# Project of Comparison and Performance Evaluation of Selected Czech and Russian Mutual Funds.

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Master's thesis 2016



Tomas Bata University in Zlín Faculty of Management and Economics

# Tomas Bata University in Zlín Faculty of Management and Economics

Department of Finance and Accounting Academic Year: 2015/2016

# MASTER'S THESIS ASSIGNMENT

(PROJECT, ARTWORK, ARTISTIC PERFORMANCE)

Degree, First Name and Surname:

regrees and manne and dament

M140384

Iuliia Rozova

Personal Code: Degree Programme:

N6202 Economic Policy and Administration

Degree Course:

Finance

Thesis Topic:

Project of Comparison and Performance

Evaluation of Selected Czech and Russian Mutual

Funds.

Thesis Guidelines:

### Introduction

Define the objectives and the application methods used in the Master thesis.

### I. Theoretical part

Compile the theoretical information about mutual fund industry.

### II. Practical part

- Analyze the macro-level environment in relation to mutual funds among the world, the United States, the European Union, the Czech Republic and Russia.
- Prepare a project of performance comparison of selected mutual funds in Russia and the Czech Republic and detect the aspects of their potential future development.
- Provide applicable conclusions for individual and institutional investors about recent and future development trends of selected mutual funds in Russia and the Czech republic, based upon the project.
- · Submit the project to risk and cost analysis.

Conclusion

Thesis Extent:

70 stran

Appendices:

Form of Thesis Elaboration: tištěná/elektronická

ANDERSON, Seth C. and AHMED, Parvez. Mutual funds: fifty years of research findings. New York: Springer Science and Business Media, 2005, 166 p. ISBN: 978-0387-25307-7. BOGLE, John C. Common Sense on Mutual Funds. 10th ed. Hoboken: John Wiley and Sons, 2010, 656 p. ISBM: 978-0-470-13813-7.

HASLEM, John. Mutual funds: risk and performance analysis for decision making. Oxford: Blackwell Publishing, 2003, 592 p. ISBN: 0-631-21561-1.

NORTHCOTT, Alan. The mutual funds book: how to invest in mutual funds and earn high rates of returns safely. Florida: Atlantic Publishing Company, 2009, 288 p. ISBN: 978-1-160138-0001-2...

PANKRATOVA, Larisa. Paevye investicionnye fondy v RF. Voronezh: IPC Voronezh. gos. un-ta, 2008, 158 p. ISBN 978-5-9273-1273-3.

POZEN, Robert and HAMACHER, Theresa. The Fund Industry: How Your Money is Managed. 2nd ed. John Wiley and Sons, 2015, 544 p. ISBN: 978-1-118-920994-0.

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Date Assigned:

15 February 2016

Thesis Due:

18 April 2016

Zlin, 15 February 2016

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# **ABSTRAKT**

Podílové fondy se stávají populárními investičními instrumenty po celém světě a objem peněžních prostředků do nich investovaných narůstá. Nesporným lídrem investičního průmyslu jsou Spojené státy americké, tato oblast se však nesporně rozvíjí a stává zajímavou také v ostatních zemích, jako je např. Česká republika nebo Rusko. Zatímco v České republice je sektor podílových fondů orientován v souladu s evropskými principy, v Rusku je důraz kladen na trvalý rozvoj sektoru podílových fondů. Po prostudování hospodářských podmínek a sektoru podílových fondů ve světě, ve Spojených státech amerických, v Evropské unii, v České republice a v Rusku jsou autorem odvozeny aplikovatelné závěry využitelné předně pro investory, včetně analýzy nákladů a rizik.

**Klíčová slova:** kolektivní investování, podílové fondy v České republice a v Rusku, hodnocení výkonnosti

## **ABSTRACT**

Mutual funds are becoming widely spread investment instruments all over the world as their amount is growing year by year. The doubtless leader of investment industry is America but such developing processes are interesting in other countries like the Czech Republic and Russia. The Czech Republic is trying to go along with European mutual funds principles while Russia organizes the strong base for continuous development of mutual fund industry. After studying the economic conditions in the world, U.S., E.U., the Czech Republic and Russia and mutual funds industry in the above mentioned locations the author derives an applicable conclusion for investors including risk and cost analysis.

**Keywords:** collective investments, mutual funds in Czech Republic and Russia, performance evaluation.

## **Motto:**

"Bored by Theocritus and Homer,
Adam Smith was more his tome, where
Deep in all things economic
The wealth of nations was his topic;
On what the state relies, he told,
Of how it lives, the what and why
With staple products its supply,
No need to keep reserves of gold."

(Pushkin, A. (2009). Eugene Onegin)

# **Acknowledgements:**

Here I would like to thank a few people that contributed to this master thesis no less than me. Firstly, with all my heart I am grateful to my supervisor Ing. Jana Vychytilová, Ph.D. whose passion for hard work made impossible things to be possible. Secondly, I am endlessly thankful to my parents whose everyday support and guidance helped me to go through this all. And finally, and am sending my best wishes to each and every one from staff of "Tomas Bata University in Zlin".

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# INTRODUCTION

We live in the modern world and fast development touches all sides of our lives. Nowadays with rising globalization and integration of economies, it is very important even for investors to understand changing financial markets. However, investments are always an attempt to go through regress and conservatism. It is a deliberate deviation from routine and a desire to look behind the curtain of future. With time, investment activity showed itself in different spheres due to increased amount of organizational forms of economy: transnational corporations, financial and industrial groups, financial companies, investment banks and financial markets. Long run economic growth is determined by the level of investments into production, science, medicine and culture. Reaching the next level of culture, medicine, policy and economy became an inseparable part of every activity. Finance represent one of those life-supporting movements. Even the word "finance" as a noun stays unclear and abstract for understanding but when we see the verb "to finance" the new true meaning is opened for us. There is a fact that investments are usually mentioned during discussions of intensive development of both different countries, regions and firms. Mutual funds are a big part of investment industry which attract many investors nowadays. This topic is important to study because our century is marked with great epoch-making discoveries in social and technical spheres that make the life of people more easy and fast at the same time. Mutual funds are the "next step" on investing stair that leads to easy and effective wealth management of every participant of financial life: from a teenager who have some pocket money to save to a CEO of huge trans-national company that wants to re-invest the profit.

In this work we will go through historical notes on how mutual funds industry grew up both in the world and chosen countries. In addition, the modern state of mutual funds industry in the world, the United States of America, United Kingdom, Europe, the Czech Republic and Russia will be discussed. The work also contains wide theoretical background of mutual funds. Such important topics as classification of mutual funds, regulation and risks of mutual funds, performance measuring and predicting of mutual funds are discussed. There was a need to go through a topic of world financial crises because those one are spreading like strong hurricanes and touching the whole neighbor countries or even continents. They have a great impact on financial industry due to direct connection of mutual funds with a country financial system through investment products that usually included in mutual funds: stocks, bonds, real estates, currencies, commodities, precious metals and others.

Based on analysis of mutual funds industry we will create the project of comparison and performance evaluation of selected Czech and Russian mutual funds. The project showed that mutual funds in the Czech Republic and Russia are now on different stages of development however it is possible to invest into both countries funds as their functionality confirmed by quite long history tracking their NAV's and unit prices. This history allows to study a fund's past performance and to understand fund's reaction to different economic events however it is not a guarantee of future performance. Investment decision should go along with one condition: an investor should clearly define its investment aims and acceptable level of risk. Fundamental analysis, technical analysis, intermarket analysis and psychological analysis were used to support funds' performance prediction.

# OBJECTIVES AND METHODS OF MASTER THESIS PROCESSING

The purpose of this work is to assess the connection between current economic situation in the world, United States of America, European Union, the Czech Republic and Russia and current trends of mutual funds industry in those locations. After this the purpose will be to create a comparison of selected mutual Czech and Russian mutual funds and evaluate their performance.

# **Research questions:**

- 1. What theoretical information about mutual funds industry is available?
- 2. What is the modern state of macro-level environment in relation to mutual funds among the world, the United States, the European Union, the Czech Republic and the Russian Federation?
- 3. What are results of performance comparison of selected mutual funds in the Czech Republic and Russia and what is the direction of potential future development?

# Methodological approach:

The author will use availed literature sources to complete the literature overview with books, articles are information from official resources. Quantitative data will be applied for analysis of comparison and performance evaluation of funds. Qualitative data will be used directly for macro-level estimation of mutual funds industry in the above mentioned countries and in the world in the whole. Author will also use following research methods- analysis, synthesis, induction, deduction, and mathematical methods.

# **Delimitation:**

The study cannot consider every small condition that can influence a mutual fund so here the author will go through the most important and relevant to the study conditions.

## **Dispositions**:

This thesis consists of the following chapters:

Chapter 1: Collective investment industry. It describes the whole investment industry with its history and includes development of collective investment industry in the Czech Republic and Russia.

Chapter 2: Mutual funds are described more carefully including such information as classification of mutual funds, regulations, risks applied to mutual funds' investments, advantages and disadvantages of mutual funds and other issues.

Chapter 3: Analysis of macro-microenvironment and current mutual funds industry trends. Here each particular country will be described from the point of macro-economy and then this information will be connected with mutual funds trends and their future development possibilities.

Chapter 4: Comparison of mutual funds in the Czech Republic and Russia. In this chapter the author will apply the knowledge from the chapter 3 to perform the comparison of selected mutual funds. The funds will be described in details and quantitative data will be used for performance evaluation.

# I. THEORY

# 1 COLECTIVE INVESTMENT INDUSTRY.

This chapter includes the description of collective investment industry as it is and also pays attention to collective investment industry in the Czech Republic and Russia.

# 1.1 Development of collective investment industry worldwide.

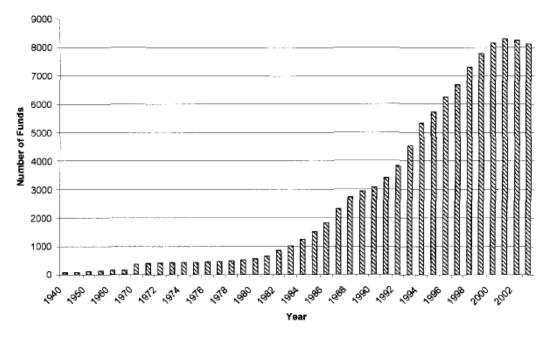
Some historians look at early 19th century to find the origins of today's mutual funds. "Societe General de Belgique" is considered as the first organization that invested in financial assets. The King of Belgium William I established this investor-owned pool. Others say that in 1774 a merchant from the Netherlands named Adriaan van Ketwich created an investment trust "Eendragt Maakt Magt" (that is translated as "Unity creates strength"). Ketwich realized that diversification will attract small investors that can participate in the fund with minimal capital (McWhinney, 2005).

