller of their obligations and guarantee the possibility of returning the goods. Therefore, purchases here among Internet users from around the world are considered relatively safe.

Amazon does not have physical stores and all business exchanges on it are made only through the Internet. Therefore, Amazon manages to keep the prices of goods sold at a very low level.

**CEO:** Jeff Bezos

**Share price:** AMZN (NASDAQ) 1,789.30 \$ (October 22, 2018)

**Types of shares:** common stock

**Headquarters:** Seattle, Washington

**Founders:** Jeff Bezos

**Industry:** Online shopping

**Number of outstanding shares:** 487,741,000.00 (October 22, 2018)

**Subsidiaries:** A9.com, AbeBooks, Amazon Air, Amazon Books, Alexa Internet, Amazon Lab126, Amazon Robotics, Amazon Studios, Whole Foods Market, Zappos, IMDb and etc.

**Table 1: The main direct holders of Amazon.com Inc. shares on 14 November 2017**

<b>Direct Holders</b>	<b>Number of shares</b>
BEZOS JEFFREY P	78 893 280
JASSY ANDREW R	82 727
BLACKBURN JEFFREY M	55 028
ALBERG TOM A	17 114
BROWN JOHN SEELY	14 444

**Source: Finance.yahoo.com, 2018**

**Table 2: The top institutional holders of Amazon.com Inc. on 29 June 2018**

<b>Holder</b>	<b>Number of shares</b>
Vanguard Group, Inc. (The)	29 082 740
Blackrock Inc.	25 402 494
FMR, LLC	17 245 226
Price (T. Rowe) Associates Inc	15 990 283
State Street Corporation	15 227 463

**Source: Finance.yahoo.com, 2018**

The number of employees as shown in table 3 are increasing every year. It reached half a million of employees in the year 2017.

**Table 3: Number of Amazon.com Inc. employees in 2013-2017**

<b>Year</b>	<b>Number of employees</b>
2013	117 300
2014	154 100
2015	230 800
2016	341 400
2017	566 000

**Source: Statista.com, 2018**

## **Operation principles of Amazon.com, Inc.**

The priorities of the company are customer requirements and production of the corresponding products. Products from Amazon are focused on a specific buyer. Amazon focused on customers with average and high income. The main principle - to the customer the best of everything.

The technology used by the company, allows Bezos to provide the involved and e-business to organizations, valuable information about customers, because when making the order all information about the tastes and preferences of the customer recorded in the database. Thus, Amazon's site serves as a kind of questionnaire with information about the clients of the company's partners, and this is extremely necessary when researching the market.

Amazon's goal has not changed since when it started - to attract as many buyers to their site and sell as many different goods and services as possible. Thus, the main goal of Bezos is not to become the largest participant in any market, but to become the largest electronic store where you can buy everything.

An organization can achieve its objectives in the long term, if it is clearly built an action plan and set objectives to achieve this goal. The process of drafting the plan should consist of the following items:

- clearly define the goal;
- answer the questions: what we want to achieve and what we have already achieved?
- identify the most important tasks;
- identify short-term tasks;
- define a strategy for each task. For Amazon, these tasks are defined as: "so that customers enjoy shopping", "improve technology", "reliability of deliveries";
- identify the tactics - clear guidance aimed at solving tasks.

The concept of "product value" combines several factors: price, quality of goods, delivery speed, customer service and new technologies. During the work with clients, Amazon takes into account all five of the above.

Main factors of Amazon.com Inc.'s success is:

- **Customer focus**

Amazon has been improving all the time. The company is simply obsessed with customer focus. For example, Amazon.com was the first to introduce such an option, as the customer reviews on this product. Practice has shown that reviews only increase sales. The most popular feature of the site is that customers can post reviews of the purchased goods and evaluate them. This helps to select the desired thing or item of good quality.

- **Diversification**

Another factor in the success of the company is that it did not focus on selling books. Today, Amazon is not just the biggest bookstore, but the store with the richest selection of products.

- **HR Policy**

The company believes that success can be achieved by small groups. That is the reason why Amazon does not have particularly complex vertical hierarchy in management. All based around small groups. It needs only the best people.

- **Long-term perspective**

The company has always centered on the long - term perspectives.

- **Informational content**

Customers of the company are given the opportunity to negotiate the necessary information relating to the purchase of any product, whether it be a book, or drives, or any other items. Consumers are also informed about the terms of delivery, terms and price, and can even send a list of products belonging to this category of products. (Snap Agency, 2018)

## **4.2 Fundamental analysis**

### **4.2.1 Horizontal analysis**

Horizontal analysis compares the results from the annual financial reports. In other way it can be called analysis by line. It is necessary to have the long-time series (more than two periods), as a period might be taken on quarterly basis of financial statements or on yearly basis, which will make this method more informative and sufficient.

For calculation the relative change of the two specified periods (yearly basis) t and t-1 is this formula can be used:

Percentage change = (indicator t- indicator (t-1)) \* 100/indicator(t-1).

#### **4.2.1.1 Horizontal analysis of Balance Sheet**

In table 4, there are compared the data from the assets of the balance sheet for five years in horizontal view – 2012 year with 2013, 2013 with 2014, 2014 with 2015 and 2015 with 2016. Comparison of data is done by relative terms in percentage and by absolute terms in USD dollars of assets from Amazon's balance sheet. The horizontal analysis shows an increase in total assets until the year 2015. In the year 2014, their total assets were grown by 35.7 % and in 2015 it was just by 18.8%. The biggest decrease in the item of cash and cash equivalents by 9.2% (1 333 mil.



USD) in 2015. In addition, the change was in net receivables where in the year 2014 it was 17.7% and it decreased by 0.7% in 2015.

In 2013 compared to 2012 the majority of assets were increased in long term assets and in the item of cash and cash equivalents. Other short - term investments, net receivables, and inventory were decreased in 2014.

In 2016 compared to 2015 there were decreases in inventory by 11.9% and in goodwill just by 0.7%.

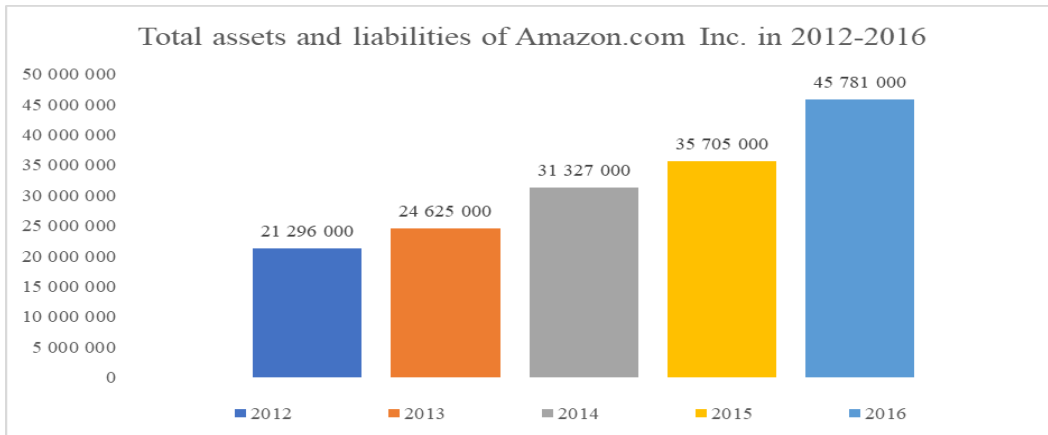
**Table 4: Horizontal analysis of Amazon.com Inc. Assets (2012-2016)**

	2013/2012		2014/2013		2015/2014		2016/2015	
Current Assets	in \$	in %	in \$	in %	in \$	in %	in \$	in %
Cash and Cash Equivalents	574 000	7.1	5 899 000	68.1	1 333 000	9.2	3 444 000	21.7
Short-Term Investments	425 000	12.6	-930 000	24.5	1 059 000	37.0	2 729 000	69.7
Net Receivables	1 403 000	41.7	845 000	17.7	42 000	0.7	2 685 000	47.5
Inventory	1 380 000	22.9	888 000	12.0	1 944 000	23.4	1 218 000	11.9
Deferred income taxes	-453 000	-100.0	0		0		0	
<b>Total Current Assets</b>	<b>3 329 000</b>	<b>15.6</b>	<b>6 702 000</b>	<b>27.2</b>	<b>4 378 000</b>	<b>14.0</b>	<b>10 076 000</b>	<b>28.2</b>
Fixed Assets	3 889 000	55.1	6 018 000	55.0	4 871 000	28.7	7 276 000	33.3
Goodwill	103 000	4.0	664 000	25.0	440 000	13.3	25 000	0.7
Other Assets	283 000	17.2	962 000	49.8	553 000	19.1	1 278 000	37.1
<b>Total Assets</b>	<b>7 604 000</b>	<b>23.4</b>	<b>14 346 000</b>	<b>35.7</b>	<b>10 242 000</b>	<b>18.8</b>	<b>18 655 000</b>	<b>28.8</b>

**Source: own calculations. Data from annual reports of Amazon.com Inc., 2018**

The figure 9 shows the increase of total assets and liabilities of Amazon.com Inc. between the years 2012-2016. From 21 296 million USD in 2012 it grew to 45 781 million USD. For the five years the total amount of assets and liabilities are increased twice.