Such type of organization started to develop gradually in England and Scotland during the mid-1800s. As an example of such activity, we can see the organization called "London Financial Association". In 1863, it offered as a loan the revenues from the sales of their shares to local railroad companies. The loans were collateralized with railroad securities that turned out to be of very low liquidity. This led to the collapse of the trust. However, it was just a trial and this new idea inspired other people. This way five year later, the company called "Foreign and Colonial Government Trust" organized the selling of their shares and invested the revenues into government bonds of 18 countries. This campaign had a great success and investors of this trust received both dividends and return of their capital. (Anderson and Ahmed, 2005)

Historians consider a few funds as the first one in United States. In 1823, "Massachusetts Hospital Life Insurance Company" pooled funds together to invest. Others say that New York Stock Trust (1889) or Boston Personal Property Trust (1893) were the first closed-end investment companies that offered to their clients to invest small amounts of money to diversified portfolios. As the third option, historians offer "Alexander Fund" (1907) that was founded in Philadelphia and was the prototype of modern investment funds. Therefore, if we will not pay direct attention to the origin of American funds we will see that the development of a typical investment fund in US was gradual. Only 18 investment funds were organized from 1889 to 1924. New opened trusts had different purposes starting from a hedge fund ("Railway and Light Securities Company") to modern closed-end company ("Boston

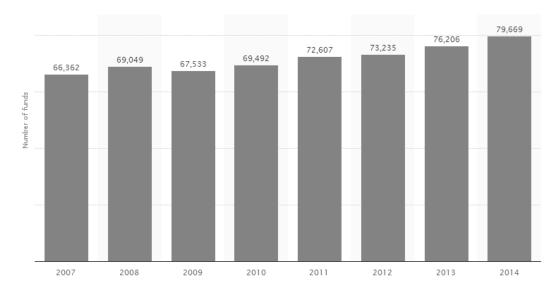
Personal Property Trust") or investment trusts like "International Securities Trust of America" that was founded in 1921 and was a quickly developing company. Only after 2 years of functioning, the trust already was offering stocks and bonds. Corresponding to rise of investment funds in Great Britain there was an increasing of American funds in early 1920s. There followed British example and invested into income, diversification and stable growth (Anderson and Ahmed, 2005).

With time, shares rose in prices and public started to appreciate the profitability of funds and became keener on investing. 1920s were the starting point. 40% of a fund contained preferred equity and bonds. Despite the fact that most of investment companies crashed, not all of them behave such way. 1920s are also famous as da date when the first modern open-end mutual fund came into existence. While other fund offered speculations and high one time profit this fund offered safety and stability. "Massachusetts Investors Trust" was established in 1924 and had a big importance for future of whole investment industry. After the abovementioned unpleasant situation with speculations investors started to look for safety. According to their redemption policies, open-end investment funds offered such type of securities that closed-end funds could not offer. The new mutual open-end funds in the amount of 20 started at 20's with total combined assets of \$140 million and in the end of 1936 they showed \$506 million of assets.



Picture 1. Growth of mutual funds in the U.S. Source: Anderson and Ahmed, 2005.

Nowadays the short-term expectations can be a bit complicated and confusing. It seems that slowdown in China economy will not only negatively influence the country's securities but also many other stocks in different countries as well. Moreover, the countries that heavily depend on profit from natural resources will face the very low commodities price that will hurt their economies The above-mentioned short-term overview may exert high level of influence on performance of the funds. However, with time this situation will be leveled (Emerging Markets Committee, 2009; Forbes.com, September 9, 2013).



Picture 2. Number of mutual funds in the world. Source: Statista, 2016.

During 2005-2007 years, 29 of 31 emerging markets countries showed the rise of the value of AUM (assets under management) and during the same period the amount of funds grew by 28,7%. The three countries (Brazil, Korea and China) were the biggest from the emerging markets and their activity heavily influenced the statistics of all "emerging basket". The three together collected the \$1,375 billion of AUM out of the total US\$1,942 billion of EMC. Moreover, Brazil, Korea and China together performed 80% of growth of all emerging markets in 2007. In addition, Brazil and Korea hold 57% of all emerging collective investments schemes (CIS).

Logically, we can understand the following statement that in the future the fastest growth will belong to emerging and developing countries where the development of investment industry is the lowest. According to some estimations, by 2050 the emerging countries will represent 60% of global GDP. As an example, we can look at India and China where during the last 20 years the personal financial assets have grown at a rate of 25% per year (Haldane, 2014).

# 1.2 Collective investment industry development in the Czech Republic.

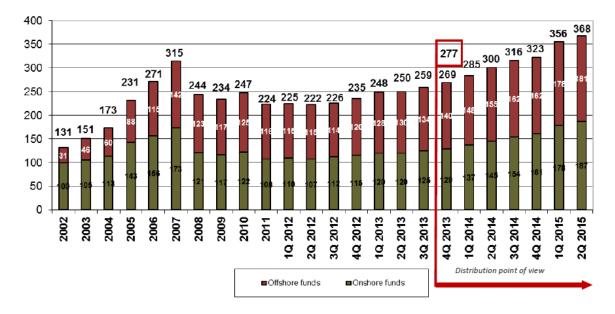
The most popular information that we know about the Czech Republic is that the country is the center of Europe in both senses – geographical and financial. Prague acts like the central hub and every self-respecting financial (and not only financial) company has its aim to organize a subsidiary or a branch in the Czech Republic. From 1996, there is a start of development of collective investment schemes. At that time, Czech Republic had net assets of mutual funds at the amount of 0.81% of GDP. As for 1998, we have the following data. Assets of mutual funds represented the number of \$0.56 billion. The total number of funds was 56 and the average fund size was \$10 million (Klepper, 1998; World Bank, 2004).

Therefore, we see that it has not such a big size. The position still stays insignificant on the EU investment fund market. In 2013, Czech Republic hosts only 0.08% of funds that are managed by investment funds from EU. However, the Czech government is actively working to make the country the biggest investment center in Europe and it is logical because it has all the backgrounds and preconditions to do so (Kotus, 2013).

The legislative activity can be confirmed by the following changes in the Czech law regulations. In 2007, QIF (Qualified Investment Fund) was introduced to Czech law. Such kind of funds brought many of less regulated opportunities for "qualified investors" – credit institution like banks and simply experienced in investments persons. In 2004, the main direction is to open the investment industry even more and to make it look like the Directives and regulations of the European Union. Firstly, "Law on Collective Investments" replaced the "Law Investment Companies and Investment Funds" to go along with the UCITS Directive. Secondly, "Law on Capital Market Undertakings" replaced "Law on Securities". The other department that was actively working on changes is CSC ("Czech Securities Commission") which brought to life 6 new regulations about investment funds (World Bank, 2004).

The real active policy led to nice recent results. According to Czech Capital Market Association in the second quarter of 2015 there was a 3.29% growth was detected in the assets invested in collective investment funds (from 31.3.2015 to 30.6.2015 - from CZK 355.67 billion (\$14.4 million) to CZK 367.39 billion (\$14.9 million) relatively). Investing becomes very popular and now every seventh Czech citizen is an investor in funds. At the date 30.06.2015, four main collective investment funds companies are working in the Czech

Republic. They are ČSOB group, the Česká spořitelna group, the Komerční banka group, and the UniCredit Bank (AKAT, 2015).



Picture 3. History of fund industry of the Czech Republic. Source: AKAT, 2015.

This way we can see that collective investment industry in the Czech Republic is doing its steps to the right direction to be an investment center of Europe. The big amount of changes is a good sign and that means that the country is vividly working on its aim.

# 1.3 Collective investment industry development in Russia.

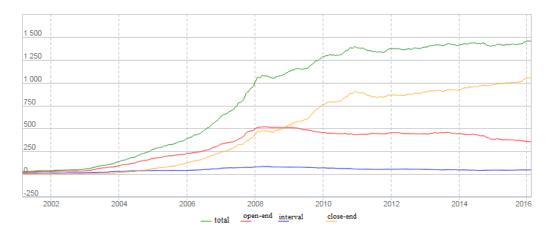
The beginning of 21<sup>st</sup> century showed us the great development of institutional investors at equity markets all over the world, including Russia. Market transformation in Russian economy lead to great institutional changes which has expressed in the bigger role of financial intermediaries. Formation of institutional investors including mutual funds created itself through the experience of American and European ones. World financial crisis of 2008 has reached Russian economy too. However, Russia has good preconditions for development of investment industry, especially when it is supported by the low called "Equity markets development strategy in Russia for the period till 2020" accepted by Russian government in 2009.

According to the decree of president of Russia from 1996 called "Complex measures for providing safety to depositors and investors" collective investment schemes are related to

investment funds, credit unions, non-government pension funds, insurance companies, government pension funds and commercial banks (Vershinina, 2013).

Before it all started, it is worth mentioning about the period in Russian investment schemes in 1992-1994. Government was trying to make the economy alive in different was and one of them was "privatization vouchers". This voucher or check can be exchanged to an equal share of a company, invested into "check investment funds" (CHIF's) or be sold to other person. According to the statistics, around 25 million of people invested their vouchers into CHIFs. Around 40 million of people exchanged their vouchers into shares of different companies by their own and one third of all owners of checks just sold them in the end of privatization (in 1993) – the price of a check was 40000 rubles (due to hyperinflation at this time the number was equal just to \$30. The bigger part of CHIFs went bankrupt and the others just does not pay dividends to their owners because they do not receive profit. In 1998 remaining CHIFs according to the new law had to transform themselves into investment funds of to stay as a joint-stock company and exclude words "check investment fund" form their names (The Federal Foundation for the Protection of Investors and Shareholders rights in Russia, 2010).

Actually, at the beginning of 1990's in Russia collective investment was quite unstructured. Those were the time of financial pyramid schemes and the most famous was "MMM" by Sergey Mavrody (the existence of "MMM-2012" proves that investors in Russia want to invest but they do not know proper information about investing). 1995 year is famous by three laws that manage the better functioning of collective investment. In 1994 first investment funds appeared. The most famous one is "Trojka-dialog" which exists even now and is under the biggest bank of Russia "Sberbank" (Solobuto, 2007).



Picture 4. The amount of funds in Russia. Source: InvestFunds.ru, 2016.

# 2 MUTUAL FUNDS.

In this chapter we are going to explore the most popular and relevant terms of mutual funds classification.

# 2.1 Classification of mutual funds.

To categorize funds, the different criteria of mutual funds are used. The criteria include management style, assets classes, and size of market capitalization, size of a fund, geographical coverage, sectors, maturity period and others:

- Market capitalization will not tell you a lot of information but this is very common category of a mutual fund. Market capitalization of a fund is a capitalization of all stocks in the fund. For example, for stock funds, it can me small, medium and large and for bond it is low, medium and high capitalization. Large cap more than \$10 billion of market capitalization (those are usually "blue chips"), mid-cap from \$2 to \$10 billion, small-cap from \$300 million to \$2 billion, micro-cap less than \$300 million of market capitalization.
- As for the management style of investment, we can see three groups. There is value, growth and blend. When we speak about growth usually, it is referred to "aggressive growth" because all fund has an aim of minimum growth at least to cover the inflation.
- For geographical criterion the following point are used: domestic, international or foreign (which can be developed markets and emerging markets; the investment will be made both into home country and oversee one), global (world; any other countries that home one).
- Size of a fund is usually measured by the amount of assets under management and doing this we should consider the type of fund form the point of securities.
- Sectors may be as for alternative energy, biotechnology, energy, financial services, green parties, healthcare, infrastructure, natural resources, precious metals and commodities, real estate, social responsibility, and technology.

# • Asset classes:

Equity funds (stocks) – this is very large category of mutual funds. The aim
of the funds is to receive income on long-term growth through investing into
stocks.

- o Fixed-income funds (bonds) are "bond fund", "income fund". These funds are made for just to provide a stable income for their participants that are usually conservative investors and pensioners. Typically, here investments are made into government securities.
- Money market funds— short-term debt instruments. Usually those funds invest in treasury bills, government bonds and certificates of deposits. They sow relatively small results for investors; however, they are also relatively safe.
- Balanced (mixed) funds are trying to finds the balance between safety, profit and capital appreciation. The idea is to balance the equity and fixedincome baskets.
- Real estate it is considered to bring constant profit in the size of 8-10% per year and it is one of the most famous fundamental investment. Alas, the real estate profit highly dependent on the health of the economy and on the specification of property you own. Those funds are usually organized for those who has enough capital and patience and does not want to go through purchasing and maintaining their property.
- o Index funds (exchange-trade fund, ETF) are trying to go along with some specific index like S&P500 or NASDAQ. The fund includes as much as possible of the same securities as the tracked index. The funds solely show the same movements as the chosen index and does not require many fees due to the manager of the funds does not have to do many decisions.
- Funds of funds these funds buy the shares of other funds. Their aim is the same as for balanced funds because they are trying to diversify the capital of investors properly for them.

# • Maturity period.

Open-end funds these are investment companies that can issue as many (or as few) share as they want. If there is a new investor – he or she will be welcomed. The price of the fund is determined by its NAV and the share cannot be bought in secondary markets – one can do in at a fund company in a primary market transaction. That means that the funds are opened to newcomers and for those who want to take their capitals back immediately (Fink, 2008).

- Interval funds actually combine open-end and close-end funds because they allow to sell the funds' shares only at specific predetermined dates intervals (e.g., monthly, quarterly or annually). The price of a share is based on its NAV (Seic.com, 2015).
- Closed-end funds here the fund company at first decides how many shares they will issue (that means that they decide how many investors exactly they want). After the moment when all shares are sold, the only possibility to have that share is to buy it from existing investor. The investment company rises its capital through initial public offering (IPO). The shares are traded at secondary markets (like NYSE) and market forces (supply and demand) form their price (Investopedia, 2016).

The above-mentioned classification is used in mixed style. However, one fund can have a few characteristics (for example, open-end real estate fund or closed-end healthcare fund). (Mobius, 2007; Investing-in-mutual-funds.com, 2016; Tyson, 2010: GetSmarterAboutMoney.ca, 2016).

# 2.2 Regulations of mutual funds.

According "ISO Standard List" there are around 250 countries in the world and from the prism of mutual funds researches says that the stricter regulations, stringer judicial system and stringer disclosure and requirements are in a country the more mutual funds the country has. There might be a suggestion that strong legislation and regulations are beneficial to fund industry. Moreover, as for equity funds, the pressure to create insider trading rules affects the amount of contracts in adverse way and we have to consider that bad rules discourage clients and investors to enter the fund. Legal system and its quality is very important for attracting new investors (Khorana, 2003). There is a well-known fact that Russian law about institutional investors is in a great need of close attention and hard work in modification that only proofs the importance of correct and strict legislation. (Vershinina, 2013)

As for this, we can see that the most regulated fund industry is apparently in America. Before a fund can work at all and accept money from investor, it must be registered in Security and Exchange commission (SEC). The most relevant rule of US SEC is "Investment Company Act of 1940". It says about diversification and touches the question of a fund being an investor to other funds, so it protects mutual from too high concentrating. The other rule work for "name test" that means that a fund policy is reflected in funds' name and

prospectus. If you are a person in Hong Kong that wish to invest into pension fund, the only possibility for you will be funds regulated by "Mandatory Provident Fund Schemes Authority". They forecast that until 2030 almost 30% of population of Hong Kong will be aged 65 and above (Tyson, 2010; Hong Kong Government, 2015).

Investment funds industry regulations are different all over the world. Regulation and laws in US are not similar to Europeans one which in their turn are not equal to rules in Hong Kong. Each country has its own regulations of how a fund must look like and it is important to understand this difference. The common shape of a mutual fund is a pool of investors that invest into stock or bonds with possibility of minimum contribution that benefit from diversification. The other common thing is that the regulation is directed to protect the rights of investors. As for Europe, the chief low is "Undertaking for Collective Investments in Transferable Securities" (UCITS). In published version of UCITS III and it pays attention to the monitoring of risks. There are a lot of other point but as "40s act" the European investment funds rules track the level of diversification and concentration of funds (Brown, 2016). The last version is UCITS V that was published on 23 July 2014 says about depositary functions, remuneration policies and sanctions. There is UCITS VI to be determined (Ernst and Young, 2015).

In the Czech Republic on can do in in Czech National Bank. CSC (Czech Securities Commission) controls the local market of investment funds however; in 2014, the team of the World Bank advised that CSC should have more rights in regulating the inner market. For example, CSC have to strengthen its capacity to control that collective investment funds issue financial reports to their investors in the form of IFRS (International Financial Reporting Standards). According to the same piece of advice, it is important to complete a corporate governance code for investment companies and corporate investment funds and to monitor the results through CSC or Union of Investment Companies in the Czech Republic (World Bank, 2004).

Russian regulation of collective investment is going to a bit complicated form now. From 2004 until 2013 there was a special Federal Financial Market Service which in 2013 was abolished and transferred into separate department of Central Bank of Russia called "Central Bank Financial Market Services". This unit was also abolished after one year of existence and now there is no central department like this. All the necessary services one can find and receive in numerous departments of Central Bank. If one wants to communicate about collective investment, he or she should apply to "Department of collective investments and

trusting asset management" of Russian Central Bank. This department is also carrying out the state control for the above-mentioned activities (Banki.ru, 2014).

### 2.2.1 Taxation of mutual funds.

Taxation of mutual funds is a complicated issue in all parts. Both a management company and investor have to pay the most careful attention because it is directly influence on money they will receive on hands in the end. Definitely, there is a need for consultation and tax planning with tax professionals (Ernst and Young, 2015).

The two transactions that must be tracked are dividends and capital gains (more generally distributions). Dividends are the net earnings of the funds and capital gains are profit form investors' trading. European UCITS has an aim to be like American's regulations. Russian law that defines taxes is "Tax Code of Russian Federation" (Banki.ru, 2014).

Easy banking and tax laws made Luxembourg the major point of offshore mutual funds. Moreover, strict rules of banking secrecy laws led the city to be a tax heaven. The other successful center of funds is Ireland (Dublin mostly) has become like it is due to the creation of International Financial Service Center (IFSC) which has provide an incentive to reduce tax of 10% on income from some financial operations.

Here is one small but not the least fact - they get double tax reductions for rent. In addition, those cities became famous due to the regulation that allow selling funds throughout the whole Europe (Khorana, 2003).

# 2.3 Risks of mutual funds.

No investment is isolated from risks but exactly collective investment industry offers relatively less risk investments. It happens because of the way how investment funds are managed and diversification factor. The basic idea of it is that all sectors and all the corporations cannot perform badly at the same time so when some share of fund shows negative results the losses can be covered with profits from other part. Moreover, the great tendency of de-risking that had started in banking goes through the world and the aim of it is to improve both financial system and world economy (Haldane, 2014).

## 2.3.1 Classification of financial risks.

There are varieties of risks kinds and the most interesting for us are financial risks because those are connected with financial market fluctuations and it caused possible financial losses of a fund. Movements of currencies, stock prices, interest rates and others represent financial markets movements (Simplilearn.com, 2012).