**Figure 9: Total assets and liabilities of Amazon.com Inc (2012-2016)**



**Source: own calculations. Data from annual reports of Amazon.com Inc., 2018**

Liabilities and shareholder's equity are the second part of the balance sheet and it's shown in the table 5.

**Table 5: Horizontal analysis of Amazon.com Inc. Liabilities and Stockholder's equity**

	2013/2012		2014/2013		2015/2014		2016/2015	
	in \$	in %	in \$	in %	in \$	in %	in \$	in %
<b>Accounts Payable</b>	2 819 000	14.8	4 445 000	20.4	4 503 000	17.1	8 279 000	26.9
<b>Other Current Liabilities</b>	1 159 000		664 000	57.3	1 295 000	71.0	1 650 000	52.9
<b>Total Current Liabilities</b>	<b>3 978 000</b>	<b>20.9</b>	<b>5 109 000</b>	<b>22.2</b>	<b>5 798 000</b>	<b>20.6</b>	<b>9 929 000</b>	<b>29.3</b>
<b>Long-Term Debt</b>	107 000	3.5	5 074 000	159.0	-38 000	-0.5	-533 000	-6.5
<b>Other Liabilities</b>	1 965 000	86.3	3 168 000	74.7	1 839 000	24.8	3 358 000	36.3
<b>Total Liabilities</b>	<b>6 050 000</b>	<b>24.8</b>	<b>13 351 000</b>	<b>43.9</b>	<b>7 599 000</b>	<b>17.4</b>	<b>12 754 000</b>	<b>24.8</b>
<b>Capital Surplus</b>	1 226 000	14.7	1 562 000	16.3	2 259 000	20.3	3 792 000	28.3
<b>Retained Earnings</b>	274 000	14.3	-241 000	-11.0	596 000	30.6	2 371 000	93.2
<b>Other Equity</b>	54 000	22.6	-326 000	176.2	-212 000	41.5	-262 000	36.2
<b>Total Stockholder's Equity</b>	<b>1 554 000</b>	<b>19.0</b>	<b>995 000</b>	<b>10.2</b>	<b>2 643 000</b>	<b>24.6</b>	<b>5 901 000</b>	<b>44.1</b>
<b>Total Liabilities &amp; Equity</b>	<b>7 604 000</b>	<b>23.4</b>	<b>14 346 000</b>	<b>35.7</b>	<b>10 242 000</b>	<b>18.8</b>	<b>18 655 000</b>	<b>28.8</b>

**Source: own calculations. Data from annual reports of Amazon.com Inc., 2018**

The growth of total assets in the current period is also occurred in the same growth of liabilities and stockholder's equity by 28.8 % or 18 655 million USD in 2016.

The total stockholder's equity in 2016 grew by 44.1% or 5 901 million USD, while in the year 2013 compared to 2012 it was only 19%.

By the end of the year 2016 highest increase was in retained earnings of the company by 93.2% comparing to 2015 and in the beginning the analysis year it was only 14.3% or 247 000 USD.

Between the year 2014 and 2013 the highest increase was the growth of long – term debt by 159% or 5 074 million USD, but next following years it sharply decreased by – 6.5% in 2016 compared to the year 2015.

#### 4.2.1.2 Horizontal analysis of Income Statement

The calculated data of income statement is shown in absolute and relative terms in the table 6. In the years 2012/2013 the total revenue by 21.9% or by 13 359 million dollars. In the following years revenue increased, and in the final year of analysis it was grew by 27.1%.

Such tendency followed in cost of revenue where from the beginning of analyzing years 2012/2013 it was 17.9% and final year of analysis it increased by 23.2% or by 16 614 million dollars. During the observed period the most significant increase was in operating income by 1154% or by 2 million dollars.

The net income of Amazon.com Inc.'s increased from 2015 to 2016 by 1 775 million dollars.

**Table 6: Horizontal analysis of Amazon.com Inc. Income Statement (2012-2016)**

	2013/2012		2014/2013		2015/2014		2016/2015	
	in \$	in %	in \$	in %	in \$	in %	in \$	in %
<b>Total Revenue</b>	13 359 000	21.9	14 536 000	19.5	18 018 000	20.2	28 981 000	27.1
<b>Cost of Revenue</b>	8 210 000	17.9	8 571 000	15.8	8 899 000	14.2	16 614 000	23.2
<b>Gross Profit</b>	5 149 000	34.0	5 965 000	29.4	9 119 000	34.8	12 367 000	35.0
<b>Sales, General and Admin.</b>	5 080 000	35.2	6 532 000	33.5	7 064 000	27.1	10 414 000	31.4
<b>Operating Income</b>	69 000	10.2	-567 000	-76.1	2 055 000	1154.5	1 953 000	87.5
<b>Add'l income/expense items</b>	-58 000	145.0	19 000	-19.4	-127 000	160.8	396 000	-192.2
<b>Earnings Before Interest and Tax</b>	11 000	1.7	-548 000	-84.7	1 928 000	1947.5	2 349 000	115.9
<b>Interest</b>	49 000	53.3	69 000	48.9	249 000	118.6	25 000	5.4

<b>Expense</b>								
<b>Earnings Before Tax</b>	-38 000	-7.0	-617 000	-121.9	1 679 000	-1512.6	2 324 000	148.2
<b>Income Tax</b>	-267 000	-62.4	6 000	3.7	783 000	468.9	475 000	50.0
<b>Equity Earnings/Loss Unconsolidated Subsidiary</b>	84 000	-54.2	108 000	-152.1	-59 000	-159.5	-74 000	336.4
<b>Net Income-Cont. Operations</b>	313 000	802.6	-515 000	-188.0	837 000	-347.3	1 775 000	297.8
<b>Net Income</b>	313 000	802.6	-515 000	-188.0	837 000	-347.3	1 775 000	297.8
<b>Net Income Applicable to Common Shareholders</b>	313 000	802.6	-515 000	-188.0	837 000	-347.3	1 775 000	297.8
<b>Basic</b>	1	766.7	-1	-186.7	2	-346.2	4	291.4
<b>Diluted</b>	1	755.6	-1	-188.1	2	-340.4	4	292.0
<b>Basic</b>	4	0.9	5	1.1	5	1.1	7	1.5
<b>Diluted</b>	12	2.6	-3	-0.6	15	3.2	7	1.5

**Source: own calculations. Data from annual reports of Amazon.com Inc.,2018**

Basic and diluted earnings per share have almost the same changes for the following analyzing years. The basic earnings per share increased by 291.4% in 2016 compared to 2015. And diluted earnings per share increase percentage was almost exactly the same as for basic, by 292%. But before the percentage changes in percentage for basic and diluted earnings per share were negative.

#### **4.3.2 Vertical analysis**

Vertical analysis is the percentage of each individual item which is represented as a proportion of the total account.

##### **4.3.2.1 Vertical analysis of Balance Sheet**

This table 7 describes the total assets and their individual item's share. Between the analyzing years 2012 till 2016, the largest share in total assets was from fixed assets and cash and cash equivalents, which is in the last year of analysis in 2016 it was small decreasing in cash and cash equivalents 23.18%, and significant increase for fixed assets - 34.91%.

The lowest contribution for total assets was in goodwill and other assets, which is approximately around 5% or 6 % in 2016.

In 2012 and in 2013 the lowest contribution to the company had the deferred income taxes – 1.39% in 2012 and other assets – 5.09% in 2012 and 4.81% in 2013. As one of the largest shares in the same year had cash and equivalents – 24.83% (in 2012) and 21.56% in 2013, and fixed assets – 21.69% in the year 2012, 27.26% in 2013. Total current assets had the 65.42% in 2012 and 61.32% in 2013 on share of Total assets.

In the following years the highest shares had fixed assets around 31-33% and cash and cash equivalents had the second highest significance 24-26% share of Total assets.

**Table 7: Vertical analysis of Amazon.com Inc. Balance Sheet (2012-2016)**

	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016
<b>Cash and Cash Equivalents</b>	24.83	21.56	26.71	24.54	23.18
<b>Short-Term Investments</b>	10.33	9.43	5.25	6.05	7.97
<b>Net Receivables</b>	10.33	11.87	10.30	8.73	10.00
<b>Inventory</b>	18.53	18.45	15.23	15.82	13.74
<b>Deferred income taxes</b>	1.39	0.00	0.00	0.00	0.00
<b>Total Current Assets</b>	<b>65.42</b>	<b>61.32</b>	<b>57.48</b>	<b>55.15</b>	<b>54.89</b>
<b>Fixed Assets</b>	21.69	27.26	31.13	33.73	34.91
<b>Goodwill</b>	7.84	6.61	6.09	5.81	4.54
<b>Other Assets</b>	5.06	4.81	5.31	5.32	5.66
<b>Total Assets</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Source: own calculations. Data from annual reports of Amazon.com Inc., 2018**

The table 8 shows the vertical analysis of liabilities and stockholders. During the analyzing years the highest impact on it had the total liabilities which was fluctuating around 70-80%.

The main items that are contributed in 2016 except total liabilities are accounts payable which is 46.82% and capital surplus - 20.61%. The lowest share of total liabilities & equity had retained earnings – 5.89% and long - term debt – 9.23% in 2016. Moreover, it was a negative contribution of treasury stock – (2.20%) and other equity – (1.18%) in a year 2016.

From the beginning of the analyzing years the biggest share had Accounts payable and Capital Surplus, which were decreasing from 58.37% in 2012 to 47.52% in 2015 and 25.64% in 2012 to 20.69% in 2015. The smallest impact with negative contribution had Treasury stock and other equity with – (2.84%) and (1.12%) share of Total liabilities & equity.

**Table 8: Vertical analysis of Amazon.com Inc. Liabilities and Stockholder's equity (2012-2016)**

	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016
Accounts Payable	58.37	54.34	48.19	47.52	46.82
Other Current Liabilities	0.00	2.89	3.34	4.82	5.72
<b>Total Current Liabilities</b>	<b>58.37</b>	<b>57.22</b>	<b>51.53</b>	<b>52.34</b>	<b>52.54</b>
Long-Term Debt	9.47	7.95	15.16	12.71	9.23
Other Liabilities	6.99	10.56	13.60	14.28	15.12
<b>Total Liabilities</b>	<b>74.84</b>	<b>75.73</b>	<b>80.29</b>	<b>79.33</b>	<b>76.88</b>
Common Stocks	0.02	0.01	0.01	0.01	0.01
Capital Surplus	25.64	23.84	20.43	20.69	20.61
Retained Earnings	5.89	5.45	3.58	3.93	5.89
Treasury Stock	-5.64	-4.57	-3.37	-2.84	-2.20
Other Equity	-0.73	-0.46	-0.94	-1.12	-1.18
<b>Total Equity</b>	<b>25.16</b>	<b>24.27</b>	<b>19.71</b>	<b>20.67</b>	<b>23.12</b>
<b>Total Liabilities &amp; Equity</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: own calculations. Data from annual reports of Amazon.com Inc., 2018

#### 4.3.2.2 Vertical analysis of Income Statement

In the vertical analysis of income statement, it was defined that during the observed periods the largest contribution of the company had cost of revenue. In 2012 it was 75.25% and it had decreased to 64.91% in 2016, it means the positive change, as they earned more profit and decreased their costs. Amazon.com Inc.'s sales, general and administrative expenses and operating income also increased from 2012 to 2016. At the same time there was a progressive growth on net income increase from negative contribution – (0.06%) in 2012 to positive share – 1.74% in 2016.

**Table 9: Vertical analysis of Amazon.com Inc. Income Statement (2012-2016)**

	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016
<b>Total Revenue</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Cost of Revenue	75.25	72.77	70.52	66.96	64.91
Gross Profit	24.75	27.23	29.48	33.04	35.09
Sales, General and Admin.	23.65	26.23	29.28	30.95	32.01
Operating Income	1.11	1.00	0.20	2.09	3.08
Add'l income/expense items	-0.07	-0.13	-0.09	-0.19	0.14
Earnings Before Interest and Tax	1.04	0.87	0.11	1.89	3.22
Interest Expense	0.15	0.19	0.24	0.43	0.36
Earnings Before Tax	0.89	0.68	-0.12	1.47	2.86

<b>Income Tax</b>	0.70	0.22	0.19	0.89	1.05
<b>Equity Earnings/Loss Unconsolidated Subsidiary</b>	-0.25	-0.10	0.04	-0.02	-0.07
<b>Net Income-Cont. Operations</b>	-0.06	0.37	-0.27	0.56	1.74
<b>Net Income</b>	-0.06	0.37	-0.27	0.56	1.74
<b>Net Income Applicable to Common Shareholders</b>	-0.06	0.37	-0.27	0.56	1.74

Source: own calculations. Data from annual reports of Amazon.com Inc., 2018

### 4.3.3 Net working capital

Net working capital measures the short – term liquidity of the company. In general, it represents ability of the company to liquid its assets. The figures in selected period are positive, which means that Amazon.com Inc. has enough funds to pay current liabilities (short – term debt). In comparison of 2015 in 2016 the amount of net working capital increased by 1 965 mln. USD. Comparing with analyzing years from 2012-2016. The higher amount was in 2014, which was 3 238 mln. USD.

**Table 10: Net working capital of Amazon.com Inc. (in mln. USD)**

<b>Year</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Net working capital</b>	2 294	1 645	3 238	1 818	1 965

Source: own calculations. Data from annual reports of Amazon.com Inc., 2018

### 4.3.4 Profitability analysis

The profitability analysis of Amazon.com was done through ROA (return on assets). ROE (return on equity). ROS (return on sales). ROI (return on investment). gross profit margin and operation profit margin. The analysis is covering the period 2012-2016 and shown in the table 11. As Amazon.com Inc. relates to the Retails industry the results will be compared with the same industry.

Gross profit margin of Amazon is growing steadily over past few analyzing years. It's higher than its main retail competitors, which has gross profit margin around 20-25%. In the beginning of analyzing year the operating margin of Amazon was low. because of the low pricing strategy. and investments into various strategies makes it low. But it has increased since then and in 2016

it was 3.08%. Net profit margin was positive – 1.74% comparing to 2012, when it was – (0.06%).

Return on assets shows how well the company utilizes its assets to generate the return. The ROA of Amazon is 2.84%. which is lower than average in retail industry, which is 8%. Comparing to last few analyzing years. It shows the higher value and its increasing. which is good sign for the company.

Return on equity is measures profit relatively to its shareholders’ equity. Amazon.com Inc generated a below average ROE of 12.29% in 2016, while its industry returned 22%. It implies 0.13\$ returned on every 1\$ invested. Return on investment shows gain or loss generated on an investment relative to the amount of money invested. The ROI in 2016 was 25.49%, which describes that for 1\$ invested they earned 25 cents.