- 1. Market risk or in other words, systematic risk is what can affect the price of shares in certain country, region or industry. That macroeconomic factors, business cycles and recessions influence the whole segment of securities. This risk combines all "unknown unknowns" for economy. It happens because nobody knows what will happen in the future and if the given asset will rise in price or fall. Market cannot be totally predicted or controlled so from that point there are no risk-free investments. For example, the financial crisis of 2008. Almost all companies' securities lost in price, even those who had not did anything wrong (Investinganswers.com, 2016; The Mutual Fund Education Alliance, 2016; Investopedia, 2016).
- 2. Liquidity risk means the lack of possibility to sell an investment which value has declined simply because buyers do not want to buy such thing. For example, if, for some reasons, the yield of bond will rise there will follow a high redemption pressure. American's SEC has advised to pay more attention to liquidity risk management and to use "swing prices" which means to pass on the costs of purchasing and redemption to shareholders' shoulders (Greenberger, 2015; Ashworth, 2015).
- 3. Credit risk or default risk refers to the possibility of the issuer of a security to repay its obligations, interests or principles. There are such protections as credit ratings. It is better to check it before making an investment decision. For example, economic crisis in Russia in 1998, when the government announced a technical default for main state bonds (which during 1995-1998 actually turned into financial pyramid because dividend for earlier investors were payed from the capital of newcomers) (Rustagi, 2013).
- 4. Interest rate risk usually this risk lowers the value of fixed-term investments if the interest rate rises. The most obvious subjects of interest rate risk are bonds and preferred stocks while exposure of this risk on short-term investments is less (The Mutual Fund Education Alliance, 2016). Bonds duration usually shows the interest rate risk. Duration shows the sensitivity of bond's price to interest rate movements. Usually the duration is showing the time of maturity and expressed in years. So, the longer the bond, the higher its duration, and the higher the exposure to interest risk. This way, the bonds with 20-year on maturity will be riskier than 10-year bonds. But,

- as the rule of market and according to Adam Smith's "invisible hand of market" the longer a bond the higher yield is has (Investment Company Institute, 2010).
- 5. Country risk this risk refers to international funds and they will lose its value if the target country has some political instability, government actions, terrorism, vast social changes, nature disasters can weaken the investment issuer country's economy. Economical risk of a country is the risk when the country does not have an ability to pay the debt. Political risk is measured by willingness of the government to pay its debts (Perry, 2016).
- 6. Currency risk there is a risk of changing in the price of a currency and this way the value of a fund will change. For example, the value of US dollar gets stronger and it makes non-US dollar securities weaker. Correspondingly if the dollar value decreases, the value non-dollar asset will rise (The Mutual Fund Education Alliance, 2016). Obviously, for international fund managers it is always difficult to predict the fluctuation of currencies' rates. There is a strong opinion that currency rate will influence the fund's value in long-term period (Schoenberger, 2013).
- 7. Inflation risk as the inflation eats the value of a country's currency the value of income and assets is going down also. Purchasing power of the money declines and investors prefer to accept funds, which cover the inflation into long-term period (The Mutual Fund Education Alliance, 2016).
- 8. Personal risk tolerance this is not a direct risk however, it is one of the most important part of investing. This refers not to external facts but to direct internal feelings of the investor. The two main factors are patience and long-term orientation sometimes difficult to achieve for some people (The Mutual Fund Education Alliance, 2016).

# 2.4 Main advantages and disadvantages of mutual funds.

After going through some important points of mutual funds, let us see why it is important and useful to invest in mutual funds.

# Advantages of mutual funds:

1. Diversification. Mutual funds give you the possibility to diversify your investment. That meant to invest not only in one company but also in many of them. (Bryant, 2015; Rediff.com, 2007).

- Money management. Management companies are hiring the most educated managers
  to work with a fund. Solely typical investors of working class are not able to hire
  such a manager. Investing in a mutual fund allow you to give your money under
  professional management (Tyson, 2010; Northcott, 2009).
- 3. Low cost of money management. Due to the economy of scale, the big amount of investors shares the costs for paying the salary for professional manager of a fund. Through different types of funds, investors also can find more expensive and cheaper fund costs (for example, index funds are the cheapest among funds) (Rediff.com, 2007).
- 4. Passive income. Mutual funds will bring you your dividends even if you are spending time sitting on a couch (Tyson, 2010).
- 5. Dividend reinvestment. Modern systems of mutual fund functioning allow to invest received dividends back into work. Dividends will act as a new capital for buying shares. It will help to grow the investment (Merkel, 2016).
- 6. Liquidity. In most cases the shares of funds are very liquid and investors are able to their money back just in a few days (if such is prescribed by fund's prospectus) (Rediff.com, 2007)

# Disadvantages of mutual funds:

- Tax inefficiency. Investors do not have the direct control on their shares. When it
  comes to tax payments, only the fund by itself manages the distributions. Managers
  makes decision to buy or to sell and it is not always optimal for investors
  (Investorguide.com, 2016).
- Risks. No matter who educated a fund manager is there is always a possibility that
  the value of a fund will fade away. There are always will be market fluctuation, which
  will influence the fund. Moreover, your investments are not guaranteed buy
  government (unlike banking savings).
- 3. Choice of mutual fund. They say that a mutual fund cannot satisfy every demand with tiny wishes to invest in particular companies. However, there are at least 10000 fund functioning (in US) and every fund has its own prospectus, investment aims, styles and strategies.
- 4. Cash reserves. Funds have to keep many cash to satisfy the condition of liquidity. That means that a large number of assets is invested into cash, which lowers the fund's efficiency.

- 5. Fees and expenses. Despite the fact that all expenses are divided between all fund's investors, the size matters. In aggressively managed funds fees can reach 3% (Bogle, 2010).
- 6. Dilution. Diversification can perform as an advantage. Sometimes it can turn out to be a con and a dilution. A fund diversifies the investments and if one of asset rises twice in its price that does not mean that, the whole fund will go the same. It means that a part of investments doubled the value that probably will work as a coverage of some losses in other parts. Due to this, mutual funds are not extremely profitable nor extremely poor (NASDAQ.com).

# 2.5 Methods of performance and risk measurement.

There is an important difference between benchmarking in business and finance. Due to benchmarks are widely used in investment practice this difference is sufficient. Business benchmarks mean, "Comparing of elements to find out the best one to use it in the process of improvement". In finance, it has slightly different meaning, "It is rarely used for defining the best product, but it used to find out if the product or organization meets performance standards" (Kuosmanen, 2007).

Usually investors are used to use the profitability as the main performance indicator. However, it may occur as wrong strategy. For more clear view on fund, one must assess other indicators like the following (Pankratova, 2008).

• Sharpe ratio measures "reward-to-variability" activity of a fund. In other words, it shows the relationships between the exceeding of fund's profit over free risk assets to standard deviation (risk of fund portfolio):

$$RVAR_p = \frac{ar_p - ar_f}{\sigma_p}, [1]$$

Formula 1. Sharpe ratio. Source: Pankratova, 2008.

where  $ar_p$  - average fund's profit over the given period of time,  $ar_f$  - average profit or risk free asset,  $\sigma_p$  - standard deviation.

The thing is that the Sharpe ration shows standard deviation measuring risk. Therefore, the bigger standard deviation from average profit, the bigger the risk. The Sharpe ratio is a very

useful tool. However, it has one disadvantage. According to Sharpe, there is no difference between upwards and downwards movements. This means that both upwards and downwards movements are bad for fund. It would show a manager that had a few good upwards directed contracts as a disadvantage. Small number of Sharpe's ratio shows that profitability of a fund does not cover the accepted risk level (for example, small profit and big standard deviation). Negative meaning shows that banking savings accounts and government bonds are more profitable than given fund.

• Beta. This coefficient refers not only to performance measurement but also to risk measurement. Beta shows hove the changes in the market will influence on a portfolio profit. Beta of the whole portfolio equals to weight average meaning of assets' betas that included into given portfolio. Assets with more than beta equal to one are considered as riskier than market and with bets less than one – less risky (Pankratova, 2008).

$$\beta_p = \frac{\sigma_p}{\sigma_m} k,$$
 [2]

Formula 2. Beta ratio. Source: Pankratova, 2008.

Where  $\sigma_p$  - standard deviation of funds return,  $\sigma_m$  - standard deviation of index, k - coefficient of portfolio and index return correlation.

• Alfa coefficient. This one characterize how the average fund's growth excesses the normal or expected fund's growth according to calculated beta. The higher the alfa the better the skills of the manager. Positive meaning of portfolio's alfa shows that its average return is higher than the expected return that means that the managing of the fund was of high quality. Negative alfa meaning shows that portfolio performance was less than standard model. If the alfa is equal to zero, it shows that the changes of our fund does not depend on the changes of standard model. Actually, that means that the manager invested into index fund and did not manage the fund actively (Pankratova, 2008).

$$\alpha_p = ar_p - \left[ ar_f + \left( ar_M - ar_f \right) \beta_p \right]_{[3]}$$

Formula 3. Alfa coefficient. Source: Pankratova, 2008.

Where  $ar_p$  - average return of the portfolio,  $ar_f$  - average return of risk-free assets,  $ar_M$  - average return of market (index),  $\beta_p$  - beta of the fund.

• Treynor ratio goes through reward-to-volatility relationships. It shows the percentage of how much we received more investing into fund than investing into risk-free assets (for example treasury bills). It shows excess or return we receive by taking more risk by investing into fund instead of investing into risk free assets. It is calculated almost like Sharpe ratio however, we should take just a systematic risk – not the whole on. It is represented by dividing the excess the return of fund's return over risk-free return to beta coefficient (Pankratova, 2008; Reill, 2011):

$$T = \frac{r_i - r_f}{\beta_i} \quad [4]$$

Formula 4. Treynor ratio. Source: Reill, 2011.

where ri – portfolio return, rf – risk-free return,  $\beta$ i – beta coefficient.

### Risk measurement of mutual funds.

During last ten years, investors started to show a high interest to other dimension of mutual funds' performance: risks. In the history, there are three remarkable periods of risk measurement development: 1965-1968, 1977-1980, and 1991-1993. The first period included a lot of actively developing small. During other two periods, mutual funds did not pay attention to the size of funds and tried to perform according to the situation (Jagric, 2007).

There are several ways to measure risks of mutual funds.

- 1. Standard deviation. It says the level of investment fluctuation from the average return. This way, if a standard deviation equal to 3.0 that means that the monthly return will be 3% lower than the average monthly return and 3% higher than the monthly return.
- Chance of loss. The most conservative funds have almost zero chance of loss and the other more active funds have the following consequences. The higher level of income they have the bigger chance of loss they will face.
- 3. The magnitude of loss. It meant how much a fund can lose during the given year. For example, a fund in theory can lose 40% of investments. An investor has to decide, if

this magnitude of loss suitable for his level of tolerance. If the feeling will be interpreted wrong, the investor can make a negative investor's decision and withdraw the investment in wrong time.