**Table 11: Profitability indicators of Amazon.com Inc. (2012-2016)**

<b>Year</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>ROA</b>	-0.12%	0.68%	-0.44%	0.92%	2.84%
<b>ROE (after tax)</b>	-0.48%	2.81%	-2.24%	4.45%	12.29%
<b>Net profit margin</b>	-0.06%	0.37%	-0.27%	0.56%	1.74%
<b>ROI</b>	30.54%	26.75%	53.77%	19.42%	25.49%
<b>Gross profit margin</b>	24.75%	27.23%	29.48%	33.04%	35.09%
<b>Operating profit margin</b>	1.11%	1.00%	0.20%	2.09%	3.08%

**Source: own calculations. Data from annual reports of Amazon.com Inc., 2018**

#### **4.3.5 Asset turnover analysis**

Asset turnover analysis was made to measure how quickly company turn over its assets through sales. The results of calculation are shown below in table 12. Inventory turnover increased to 7.70 from 7 as it was in 2015. It shows that times of selling inventories are increased. The inventory turnover period is decrease from 52 days to 47 days. The average in the industry is around 77 days. Total assets turnover is stay stable around 1.65. Payable turnover is decreased from 2.42 to 2.26, it shows that company start paying to their suppliers a bit slower comparing to 2012.



**Table 12: Asset turnover indicators of Amazon.com Inc. (2012-2016)**

Year	2012	2013	2014	2015	2016
<b>Inventory turnover</b>	7.62	7.31	7.56	7.00	7.70
<b>Inventory period</b>	47.88	49.93	48.27	52.18	47.39
<b>Total assets turnover</b>	1.88	1.85	1.63	1.65	1.63
<b>Payable turnover</b>	2.42	2.48	2.39	2.33	2.26
<b>Payable period</b>	150.87	147.00	152.78	156.74	161.47

Source: own calculations. Data from annual reports of Amazon.com Inc., 2018

#### 4.3.6 Financial Leverage analysis

Financial leverage analysis is shown in table 13, which analyze the sustainability of the company. Debt to assets ratio is 0.77 in 2016, which indicates that 70% of company's assets are financed by creditor or debt, other 30% is financed by the owners. Debt to capital is decreased to 0.51 from 0.60 in 2014, which means company relies is less on debt. The industry average is 0.47. Another important leverage ratio is debt to equity which has growth from 0.61 to 1.06, it means that debt is equivalent to its common equity. The industry average is 0.87. The interest coverage of Amazon is increased twice in 2016 comparing to 2015.

**Table 13: Financial Leverage indicators of Amazon.com Inc. (2012-2016)**

Year	2012	2013	2014	2015	2016
<b>Debt to Assets</b>	0.75	0.76	0.80	0.79	0.77
<b>Debt to Equity</b>	0.61	0.71	1.50	1.31	1.06
<b>Debt to Capital</b>	0.38	0.42	0.60	0.57	0.51
<b>Interest Coverage</b>	6.91	4.09	0.65	4.37	8.84

Source: own calculations. Data from annual reports of Amazon.com Inc., 2018

#### 4.3.7 Liquidity analysis

The liquidity ratios are representing the company to pay off their short – term debts. without raising external capital.

The current ratio measures whether or not the company has enough cash to pay off its current liability over the next FY. Industrial average is 1.15 so the Amazon.com Inc's has lower ratio.

but not very far from average. And it's not less than 1, which may indicate that company has the difficulties with paying their obligations.

The industry average for quick liquidity is 0.28 so Amazon.com Inc. has better ratio which is pretty much stable in analyzing years.

**Table 14: Liquidity indicators of Amazon.com Inc. (2012-2016)**

Year	2012	2013	2014	2015	2016
<b>Current ratio</b>	1.12	1.07	1.12	1.05	1.04
<b>Quick liquidity</b>	0.80	0.75	0.82	0.75	0.78

**Source: own calculations. Data from annual reports of Amazon.com Inc., 2018**

#### 4.3.8 Market Value analysis

Market values ratios are evaluating current share price of the of the company's stock. It helps to current or future investors to define if the company's share price is over or under priced.

Book value of Amazon is significantly increased from 18.04 to 40.43 in 2016. Earnings per share were increasing and showing positive value 4.97 in 2016. Price earnings ratio is decreased to 166.53 in 2016, while it was 463.73 in 2015. The industry average of P/E is 64.87. It means that investors are willing to pay more for a piece of Amazon's earnings than they are willing to pay for the others. Price to book ratio is increased from 13.90 in 2012 to 18.55 in 2016. But comparing to 2015 it has decreased.

**Table 15: Market Value ratios of Amazon.com Inc.**

Year/ Ratio	2012	2013	2014	2015	2016
<b>Book value</b>	18.04	21.23	23.10	28.42	40.43
<b>EPS</b>	-0.09	0.59	-0.52	1.25	4.97
<b>PB ratio</b>	13.90	18.78	13.44	23.79	18.55
<b>P/E</b>	0.00	601.22	0.00	463.73	166.53

**Source: own calculations. Data from annual reports of Amazon.com Inc., 2018**

#### 4.3.9 Competitors of Amazon.com Inc.

The main competitors of Amazon in e-commerce sector are: eBay, Alibaba, Walmart, Kroger Company.

In the table below, it's possible to see that the highest market capitalization has Amazon.com Inc. and on the second place is Alibaba with 372 B. The P/E ratio the highest is in Amazon.com

Inc. with 95.99 and Walmart is in the second place in the amount of 60.67, third one is Alibaba which is 41.62.

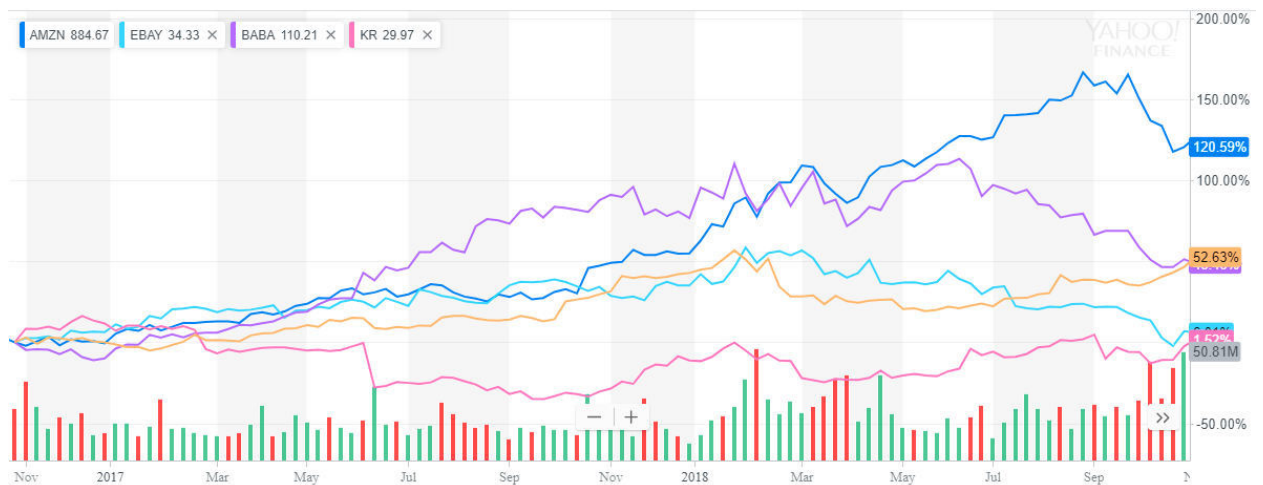
**Table 16: Main competitors of Amazon.com Inc.**

Company	eBay Inc.	Alibaba	Walmart Inc.	Kroger Co.	Amazon.com Inc.
Stock name	EBAY	BABA	WMT	KR	AMZN
Market capitalization	28 B	372 B	309 B	25 B	837 B
P/E ratio	-	41.62	60.67	7.15	95.99
Volume	8 701 653.00	16 201 231.00	8 450 355.00	6 931 393.00	5 902 186.00

Source: <https://www.nasdaq.com/symbol/amzn>, 2018

The figure 10 shows the comparison of stock prices of Amazon.com Inc. and its main competitors. The observation period is from October 2016 till October 2018. In the beginning of the observing year all these companies had the same price development. In March 2018 Alibaba in purple line and Amazon.com Inc. in blue line had the similar development. But in October 2018 the Amazon.com Inc. has the higher prices than Alibaba. The prices of eBay and Walmart Inc. in yellow line had the almost same development in the whole analyzing years. The Kroger Co. has the lowest price of the selected period. But it started to increase and in March 2018 the price is getting very close to stock price of eBay Inc.