- 4. Draw down. This term shows the number of percentage that can appear when a fund goes from its highest value to lowest. For example, a drawdown in a fund can be 41% and this means that once it has happened that the value of fund has dropped on 41%.
- 5. Beta ratios. Such ratios calculate the level of funds' deviations in case of market fluctuations. The benchmark meaning of beta is 1 because that means that a fund with beta equal to 1 will fluctuate at the same level with market. If the market will grow on 5%, the fund will have bigger value at 5%. If the market loses 11%, the same does the fund. If an investor does not want such risk exposure, he or she should choose a fund with lower beta. For example, if a fund's beta equal to 0,36 that the funds will react to market in a such way the market falls on 10%, the fund falls just on 3,6%. However, the same refers to profit the market grows on 10%, the fund grows only on 3,6%.

The risk measurement can never be optimal when using only one of the above-mentioned measurements. It is always better to use a few of them. Understanding fund's risks, it is one of the most important thing to do before picking a fund. Risks in most cases determines the performance and an investor definitely should spend some time to make such researches on it and match it with his or her risk tolerance. After taking these steps, the investor will feel more confident and comfortable while making investment decisions (Yih, 2016).

# 2.5.1 Approaches for comparing and selecting mutual funds.

Investing in a mutual fund for an investor might be very easy. One just have to make a choice and buy a fund's shares. However, to make a wise choice and not to be a victim of marketing an investor has to do its so-called "homework" (Investopedia 2016).

1. Reading a fund's prospectus. This first step is very important and allow understanding many things about the fund (TradeKing.com, 2016).

№	Information from prospectus	Why it is important
1	Fund's investment objective	Objective of investors have to be identical to fund's ones. There are three investing aims: capital appreciation (growth of stock price), income payments and saving the capital from inflation.

2	Actively managed fund of index fund	The behavior of actively managed fund will represent its manager in a big degree and everything will depend on the manager (bigger fees for that kind of funds). Index funds will follow the selected index and interruption by manager will not be required in general.
3	Fund's short-term performance records	Investing styles and asset classes are combined in a unique mixture and it will be reflected in the short-term records. Fund's history not always show the future performance and it is better to pay attention to cycles.
4	Fund's long-term performance records	Big 10 years' cycles must contain fund's yearly return and those results will show how the fund reacted and coped with market cycles. The same is for here: past performance will not reflect the future one.
5	Variation of fund's performance for year to year	Using standard deviation is very useful for understanding how far the fund can go because it shows the highest and the lowest numbers. The higher the standard deviation is the wider fund's performance can vary and the more volatile it can be.
6	The time a manager works with the given fund	Some managing companies are tent to change fund's managers and it can highly affect the fund's performance.
7	How permanent the fund in its actions and following the prospectus	Watching fund's notes somebody can see some mismatches with prospectus investing style, it called "Style drifts", and they are not always bad. The style can be changed according to market situation. But still you should track fund's flexibility.
8	Turn over ration of a fund	Despite the fact if the fund has positive or negative return, it generates taxes. The fund who trades frequently will have bigger taxes even with negative return than profitable one.
9	Fund and taxes	All distributions (gains and dividends) are taxable and distributions as a rule are made once per year. Some funds pay attention to it and work to maximize the tax efficiency.
10	Funds expenses ratio	Understanding the base of what you pay for the fund's annual operating costs will help to understand fund's efficiency. Are those high expenses reasonable for the given return?
11	Fees and sales charges	This describes the cost-effectiveness of the fund. You should orient on length of your investment and sales charges structure.
12	Risks that the fund takes	The exposure to the risks must be explained in details in the prospectus.

Table 1. Information form a fund prospectus. Source: tradeking.com, 2016.

2. Some professionals also organizing investment industry to be easy for everybody. For example, the team of web-page investment research company "Morningstar" advises to go through three main points of a mutual fund to decide if it worth investing there.

- a. Analyst pick analysts of Morningstar have gone through more than 2000 funds and have chosen the best to invest.
- Stewardship grade this grade system starts from A and ends with F just like in school and managers and investment companies are estimated according to their work
- Morningstar's analyst opinion it looks like a small commentary to fund's strengths and weaknesses.
- 3. Statistical method is worth paying attention also because it gives a mathematical picture for advantages and disadvantages of chosen fund. However, this method cannot be the only method to base your decision on. It has to be combined with prospectus screening and determining "style drifts".
  - a. Mutual fund returns. Returns can be calculated in different ways like including fees, redemption fees and dividends or not. It can be arithmetic or geometric annual return.
  - b. Mutual fund risks. Investor has to know what risks are existing for the investment and this is one of the reasons to invest or not to do. All the abovementioned risks are crucial for calculating and assessing.
  - c. Mutual fund performance. Risk-to-return ratios are the most optimal to be evaluated here and the most important ones are Sharpe's and Treynor's ratios.
  - d. Turnover rate, expense ratio and manager's tenure are three key statistic numbers that influence on net return and investing strategy (Investing-in-mutual-funds.com, 2016).

# 2.5.2 Rating and scoring.

During last times, the industry of investment funds is growing so fast that the amount of funds even became bigger than the existing amount of stocks. It is connected with great variety of investment strategies that a fund can offer. From the side of funds' managers, it can be a serious push to perform their skills in a proper way because to be more precise rating agencies will go through every manager's action to score his abilities and fund's performance. The winners of ratings are usually those funds that simply match the current market situation. Bull market wins the party and speculative funds that buy shares of "Tesla Motors" look very smart, while funds who own "AT&T" does not (Baldwin, 2015; Schmidt, 2016).

# 2.5.2.1 International rating agencies.

International rating agencies or international credit rating agencies offer assessment services on investment's risks. The most relevant assessment will provide the results on credit risk, which means the ability of a company to pay their debts back to global investors. The development of such industry went to next level when companies started to pay to agencies to receive an assessment score (Financial-dictionary.thefreedictionary.com, 2016).

The most famous and popular ones are the "Big three" – "Moody's Investors Service" (or "Moody's" for short), "Fitch Ratings Inc." (or "Fitch" for short) and "Standard & Poor's Financial Services LLC" (or "S&P" for short). Together they control almost 95% of credit rating market. They are all American based however, they perform all over the world. To show the specter of the responsibility of the "Big Three" actions we can pay attention to the financial crisis when these agencies were in a center of it. Rating is usually represented by letters – starting with AA and A and then the other alphabet letters (Council on foreign Relations, 2015; Taylor, 2013).

The agencies in general have in common the following procedure of analyzing the two factors:

- 1. Business risk evaluating geographical diversification, market position, market cycles, sector strengths and weaknesses and competitive dynamics.
- 2. Financial risk evaluates financial flexibility of a company by funding diversity, sales, liquidity, profitability measures, growth expectations and financial forecasts.

If a company wants to interact with a rating agency this function will be on the treasurer of the company or on the financial director by himself. It is important to understand clearly the procedure of putting the rating and the inner difference between agencies peers (Association of Corporate Treasurers, 2016).

# 2.6 Methods for predicting mutual funds' performance.

The fact that past performance does not predict the future on is well known. However, the track of past performance is the most precious asset for a fund. This is the first thing on which an investor or adviser watches when picking a fund. Nevertheless, does it actually right? No, according to the research of Morningstar in 2003. Funds that were staying in high lines of rating on one-year, three-year and five-year rating basis had small possibility to go the top again. Moreover, the longer the fund was staying in the top the less predictive it was.

There are many methods of predicting mutual funds' performance and here are a few of them: fundamental, technical, psychological, intermarket analysis. As one Chinese proverb tells, "There are a lot of paths to the top of the mountain". The same can be referred to analyzing financial markets and mutual funds (Brecht, 2015).

# 2.6.1 Fundamental analysis.

Usually this method goes along with technical one but as a sole method it represents overall economic factors analysis and understanding of big picture. The main thing here is to pay attention not to technical aspects of investment chart but to patterns and signs that can help you to predict the future performance of a fund. Fundamental analysis needs from you to look at thing that have more qualitative meaning. Fundamental analysis is useful when one need to understand whether to sell or not to sell. When the market is going down it is so easy to be caught by rear and to sell the investment. However, in this situation investor should step back and think and in this case to analyze the fundamentals. Does the company have good management? How did it go during previous slowdown of the market in the company? Does the company have reasonable business model? (Marquit, 2013).

# 2.6.2 Technical analysis.

It is based on visual examination of financial market charts and according to the past performance of price levels, there is an attempt to forecast the future performance. Certain quantitative aspects lie in the base of measurements and there are both relation to fundamental analysis or economic events. The future price is predicted by careful examination of patterns of volume and price movements. It involves less time and analysis than fundamental analysis. The difficulty of technical analysis is that sometimes it is difficult to identify the pattern and its impact on the future price (Kevin, 2015).

According to a fund's price history chart, one can draw a trend line – the most relevant data in technical analysis. The price charts show picks and valleys and investor can draw a trend line connecting three or more picks/valleys.

We will go through five most frequently seen patterns of price movements (Stockcharts.com, 2016):

• Double top/bottom reversal. It consists of two almost equal picks/valleys (correspondingly). Until the support line is broken the reverse cannot be confirmed.



Picture 5. Double top pattern. Source: StockChart.com, 2016

 A head and shoulders top/bottom reversal. This figure appears after an upward/downward trend with three picks/valleys where the middle one is the other two are shoulders while forming a pickline (correspondingly).



Picture 6. A head and shoulders. StockChart.com, 2016

 Flags and Pennants. This pattern can be found after a strong advance or decline. It shows a short time consolidation before the previous direction resume.



Picture 7. A flag. StockChart.com, 2016.

 Price channel. This as a trend line drawn together with resistance or support line connecting picks and valleys and creating a kind of corridor. The upward corridor called "bullish price channel" and downward corridor called "bearish price channel".



Picture 8. Price channel. Source: StockChart.com, 2016.

 Ascending/Descending Triangle. This is a formation with horizontal line and trend line, which shows upward or downward direction. After this figure the trend continues.



Picture 9. Ascending/Descending Triangle. Source: StockChart.com, 2016.

#### 2.6.3 Psychological analysis.

Mutual fund is not just a game of numbers; it has the same relation to both numbers and people. Behavioral finance that study the way how people influence on finance, has shown that investors are the worst enemies of themselves. Mathematical investment strategies are tent to fail because the market is not efficient so an investor cannot rely just on numbers and has to turn on common sense. As an investor cannot see the future of investment fund he or she faces some confusion. Blaming the manager for losses is the same for blaming market

forces for not having predisposition to go up. This is a non-effective way for investor to run away from accountability (Beattie, 2016).