**Figure 10: Price development of Amazon.com Inc. competitors (October 2016- October 2018)**



Source: <https://finance.yahoo.com>, 2018

## **4.4 Technical analysis of Amazon.com Inc.**

Technical analysis in practice is very complex and trader needs a lot of experience to be able to clearly analyze each situation on the market. Using the methods described in the theoretical part, it helps to identify the trend in the market and to derive buying and selling signals. Among the many techniques and tools of technical analysis will be used graphical methods and technical indicators. As the most indicators do not give clear signals, financial analysts are using different types of indicators. If someone decides to hold or release a position, each of the indicators used should confirm, if these indicators are not confirmed, investors should analyze the situation again and identify the cause of their non-confirmation. Next, the investor should determine which indicator is giving false signals and, accordingly, decide to buy or sell. Successful analysts usually create a set of indicators that they use in each situation.

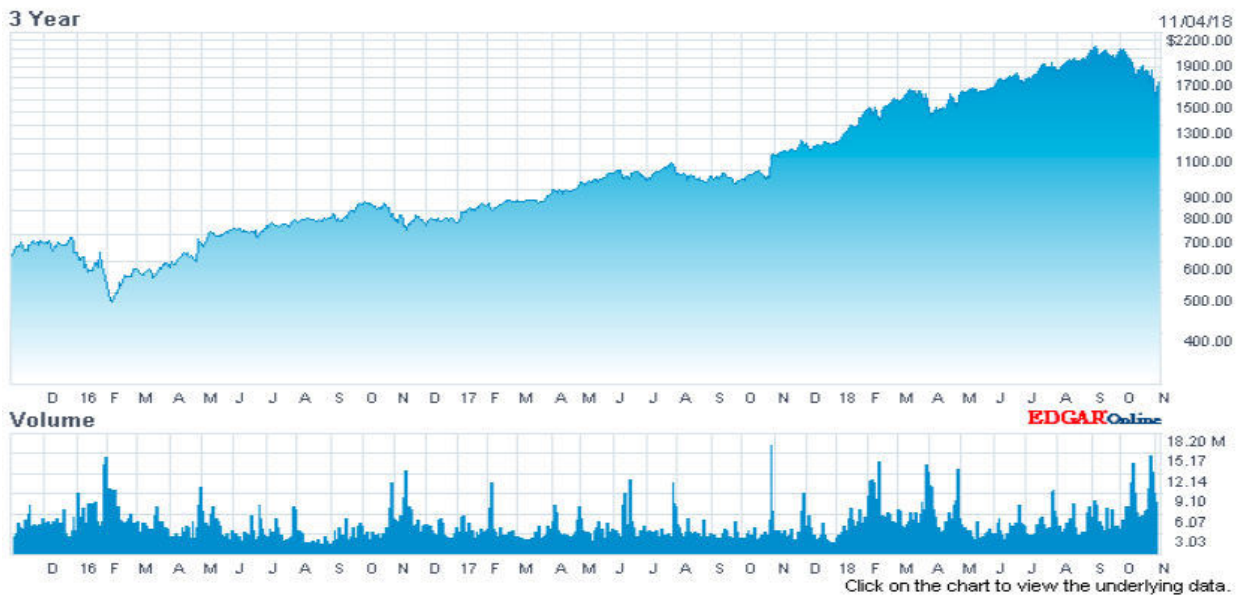
### **4.4.1 Charting methods**

Nowadays, there are many different types of graphs used by technical analysts. They are mainly Line chart, Bar chart, Candlestick charts. In this chart can follow the historical development of the Amazon's share price and trends. Furthermore, can see the selling or buying signals from the chart.

#### **4.4.1.1 Stock Price Trend**

Amazon's shares are on stock market already 20 years. Below the mountain type of chart shows the stock price in the period from October 2016 till October 2018. In the beginning when Amazon just entered to the stock market, the share price was only 2 USD and it has been increasing since. Now Amazon is well known around the world, the share price on 31<sup>st</sup> of October was 789.82 USD. During the selected analyzing periods price of Amazon's stock was changed from 789.82 USD to 1598.01 USD on 31<sup>st</sup> of October 2018, it shows that there was positive development and the price is doubled. From 31<sup>st</sup> of October 2016 till 8<sup>th</sup> of June 2017 there was a bull trend, but then trend was not stable and fluctuating and from 31<sup>st</sup> of July 2017 it became bear trend. There were small drops of share price, which then started increasing from 30<sup>th</sup> of October 2017. The highest share price it reached in 4<sup>th</sup> of September 2018 the share price was 2039.51 USD. From the October 2018 the price started to decrease, but it seems that from November prices might go up, which is good sign for Amazon.com Inc.

**Figure 11: Mountain type of chart – Amazon.com Inc. (October 2016- October 2018)**



**Source: NASDAQ.com, 2018**

#### 4.4.1.2 Candlestick chart

With the help of Candlestick graphical tool try to identify known patterns and formations that should give an answer to what trend the market is currently in progress.

The candlestick chart has four types of indicators, which shows the maximum, minimum, closing and opening rate for a certain period. Each candle is consisting body and two wicks, and each period is one candle. As a period, there is a possibility to choose one day, week or even month. Two wicks in candle shows the range between minimum and maximum rate, and body part indicates the opening and closing rate.

In the figure 12 is possible to see the rise and drops of Amazon.com Inc’s shares.

**Figure 12: Candlestick chart of Amazon.com Inc. (October 2016 – October 2018)**



**Source: <https://finance.yahoo.com>, 2018**

In the figure 13 is possible to see another interval time for candles, which were chosen on monthly basis which shows minimum and maximum share priced of Amazon.com Inc.

**Figure 13: Monthly candlestick chart of Amazon.com Inc. (October 2016 – October 2018)**



**Source: <https://finance.yahoo.com>, 2018**

#### 4.4.2 Technical Indicators

Technical analysis indicators provide analysts with many tools to help determine buy and sell signals, or to evaluate the strength of the trend, its change. This is the second method of technical analysis. As the main tools of indicators are used: SMA, Bollinger bonds, RSI, ROC, Money flow index.

#### 4.4.2.1 Simple moving average

Moving average is a classic indicator that can be used to predict the direction and strength of the movement of prices on the market trend as well as to determine the most appropriate entry and exit points. Simple Moving Average (SMA) is formed by calculating the average price for a certain period of time. The sum of the closing prices of a currency pair is divided by the number of periods considered. With these curves, one can see the general direction of traffic in the recent past and predict what will be the further vector in the short term.

The figure 14 shows the SMA of Amazon.com Inc for selected period from October 2016 till October 2018. This chart shows that there was a bullish market where is the price is started to increase, which recommends to investors to buy the share, but starting from October it shows that lines are started to decrease, which is bearish market, and its recommended to investors to sell the shares.

**Figure 14: Simple Moving Average of Amazon.com Inc. (October 2016 – October 2018)**



Source: NASDAQ.com, 2018

#### 4.4.2.2 Bollinger Bands

The Bollinger band consists of three curves: a simple moving average, which is in the middle, lower and upper zones, which take up  $\pm 2$  times the standard deviation from the moving average. Standard deviation measures the volatility of share price. If the distance between bands are narrow then there is a low volatility, if wider then vice versa. When there is narrowing of the band, it signals big changes in trend.

In this chart is used 20-day simple moving average and 2 standard deviation. The gap between the upper and lower band is started expanded in October, indicating greater price volatility in the stock. By the end of selected analyzing period the price was near the middle line, which indicates that share price was not overbought or oversold. It is recommended to follow one more month, to

see where the price is heading, if it close to upper bollinger band then its recommended to sell, as the price might fall and if its close to low bollinger band then it's better to buy, as prices might increase.