The psychology of investors, managers, heads of management companies influence on their decisions and this way influence on how the market will go. It is so because of the great scale of modern financial markets. It is not just a single person but the whole industry that functioning on daily basis.

#### 2.6.4 Intermarket analysis.

The relationships between asset classes of financial markets can help to reveal the business cycle, economic trends and risk exposure. They are all interconnected just as a domino construction. For example:

- Commodities prices will tend to rise while dollar is falling and vice versa.
- Stock enjoy rising prices for bonds and falling interest rates and vice versa.
- One of the signs of economic growth is rising commodities prices. It is also good for stock prices and has negative impact on prices of bonds.

In conclusion, intermarket analysis as a part of technical analysis investigates the correlation between main asset classes of financial markets: stocks, bonds, commodities and currencies in order to predict their potential future development (Murphy, 2012)

## 2.7 Conclusion to theoretical part.

A Collective Investment Scheme (CIS) is a regulated pooled investment fund where the underlying investors own units in a shared portfolio. According to Collective Investment Schemes Control Act (CISCA) the collective investment scheme in general is a scheme including an open-ended investment company where after pursuance the share of the scheme members of the public are invited or permitted to invest money or other assets in a portfolio. (Walters, 2008).

Mutual funds are very popular mainly for the a) easy buying and selling of funds shares, b) minimum investment is small, c) professional portfolio management d) large choice of investment objectives, e) market return for individual investors. Contrary, there are great basket of factors that must be taken into consideration before making the investment choice and one of the top importance are risks. Considering risks might be twice difficult due to both bottom and ceilings lines (The Mutual Fund Education Alliance, 2016; Haslem, 2003).

# II. ANALYSIS

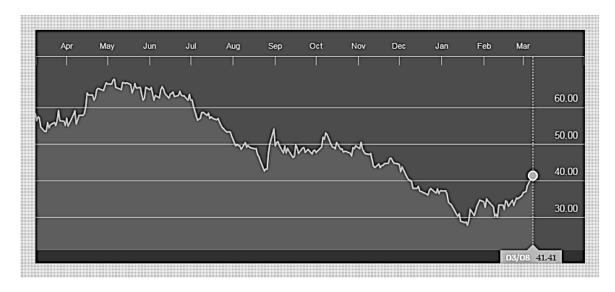
# 3 ANALYSIS OF MACRO-ENVIRONMENT AND CURRENT MUTUAL FUND INDUSTRY TRENDS.HEADING.

Here macro-environment factors and mutual fund trends will be analyzed.

### 3.1 The analysis of macro environment at global level.

Since the millennium has started the world, economy burst out by global imbalance that lasts until nowadays. This imbalance is represented by economic crisis, worsening of current accounts and public finance balances. Despite the fact that in February 2016 the world economy has declined the, outlook seems much stronger because of monetary tightening in US and strong dollar. However, there is controversial opinion that there is a current conflict between optimism macroeconomic statistic and plans of Federal Reserve and financial markets.

Oil prices. From the beginning of 2016 until 20 January, the prices of oil declined sharply and it influence on expected growth of Iran oil export. The Brent crude oil reached it lower price since 2003 (\$27 per barrel). There are some forecasts that the price will grow to \$40-45 per barrel at the end of the year; however, there are no other growth expectations during the current year (Czech National Bank, 2016).



Picture 10. Brent crude oil prices. Source: Bloomberg.com, 2016.

Average inflation continues to go down due to modest wages growth and low commodities prices. Alas, inflation in developing countries are projected to have inflation growth in 2016. Modern slow growth of world economy and low level of investments also has influenced on unemployment rate (employment-to-population rate). World economy has fail to create a

necessary amount of jobs positions. The average job creation has slowed down from 2011 at 1,4% per year (in comparison with growth of 1,7% per year during before-crisis year). Youth unemployment is equal to 36% of all world unemployment. During 2016-2017 the unemployment is projected to grow a bit and then stay still. In Organization for Economic Co-operation and Development (OECD) countries almost 30% of unemployed people stayed without work 12 months or more representing 77% of long-term unemployment since financial crisis. So we can see the picture of high unemployment rate despite the fact that some regions performing well in this sphere. In developing countries and transition economies (Argentina, Brazil, China, India, Indonesia, Russian Federation, Saudi Arabia, South Africa and Turkey) the employment growth slowed down from 1,4% (2000-2007) to 1% (2009-2014) which shows average fall in GDP and slow employment intensity in these countries. Decline of employment in developing countries is partially explained by decrease in usage on labor force (growth of technical equipment), particularly among women and youth.

There are 5 main headwinds that will slowdowns the development of macroeconomics (United Nations, 2016):

- Macroeconomic uncertainty and volatility uncertainty keeps influence on aggregate demand, that was confirmed by US Federal Reserve as a main factor of post-crisis development. As we know, households and firms make today's investment decisions on the basement of expected future performance, however people are aware of uncertain results of economic outflows. It influences on people behavior and so on future income distribution.
- Low prices for commodities and slow trade level international trade that was
  mainly driven by demand from China, has a slowdown. During 2009-2011 high
  commodities prices supported an export income of many developing and transit
  countries.
- 3. Volatility in exchange rates and capital outflows low commodities prices, capital outflows from developing countries and active diverging monetary policies caused great volatility into currencies, especially weakening of emerging-market currencies against US dollar. Another reason was differentiation in expectations of how that countries is going to develop in future. Brazil and Russia faced the biggest fall and faced with great slowdown of their economies.



Picture 11. Exchange rates of selected emerging-market currencies vis-à-vis the United States Dollar, 1 September 2014 – 23 November 2015. Source: UN/DESA, based on data from JPMorgan.

4. Disconnection between finance and real sectors – we can state this according to the completely collapsed fixed investments however the growth of debt securities continued its step-by-step growth (increase on 55% between 2008 and 2014). As aggregate demand in developing countries is low (in addition to policy uncertainty and deflation risks) the investments have no reason to be.

All in all, the main problems of the world economy now are (International Monetary Fund, 2016):

- 1. Slowdown in emerging market economies.
- China's rebalancing.
- 3. Low commodity prices.
- 4. Monetary conditions in the United States.

	Global piece	Index of economic	Global innovation	Index of economic
	index (2015).	globalization (2015).	index (2015).	freedom (2016).
	Score/place.	Score/place 95,69 /1	Score/place.	Score/place. 88,6/1
	1.148/1 – Iceland, the highest piece, 3.645/162 – Syria, the lowest piece	-Singapore, the highest globalization, 25,99 /152 – Ethiopia, the lowest globalization	68,30/1 – Switzerland, good innovations, 14,95/121 – Sudan, bad innovations	- Hong Kong, big economic freedom, 2,3/178 - North Korea, no economic freedom
US	2,038/94	58,77/90	60,10/5	75,4/11

EU	1,566 (regional average)	-	47,99 (regional average)	-
CZ	1,341/10	84,59/12	51,32/24	73,2/21
RUS	2,954/152	53,27/110	39,32/48	50,6/153

Table 2. World indexes. Source: Visionofhumanity.org, Globalization.kof.ethz.ch, Globalinnovationindex.org, Heritage.org correspondingly, 2016.

#### 3.1.1 Analysis of current mutual fund industry trends worldwide.

The world economy condition definitely has the direct impact on financial system and mutual funds. International mutual funds are key contributors to the globalization of financial markets and one of the main sources of investments to emerging economies (Kaminsky, 2001). The above mentioned outlook does not show positive mood. Economic growth remains weak, Federal Reserve rises it short-term rates for the first time after the decade, oil prices are low.



Picture 12. Dow Jones Industrial Average. Source: Marketwatch.com.

Due to fluctuation in world economy foreign stock remain volatile too. Investors put in foreign stocks funds \$208 billion in 2014 and at the same time pulled out \$56 billion from U.S. stock funds. Investors want their portfolios to look like broaden market because foreign stocks gather almost half of world market value. While central banks of Europe and Japan are trying to make their economies work the US are doing the opposite. So European regions look more profitable.

As federal Reserve rises interest rates, the prices for bonds in mutual funds portfolio drop because new rates are more attractive now then old ones. It is not such a strong effect however there are a lot of prognoses about "bond bubble".

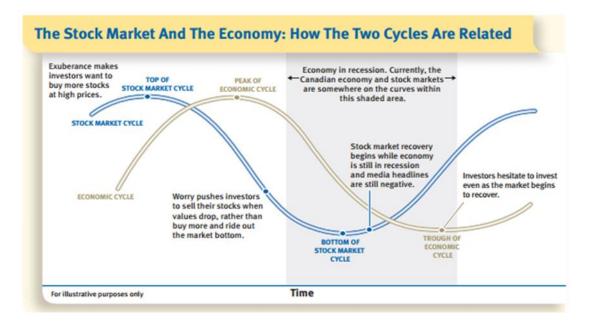
There are two differences between 2015 and 2016 years. A) Fed started to rise interest on December 16, 2015; b) now we are one-year closer to the next global economic recession according to market and economic cycles. There is a challenge for investors to stay on the waves of cycles however we still have some time before next financial crisis (Russel investments, 2015).

Despite the high power of financial markets there are more simple factors that can influence on mutual fund trends. For example, it can be a changing demographic situation. Demography now is of a great interest because during this times it has a big grow potential. Now there are 7,3 billions of people. Till 2050 our world will most likely face 9,7 billions of people living on the planet (approximately adding 83 million people annually) and 11.2 billion by 2100. This is impressive. How those digits will influence on mutual funds? Actually new growing population has a great asset potential. In 2015, 9.1% of the world's population was under age 5, 26.1% was under age 15 (United Nations, 2015). Those who were born in around 2000 prefer to save, while remaining under pressure of education loans and other financial obligations. After some time, they'll almost certainly become a stronger force in the mutual fund marketplace. This definitely will not happen in 2016 but mutual fund cannot avoid such strong trend and needs of this growing groups.

The other trend is uncertainty in regulations. The most famous US mutual fund regulator SEC (Securities and Exchange Commission) has recently had paid a lot of attention to regulations in the sphere or personal accountability and responsibility. There are a lot of rules are awaiting to be brought to life and it will have its impact on resources, processes, controls, and costs of mutual fund industry. Another side to produce regulation (mainly in US) is Department of Labor Fiduciary Rule that may impact on distribution channels and long-term relationships. Rules by Financial Stability Oversight Council can influence on risk management and reporting requirements that will rise the costs of mutual funds.