**Figure 15: Bollinger bonds of Amazon.com Inc. (October 2016 – October 2018)**



**Source: <https://finance.yahoo.com>, 2018**

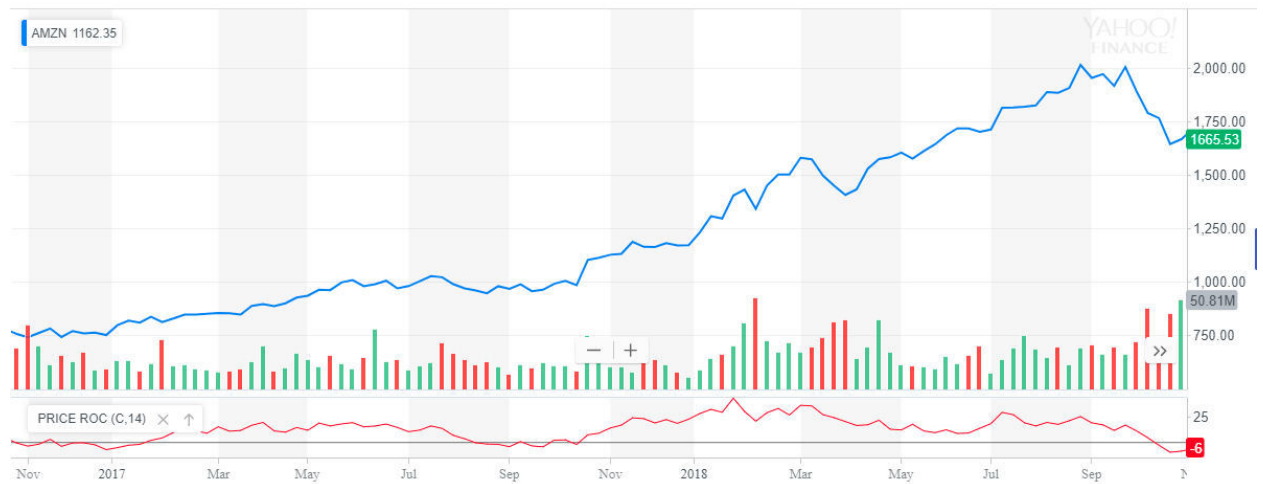
#### 4.4.2.3 Rate of change

ROC is an oscillator that measures the rate of change in the price of an asset between its periods. If the indicator is growing, then there is optimism in the market, and in the near future it expects the beginning or strengthening of the uptrend. If the indicator values fall, this indicates a weak market and suggest a downward movement. In general, the higher the indicator chart, the greater the overbought market and the likelihood of a downward movement beginning and accordingly, the lower the chart, the greater the likelihood of an uptrend.

In the chart below the ROC is equal to (-6), this indicator is negative, which means the stock of the company was oversold, and in the future price expect to grow, so for investors are recommended to buy the shares of Amazon.com Inc.



**Figure 16: Rate of Change of Amazon.com Inc. (October 2016 – October 2018)**



**Source: <https://finance.yahoo.com>, 2018**

#### **4.4.3.4 RSI**

Relative Strength Index was developed by J. W. Wilder in 1978 and it's one of the most popular indicators. If the RSI reaches the extreme values, this means that the change in trend is coming. According to Wilder, the extreme values in the band of 70 and 30. If these values are exceeded and when RSI index creates ups/downs in the band of these boundaries, it can be considered to be a trend change remark. If the rate in exceeds the rate 70, the market is referred as overbought. Investors expect the trend from bullish to bearish, and stocks are not worth it to buy. If the rate of share, falling under 30, the market is oversold. And it's recommended not to sell the stocks, because it's expecting a growing trend.

In the graph 17 the time period was selected as 14 days, and red line defines the index of RSI, which is was equal to 48 in October 2018. As can be seen from the graph there were many times when the rate is crossing the extreme line above 70. For investors are recommended to wait as the trend is getting closer to reach the extreme line.

**Figure 17: Relative Strength Index of Amazon.com Inc. (October 2016 – October 2018)**



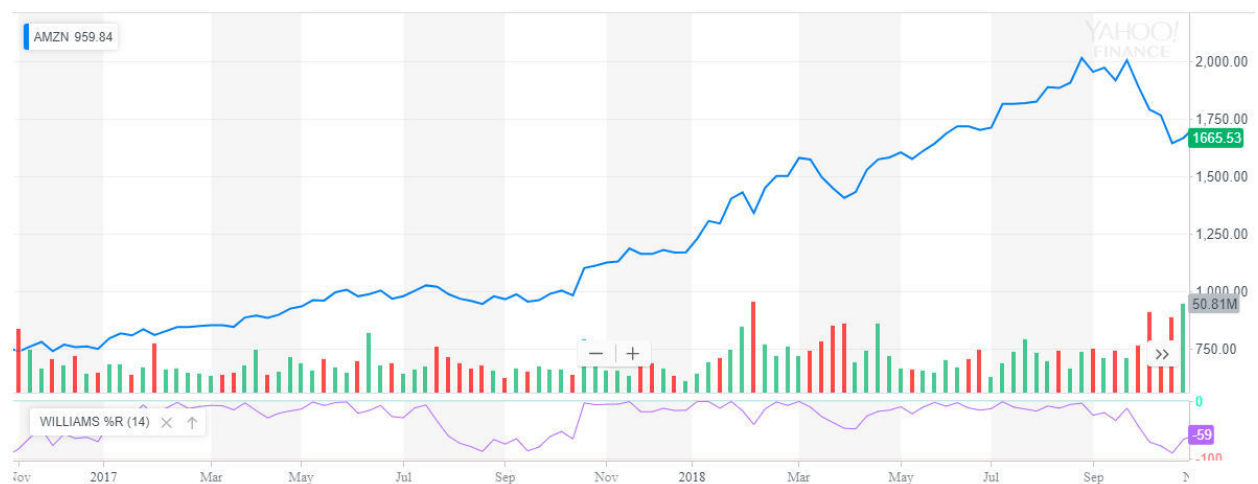
Source: <https://finance.yahoo.com>, 2018

#### 4.4.3.5 Williams %R

This indicator was invented by famous trader Larry R. Williams. This indicator belongs to the group of oscillators and gives information about whether the market is overbought or oversold. If Williams %R reaches the values between 80-100%, it means that market is oversold. The market is overbought if the values are between 0-20%.

As can be seen from the chart below the William %R is equal to (-59). It is recommended for investors to wait with purchase.

**Figure 18: Williams % R of Amazon.com Inc. (October 2016 – October 2018)**

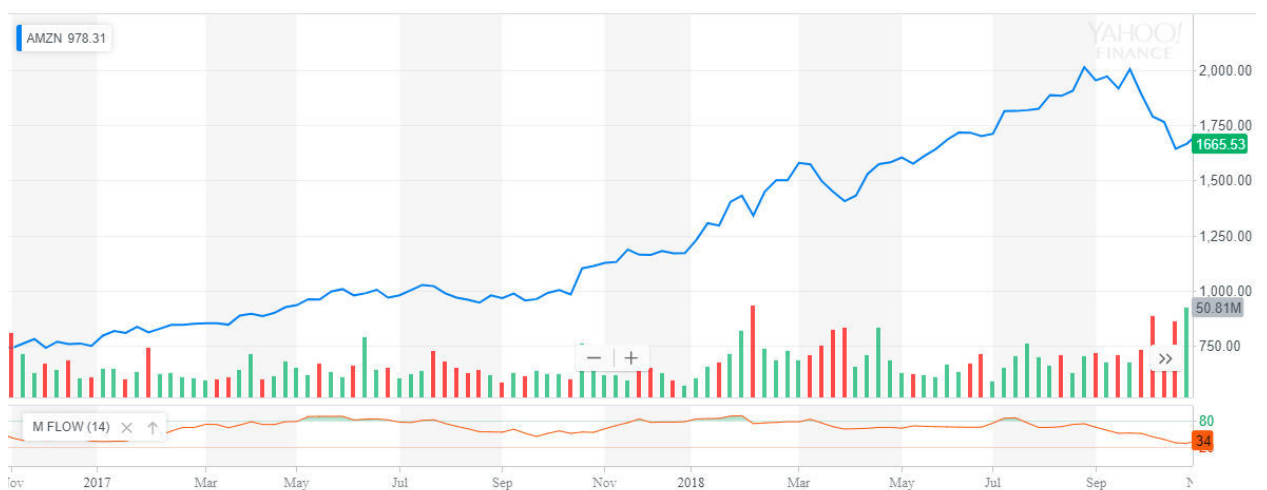


Source: <https://finance.yahoo.com>, 2018

#### 4.4.3.6 Money flow index

MFI is an oscillator that uses both price and volume to measure buying and selling pressure. It is known as volume weighted RSI because it combines momentum and volume with the RSI formula. This indicator ranges from 0 to 100 and very good at identifying overbought conditions above 80 closes to the range 90 or oversold conditions below the 20 line in the 10 area. For this chart the period was set up 14 days. From the chart below, it's seen that in May 2017, January and July 2018 the signals of MFI were overbought. In October 2018 the MFI is equal to 34, which can be considered that stocks were oversold.

**Figure 19: Money Flow Index of Amazon.com Inc (October 2016 – October 2018)**



Source: <https://finance.yahoo.com>, 2018

## 5 Results and discussions

In this chapter the results from fundamental analysis and technical analysis of Amazon.com Inc. will be described. In the beginning of the practical part the main information about the company, its operations and main factors of success are introduced.

### 5.1 Results of fundamental analysis

Fundamental analysis of Amazon.com Inc. was mainly based on balance sheet and income statement of the company, where horizontal analysis and vertical analysis were made. The period of the analysis was from 2012-2016. The financial data were received mainly from the annual reports of Amazon.com Inc.

Horizontal analysis of balance sheet showed increase in total assets of the company, in 2015 by 18.8 % and in 2016 by 28.8%.as well as total liabilities and equity. In 2015 the highest changes

were observed in short-term investments which is increased by 69.7 % comparing to 2015 where was only 37% and in net receivable from 0.7% to 47.5% in 2016.

Total liabilities and equity are showed an increase in total shareholder's equity grew by 44.1% in 2016. By the end of the analyzing year the highest increase was in retained earnings of the company by 93.2%.

By horizontal analysis of income statement showed the total revenue is increasing by 20.2% in 2015 and by 27.1% in 2016 as well as cost of revenue from 14.2% in 2015 to 23.2% in 2016. Net income showed the positive value in 2016 (237.8%), whereas in 2015 it was negative (-347.3%). Earnings before tax also significantly increased from (-1512.6%) to 148.2%.

Vertical analysis of balance sheet had every year almost the same share of total current assets in proportion to total assets around 55-60%. The highest impact on total liabilities and equity had total current liabilities (52.54%) and the lowest impact had treasury stock.

Through the vertical analysis of income statement was defined that cost of revenue is accounted almost 64.91% in 2016 of total revenue. In 2016 the share of gross profit was 35.09%.

In the following part of the fundamental analysis were calculation of financial indicators. The first indicator is net working capital, which represents the ability of the company to liquid its assets. The ratio is increasing, which is positive, and it means that the company has enough resources to meet its obligations and shows creditworthiness. Current ratio of Amazon.com Inc. is less than average in the industry.

Another indicator is profitability analysis. In this analysis were used indicators such as: ROA, ROE, Net profit margin, ROI, Gross profit margin and operating profit margin. The Amazon.com Inc.'s ROA is 2.84% and it is lower than industry average. Comparing to last few analyzing years, its increasing and other indicators gained positive results, which is good sign for the company.

Analysis of asset turnover shows that times of selling inventories are increased. Payable turnover period is decreased, which shows that company start paying to supplier a bit slower.

Financial leverage analysis results show that 70% of the company's assets are financed by creditors. The debt to capital ratio was decreased in 2016, but still higher than average in the industry.

Another important part of fundamental analysis is market value analysis of Amazon.com Inc. The P/E ratio is higher than average, which means investors are willing to pay more for Amazon.com Inc's earning, usually it describes that price is overvalued.

The last part of fundamental analysis was mainly concentrated on Amazon.com Inc. main competitors in e-commerce sector, such as eBay Inc., Alibaba, Kroger Co., Walmart Inc. The best market capitalization, the highest P/E ratio has the Amazon.com Inc. The highest volume of the stocks has Alibaba, which is approximately 16 mln., whereas Amazon.com Inc's only 5 mln.

## 5.2 Results of technical analysis

Technical analysis gave more information about the share price development and investors' interest. The period for technical analysis were chosen from October 2016 till October 2018.

For technical analysis were used charting methods and technical indicators. The first charting method used is stock price trend, which shows the stock development of Amazon.com Inc. The first time when Amazon.com Inc. entered into the exchange market the price was only 8\$. starting from the analyzing year the price had the bullish trend, but there were some small exceptions of bear trend, but overall the price is doubled from October 2016 till October 2018.

Another chart is of the famous one – Candlestick chart, which illustrates maximum, minimum, opening and closing prices for the observed period of time. The next part of technical analysis is technical indicators. The first one is SMA what is recommended to investors to SELL the stocks because it's expected for the price reduction. Another type of indicators is: Bollinger Bands, Price of Change, Money flow index. The results of these analyzed indicator were saying to buy the stocks of Amazon.com Inc. Other indicators such as RSI and Williams % R are recommended to wait with purchase, as the signal is in the middle of overbought and oversold.

**Table 17 : Investment recommendations based on technical analysis**

<b>Methods of Technical analysis</b>	<b>Recommendations</b>
Trend Chart	Wait with purchase
Chandlestick Chart	Wait with purchase
Bollinger Bonds	Buy
SMA	Sell
Money Flow Index	Buy
Williams % R	Wait with purchase
Price of Change	Buy
Relative Strength Index	Wait with purchase

**Source: own creation, 2018**

### 5.3 Discussion

In this part, the results from author's work will be compared with the 47 analysts with Finance Yahoo analysts. From the following recommendations from analysts, it is visible that it's recommended to buy the shares of Amazon.com Inc.

In figure 20 it shows the current month November 2018 and following 3 months back recommendations from analysts. Based on the table it is possible to say that investors are less dispose of buying in the following four months and prefer to hold the share. The mean rating in November 2018 is equal to 1.7, which falls under scale mostly for buy. The ranking strong buy is 1 and sell is 5. It's seen that almost the same number of analysts recommended buying, which means that stock is relied upon to show improvement over the market return.

**Figure 20: Analyst recommendations, November 2018**

Recommendation trends	Nov, 2018	Oct, 2018	Sep, 2018	Aug, 2018
<i>Strong Buy</i>	15	14	13	12
<i>Buy</i>	28	28	28	28
<i>Hold</i>	3	4	4	4
<i>Underperform</i>	1	1	1	1
<i>Sell</i>	0	0	1	1

Source: <https://finance.yahoo.com/quote/AMZN/analysis?p=AMZN>, 2018

Here are the reasons why to buy Amazon.com Inc. stocks:

- The option that Amazon.com Inc is chosen is buying option instead of build, in this case, it means that the company generates revenue without wasting time building their own infrastructure. In July 2017 it has completed the acquisition of an e-commerce giant Souq.com which is based in Dubai. Another one with natural and organic food supermarket Whole Foods market for 13.7 billion USD. In the near future, Amazon.com Inc. plans to expand their retail market share into countries like Egypt, Saud Arabia, and UAE. This is Amazon's method of handling mounting rivalry and slow growth in the e-commerce space. (Zacks, 2018)
- Amazon.com Inc generates solid cash flows. The company has been putting resources in the business forcefully and mostly transferring its gross profit gains into fulfillment, technology, innovation, content, and acquisitions. Those investments can be considered

as basic in driving the next growth phase. Moreover, because of these investments the automation in the fulfillment centers has increased and led to huge volumes of quality content, solid growth in third - party units are positive for gross margins. (Zacks, 2018)

- Consumer base, product selection, customer inputs (reviews) have helped the company build a solid position in the fast-growing e-commerce market. As the smaller players don't have enough resources to invest in innovation, they're more dependent on Amazon. (Zacks, 2018)
- The international segment out of domestic business. Through the recession and thereafter Amazon has been generating double digit - growth year over year. It has been presenting some new products (items) in the international market which expected to be in high demand. (Zacks, 2018)

## **6 Conclusion**

It's hard to believe that this company started as small website which selling used books. Now Amazon.com Inc. is the world's largest online retailer which has expanded to sell a wide variety of consumer goods all over the world and it worth over 602 billion USD and continue to grow.