One more trend relates to competition between new-coming mutual funds and existing giants. The competitive advantage in our times will be concentrated in new approaches in everything from product strategy to service models and distribution channels. Small and new mutual funds have to organize their work in a very efficient way because it is very difficult to receive expected return while competing with a bunch of powerful players. And what they both small and big funds can use to grow are new products and globalization. New products are a great impact for future development not only in the sphere of mutual funds but also in

any other industry. Price competition and product differentiation are both effective strategies in obtaining market share (Khorana, 2012).

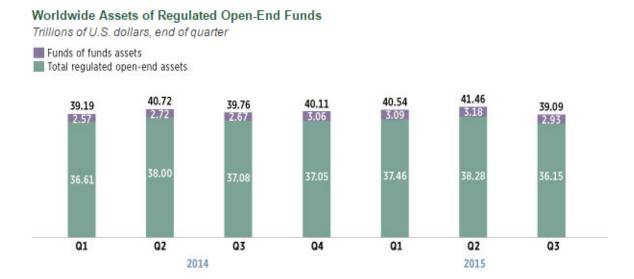


Picture 13. The stock market and the economy: How the two cycles are related. Source: RBC Asset Management, 2009.

Recent trend in collaborations of mutual funds and insurance industry is a good example and it can cover the existing investment products. Investors from year to year in their life are moving from asset accumulation to generating income and retirement and it also can give a shift to mutual fund industry. That search of new products is a sign that the industry is standing on the edge of new era of development.

One of that commonly spread risk is a cyber risk. Cyber protection is very important because it became crucial and inseparable part of mutual fund industry. A great exposure into IT was one of milestones of financial markets at all. Cyber risks have to be minimized to protect the reputation of all participants. Alas, on the other hand such cyber regulations are very expensive. One more long-term risk is switches between active and passive management strategies. Due to difficult economic situation actively managed funds may want to include index funds and fixed income solutions to their portfolios while investing into clients' education and right perception of fund's philosophy (Deloitte.com, 2016). Anyway active and passive investment are always a puzzle for investment. It Takes time to understand it and specially to decide about one or another option. Indeed, the confrontation between active and index funds in terms performance has been a key milestone of competition since the introduction of these investment structures (Pace, 2016). It is also worth considering actively

managed funds are more active and charge lower fees when they face more competitive pressure from low-cost indexed funds (Cremers, 2015).



Picture 14. Worldwide Assets or Regulated Open-End Funds. Source: Investment Company Institute, 2015.

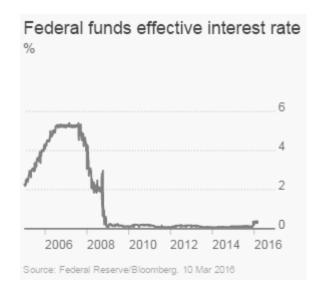
## 3.2 The analysis of macro environment at the U.S level.

Unstoppable United States keep working and 2015 showed the following features. Unemployment rate has shrunk from 10% to 5% in the end of the year, housing market is not a burden anymore, it is a source of growth and consumers are supported by healthy employment and low energy prices. The most important event is Federal Reserve decision to raise interest rates for the first time in 7 years. And now everyone is wondering how often and on which high the interest will be risen.

At the beginning of 2016, we can see a gap between the development of the US labor market and economy of the country. Households feel very positive on labor market. In future period, some sectors can be affected by low commodities prices and strong dollar. Such sectors are industry, mining and energy. In the end of previous year retail sales dropped unexpectedly. Ay the general meeting in January US central bank stated its intention not to change the federal fund rate in near future. Economy will continue to growth but not so fast.

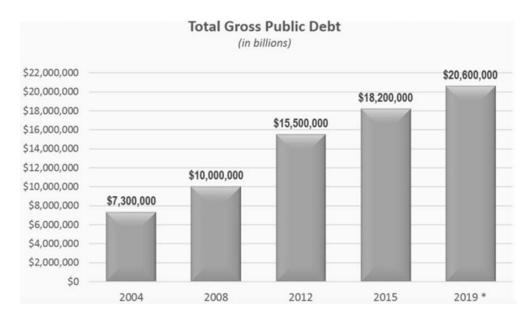
It will happen because problems of world economy are effecting American manufacturing sector and recent volatility of stock markets however, as we said above it is all covered by amount of jobs created so there will be no recession in close horizons. This economy is still the largest and the most important in the world representing 20% of global output. May be

China decided to be more service oriented economy because America is so. Moreover, America is a leader in automobiles, aerospace, machinery, telecommunications and chemicals.



Picture 15. US Federal funds effective interest rate. Source: Financial times, Office of Management and Budget, 2016.

We see the signs of recovering however there are some factors that may influence on recessions in future. Rising income inequality and medical costs are socially-oriented economic factors that are long-term issues breaking stability (Focus-economics.com, 2016). Moreover, the government debt is impressive: \$18 trillion, it is 103% of American GDP (\$154000 per taxpayer). In 2019 the debt is projected to be 20,6 trillion.



Picture 16. Total Gross Public Debt. Source: Forbes.com, 2015.

There is a hope for Americans that it can be changed. November 8, 2016 is the date of president elections. Maybe someone of Hillary Clinton, Bernie Sanders or even Donald Trump will correct the situation.

#### 3.2.1 Analysis of current mutual fund industry trends in the U.S.

# Number of Mutual Funds

	Jan 2016	Dec 2015	Jan 2015
Total long-term	7,643	7,635	7,446
Equity	4,763	4,764	4,675
Domestic equity	3,272	3,277	3,252
World equity	1,491	1,487	1,423
Hybrid	717	717	674
Bond	2,163	2,154	2,097
Taxable bond	1,587	1,581	1,538
Municipal bond	576	573	559
Total money market	483	481	526
Taxable money market	339	336	363
Tax-exempt money market	144	145	163
Total	8,126	8,116	7,972

Picture 17. Number of mutual funds in US. Source: Investment Company Institute, 2016.

The mutual fund industry for the universe of US mutual funds during 1976–2009 was very bright. Industry assets increased by a factor of 200, the number of active fund families quadrupled (Khorana, 2012). Despite the relevantly positive prognosis about American economy in near future the facts of mutual funds are not positive. Only 1% of mutual funds gave positive results in new 2016 year and 28 percent of large-cap mutual fund managers are beating their benchmarks. People from Wall Street state that fund managers can still take advantage of high volatility and earn some money using active management strategy. For now, 2016 looks like 2015 however according to the data of 2015 only 27% of actively managed funds were able to outperform. Great volatility provided high dispersion and alpha coefficient with offers good return opportunities however this situation was challenging for investors. In 2016, high dispersion (the difference between performance of sectors) was

provided by bad performance of financial sector with an 11.4 percent decline and telecom as the best performer with 3% of growth. The other factor of underperformance of active management strategy were FANGs — Facebook, Apple, Netflix and Google. In 2015 the return from them was 87%, this year it is 77%.

Such conditions influenced on mutual funds in negative way and investors started to take out their savings. There was a \$38.1 billion outflow from long-only equity mutual. Their money went to index funds (exchange-traded funds) at least because of their comparatively low costs to mutual funds. However even exchange-traded funds lost \$17.6 billion. We can percept the bigger scale through the total numbers. Exchange-traded funds lose is bigger because it is \$2 trillion industry in comparison with \$5.6 trillion under management in U.S. equity-based mutual funds (Cox, 2016).

There are a few advices from big American investment banks (Credit Suisse and UBS) to Americans how to invest in 2016 (Trang, 2015).

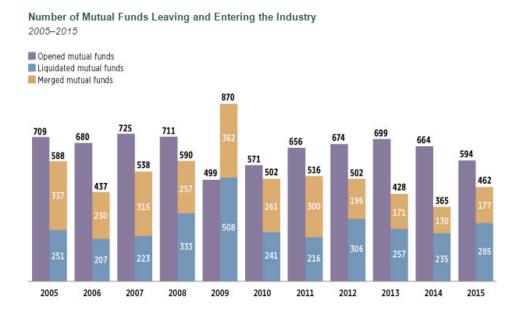
- Invest into U.S. dollar. Buying US Dollar index will bring return as other currencies
  will depreciate against the dollar. It will most likely happen because Federal Reserve
  is rising an interest rate and it will strengthen the dollar. Currencies that have higher
  interest rates are more attractive to investors because they are supposed to bring
  higher interest income if borrowing.
- 2. Invest in European Equities. There is a forecast the European earnings per share will grow 10% while 6,8% EPS growth in US. Despite the fact that global outlooks provide not so positive information, European companies will grow due to inner strength of domestic economy.
- 3. Invest into financial sector. Active market volatility will rise up the trading volumes and broker will benefit from it with bigger commissions, advisory fees and high interest rates. Despite the fact that financial sector has performed poorly it still remain the most attractive sector for investments.
- 4. Invest in technology. This sector is still reasonably valued despite some runs down. This sector will benefit from high operational level and high capital expenditures that companies will organize to rise its productivity especially in the sphere of mergers and acquisitions.

Invest in healthcare. As every other sectors it had some downwards however it is still worthy because of big entry barriers and stable earnings. In long-term period the sector will benefit

from the boom of millennium generation. In 2016 the healthcare is projected to grow 10% against 8,6% of S&P (Trang, 2015).

Actually American mutual fund industry includes not only development of funds that already exist, but also mergers and acquisition of them end even closing of funds. Mostly it happens because of competition and macroeconomic conditions. Fund sponsors create new investment companies to meet the demand of investors and they and merge of liquidate funds that does not meet investors' demand anymore. In 2014, there were 654 new funds opened. During the period 2008-2015 the amount of new funds cannot beat the pick in 2007 (726 new funds), however 594 is the normal average in 2004-2015. From the 2011 there is a decline of merged and liquidated amount of funds from 516 to 362 which lead to the largest net increase of mutual during last 10 years. Such activity of entering and leaving the industry reveals the strong competition in mutual fund (Investment Company Institute, 2015).