The main factors of their success that they are allowing space to explore, try out new ways to add some value and trying to give to customers what they want before they know what they want. As the CEO Jeff Bezos says that their customers are stay loyal until there is somebody else offers them a better service. (Thompson, 2017)

However, company today instead of paying dividends to the investors they're trying to invest more inside the company.

The main aim of the thesis was to analyze the economic situation, stock market if it is financially stable and profitable for investors, whether they should buy, hold or sell the Amazon.com Inc shares.

To identify this information, it was necessary to make fundamental and technical analysis, which provide more deep and detailed information about the financial situation of the company and their price movements in the market. According to the analysis within competitors this company has the highest market capitalization and based on the calculations of price to earnings it was found that the company is higher than the average in the industry. The technical analysis provided more detailed information about the price development of the company. From most of the charts it was detected to Buy or Hold the stocks of Amazon.com Inc. Therefore, it assumed that the price of Amazon.com Inc. will increase in the short and mid - term perspectives.



## 7 References

### 7.1 Books

BAUER, Richard J a Julie R DAHLQUIST. *Technical market indicators: analysis & performance*. New York: Wiley, c1999. ISBN 0-471-19721-1.

BERNSTEIN, Leopold A., John J WILD. *Analysis of financial statements*. 5th ed. New York: McGraw-Hill, c2000. ISBN 978-007-0945-043.

BRAGG, Steven. *Financial Analysis: Second Edition: A Business Decision Guide* 2nd Edition. 342pg. 2014. ISBN 978-1938910463

CHOWDHRY, Anil. *Fundamentals of Accounting and Financial Analysis: 1st Edition*. India: Pearson Education, 2007. ISBN 81-317-0202-2.

FAERBER, Esme. *All about stocks: the easy way to get started*. 3rd ed. New York: McGraw-Hill, c2008. "All about-- " series (McGraw-Hill Companies). ISBN 0071494553.

GIBSON, Charles H.: *using financial accounting information*. 11th ed. Mason, OH, USA: South-Western Cengage Learning, c2009. ISBN 978-0-324-65742-5.

HARTMAN, Ondřej. *Jak se stát forexovým obchodníkem: naučte se vydělávat na měnových trzích*. 2., rozš. vyd. Praha: FXstreet, c2014. ISBN 978-80-904418-3-5.

HIGSON, C. *Financial Statements: Economic Analysis and Interpretation*. Rivington Publishing Ltd. 320pg. 2006. ISBN 978-1845780104

LIM, Mark Andrew. *Technical Analysis for Beginners*. Singapore: John Wiley, 2015. ISBN 978-1-118-49-891-0.

MURPHY, John. *Technical analysis of the financial markets: a comprehensive guide to trading methods and applications*. New York: New York Institute of Finance, c1999. ISBN 07-352-0066-1.

PALAT, Raghu. *Fundamental Analysis for Investors*:4th Edition. New Delhi: Vision Books Pvt., 2010. ISBN 978-81-7094-942-8.

PETERSON, Pamela P. a Frank J. FABOZZI. *Analysis of Financial Statements*. USA: John Wiley, 1999. ISBN 1-883249-57-7.

WILEY, J. *CMT level I: an introduction to technical analysis : readings selected by the Market Technicians Association*. New Jersey, 2016.

YIORYALIS, George. *Technical Analysis for Beginners*. Page Free Publishing, 2004. ISBN 1-58961-315-5.

## 7.2 Online sources

AMADEO, K. *Benefits of Investing in Stocks Versus Disadvantages*. [online]. 10.04.2018. Available from: <https://www.thebalance.com/stock-investing-for-the-individual-investor-3306182>

Business Dictionary. *Shareholder*. [online]. 10.06.2018. Available from: <http://www.businessdictionary.com/definition/shareholder.html>

Commodity.com. *Simple Moving Average*. [online]. 10.06.2018. Available from: <https://commodity.com/technical-analysis/ma-simple/>

DRAKOPOULOU, V. *A Review of Fundamental and Technical Stock Analysis Techniques*. [online]. 10.06.2018. Available from: <https://www.omicsonline.org/open-access/a-review-of-fundamental-and-technical-stock-analysis-techniques-2168-9458-1000163.pdf>

Encyclopedia Britannica. *Stock*. [online]. 10.07.2018. Available from: [https://www.britannica.com: https://www.britannica.com/topic/stock-finance](https://www.britannica.com/topic/stock-finance)

Finance.yahoo.com. [online]. 20.09.2018. Available from: <https://finance.yahoo.com/quote/AMZN/profile?p=AMZN>

GSI Markets. *Trend lines and pivot points*. [online] 10.06.2018. Available from: <https://www.gsimarkets.com/systems/education/lesson-3/>

HORTON, M. *What rights do all common shareholders have?* [online]. 10.04.2018. Available from: <https://www.investopedia.com/ask/answers/042015/what-rights-do-all-common-shareholders-have.asp>

Investtech.com. *Support and resistance*. [online]. 10.05.2018. Available from: [https://www.investtech.com/main/market.php?CountryID=992&p=staticPage&fn=helpItem&tbReport=h\\_SupResGeneral](https://www.investtech.com/main/market.php?CountryID=992&p=staticPage&fn=helpItem&tbReport=h_SupResGeneral)

Investopedia. *Stock Market*. [online]. 10.05.2018. Available from: <https://www.investopedia.com/terms/s/stockmarket.asp>

JOHNSON, M. *Types of shares*. [online]. 10.04.2018. Available from: <https://www.rocketlawyer.co.uk/article/types-of-shares.rl>

KENNON, J. *What Is a Stock Exchange?* [online]. 16.08.2018. Available from: <https://www.thebalance.com/what-is-a-stock-exchange-358113>

Money Matters. *Types of Members or Brokers at Stock Exchange | Eligibility Requirements*. [online]. 16.08.2018. Available from: <https://accountlearning.com/types-members-brokers-stock-exchange-eligibility-requirements/>

MURPHY, Casey. *Dow Theory: The Three-Trend Market*. [online]. 18.08.2018. Available from: <https://www.investopedia.com/university/dowtheory/dowtheory2.asp>

ONUFRIEVA, Z. *7 признаков скорой смерти торговых центров (7 signs of rapid death of the markets)*. [online]. 18.06.2018. Available from: <https://secretmag.ru/trends/tendencies/torgovye-centry-uhodyat-v-proshloe.htm>

PERRY, Mark. *Amazon's Phenomenal Rise In Market Value: The Most Remarkable Case Of Wealth Creation, Business Success In History?* [online]. 18.09.2018. Available from:

<https://seekingalpha.com/article/4075799-amazons-phenomenal-rise-market-value-remarkable-case-wealth-creation-business-success-history>

Pricoa Capital Group. *What is a Private Placement?* [online]. 18.06.2018. Available from: <http://borrower.pricoacapital.com/what-is-a-private-placement--content-1371.php>

Snap Agency. *7 Reasons Why Amazon Is So Successful.* [online]. 18.09.2018. Available from: <https://www.snapagency.com/blog/7-reasons-why-amazon-is-so-successful>

THOMPSON, Sonia. *What Is the Secret of Amazon's Huge Success? Jeff Bezos Credits Commitment to These 3 Principles.* [online]. 18.10.2018. Available from: <https://www.entrepreneur.com/article/302253>

Zacks. *Amazon.com Inc.'s Report.* [online]. 20.11.2018. Available from: <https://www.zacks.com/zer/preview/377979/preview>

ZEX, S. *Technical Indicators With Formula: Stock Market Technical Analysis.* [online]. 18.06.2018. Available from: <https://books.google.cz/books?id=kFKLCwAAQBAJ&printsec=frontcover&hl=ru#v=onepage&q&f=false>