Fund companies are usually closing the funds because of their poor performance. It definitely does not help to their marketing complain and their Morningstar rating; underperforming funds will have a low rating. Technically, funds with good performance are rarely stay without money, so there is no reason to close good funds. Moreover, there is a preference to merger a fund instead to liquidate it if it is possible. It is much better for investors because they do not lose their investments and often put them even in better fund.



Note: Data include mutual funds that do not report statistical information to the Investment Company Institute and mutual funds

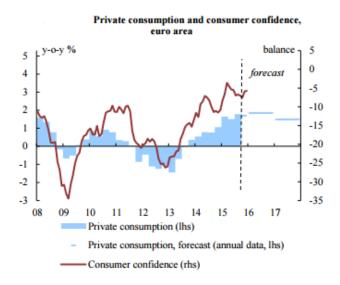
that invest primarily in other mutual funds

Picture 18. Number of mutual funds leaving and entering the industry. Source: Bernhardt, 2016.

Despite the fact that in 2016 there will be a possibility for actively managed funds to catch the wave of return however the statistic of 2015 cannot inspire them to do it. As of the end of 2015, 84.15% of large-cap managers, 76.69% of mid-cap managers, and 90.13% of small-cap managers lagged their respective benchmarks (Waggoner, 2016).

### 3.3 The analysis of macro environment at European Union level.

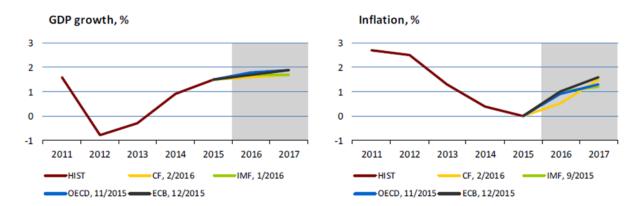
Now we know that the world economy is fighting with some difficulties while Europe remains in period of moderate growth. Apparently, the economy will continue to recover, however the growth will be slow in comparison with both historical data and other countries. Fiscal and monetary policy will support the growth but probably it will not be enough, GDP of the Euro area is expected to grow by 1.7% in comparison to 1.6% last year, and in 2017 the growth should catch 1.9%. Factors that will help to recover will bring some boost to the GDP development. Drop in energy prices stimulated the households and consumption but there is one more reason of consumption boost - the arrival of unprecedented numbers of migrants that are running from war in Syria and elsewhere.



Picture 19. Private consumption and consumer confidence for Euro area. Source: Czech National Bank, 2016.

One more factor that has to support the slow growth of Euro area is factor that expected to be short-lasting however it has longer effect. It is energy prices which are low and stimulated to stay low by the excessive production and they are supposed to stay low at least till end of summer. Exporters in EU are stimulated by the fallen Euro especially against USD. The difference between US and EU monetary policies is one of the reasons for euro to be low. This happens because US Federal reserve raised its interest rates for federal funds while ECB

and Bank of Japan continue to use quantitative easing. Moreover, both sides announced their intentions to continue what they are doing – to tighten the capital more from Fed and to loosen the capital accommodation from ECB and Bank of Japan. And the results QE in Euro area are successful. ECB is helping Member States to reduce financial differences by keeping on the quantitative easing and credit easing (low financing cost). Accommodation of capital for households and non-financial corporations has improved and lending cycle in EU is now in positive territory. There results on further improvement in bank lending and in loosening of funding constraints for small and medium entities. As for external funding, we can see that external funding continues to increase (however it still stays low compared with previous cycles) showing low investment demand and active usage of internal funds by local small and medium entities. As funding and financial cycles are expected to go on both external and internal funds will rise (Czech National Bank, 2016).



Picture 20. GDP growth in % and inflation in % in Europe. Source: Czech National Bank, 2016.

Government expenditures will be greater-than-expected due to high amount of migrants. It will add more time and money to previous government projects like public security measures. Migrants can add more to improvement of unemployment; however, it is still difficult to fight with external deterioration of world economy.

Consumers were the great contributors to the euro area GDP growth and it still holding up well. Consumers provide health growth of domestic demand and privet consumption. In the last quarter of 2015 it is supposed to reach its pre-crisis peak. Energy prices had fallen, this made inflation to decrease and it made more real gross income in disposal for people. In early 2016 consumers were confident in their major purchases and private consumption should grow further in 2016 and gown down in 2017 due to the rise of prices. It is expected to grow by 2.2% in the EU and slow down to 1.5% in 2017. Support for this downward must

come from higher salary, non-labor incomes (profit and property-related incomes), government transfers and monetary policy on asset prices (support of higher financial wealth). Inflation will move up real gross income will gradually lose its power.

The households' savings from 2013 were around 12% of gross disposable income. This rate is expected to be higher however there will be some headwinds to stop it. On one hand the situation in labor market will prevent from redundant savings and low interest rate will discourage savings.

We have been talking a lot about 103% GDP debt of USA government and here we have to say about public debts in Europe. The situation is balancing on the edge because here are 5 countries with debt more than 100% of GDP. Lately the domestic risk in Europe became high. And this is not just the crisis in Greece that can repeat and influence on the whole economy (European Commission Forecast, 2016). The major political challenge is one million of refugees the cane into the borders of Europe. There is an offer that illegal migration will never be stopped. Africa wishes to do it but European government do not want to organize it from their side. There are talks that Europe need young and energetic immigrants that that will work and pay taxes to support aging population (Theguardian.com, 2015). However, there is a bigger need in active integration of those who are in Europe already – saving and cultivating the culture of every country and also to cut out the possibility of potential terrorism, to think about public safety, education and social welfare (Simonyi, 2015).

#### 3.3.1 Analysis of current mutual fund industry trends in European Union.

Europe include a lot of countries and from financial point it is a unique place that includes both stable developed markets and emerging economies makes up one of the most diverse economic zones in the world. Large volumes of foreign direct investment and high commodity prices in the past have ensured that emerging markets in regions like the Mediterranean and Eastern Europe have continued to grow in a fast way that is favorable for both government and foreign investors. European mutual funds are getting sink their teeth into the strengths of this lively and active region and they are also a logical choice for those investors who are looking for growth for their investments. Nowadays in the region, the European Central Bank's monetary easing program has pulled the euro currency down bur the overall expected growth attracts more and more investments (Nasdaq.com, 2015).

Just as America, Europe is continuing to claim on leading position in the sphere of investments and new products and constant development of regulations will support the industry (Matting, 2009).

Europe where the majority of mutual funds are set up as Undertakings for Collective Investment in Transferable Securities (UCITS) which are governed by European legislation. UCITS benefit from an EU wide "passport" which means that once they are authorized in one EU member state, they can be sold in any other EU member state without the need for additional authorization. Due to the necessity to comply with a common European standard, UCITS are now regarded globally as very well regulated funds. The European fund market can be divided in two categories; domestic and cross border. Domestic markets are where funds are set up and sold in the same country due to the large volume of potential local investors. The cross border fund business in Europe mainly focuses around Ireland and Luxembourg. Initially, it was unfavorable tax laws in some European countries and the availability of the UCITS passport that triggered the establishment of funds into these jurisdictions. However, over time the experience and expertise in both locations has solidified the choice of these two countries as the European domiciles of choice for cross border fund distribution in Europe. The cross border market is comprised of funds set up in these locations but sold in various other countries around Europe and beyond. Europe is a very fragmented market when it comes to distribution channels. In Central and Eastern Europe, it's all about retail banks. In Switzerland and the Nordics, it is all about the private banking sector. This is set to change due to the new Retail Distribution Review regulation, which is discussed in more detail in the Regulatory Impacts section of this document. Continental Europe is still bank dominated but continued growth in the private banking channel is expected (Pwc.ie, 2014).

The performance of mutual funds shows significant variation across member states. While their market share has expanded dramatically in the 2004 accession countries, they have tended to at best stagnate and even decline elsewhere. In relative terms, mutual funds are an important savings vehicle in Spain, Belgium, Austria, Portugal, Scandinavia, Slovenia and Hungary. In countries with the highest levels of household financial assets, namely the Netherlands and the United Kingdom, the market share of mutual funds barely reaches 3%. However, indirect investments through pension funds and life insurance policies jointly account for over 75% and 60% of retail savings respectively (BME Consulting, 2007).

Despite the fact of lowing level of international investments in Europe number of UCITS is accounted for 71% of mutual funds' assets. Most cross-border UCITS are registered in Ireland or Luxembourg. In terms of future challenges for UCITS the presence of big amount of local funds can create a competition (healthy or not). As a result, an average UCIT fund is quite small and have higher expense rate that average U.S. mutual fund. Now in Europe there is also a possibility to register hedge funds in such way as UCITS international passport, but it is called AIFMD (Alternative Investment Fund Managers Directive). However, there is a trend that it is made more to protect investments and control systematic risk, because it imposes a lot of rules on non-UCITS funds (Pozen, 2015).

The total number of funds of the European investment fund market, i.e. the market for UCITS, increased 0.6 percent to 55,928 individual funds at end Q4 2015. At the end of the fourth quarter, UCITS accounted for 30,026 individual funds or 53.7% of the European investment fund market, whereas AIF accounted for 25,902 funds, or 46.3% of the market (The European Fund and Asset Management Association, 2016).

## 3.4 The analysis of macro environment in the Czech Republic.

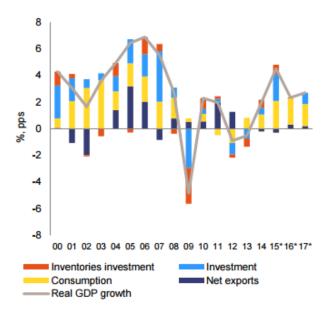
The Czech economy's performance in 2015 was noticeable. The country showed itself among the fastest-growing economies in the EU as GDP growth likely picked up to a post-recession peak of 4.3%. Growth of the economy was inspired by strong private consumption boosted by modest oil prices and low inflation, as well as rising exports that benefited from a weak koruna. Several of these factors are expected to fade in 2016 and the economy will likely return to a slower, but still solid, pace of growth. Private consumption is expected to remain as the first factor for growth, while investment will decrease due to lower EU fund inflow. High-frequency indicators confirm the health of the economy at the outset of 2016: businesses and consumers grew more confident in January, driving economic sentiment to a multi-year high, and a positive picture of the manufacturing sector (Focus-economics.com, 2016).

The recovery has given the push to important improvements in the labor market. Poverty and social exclusion remain the lowest in the EU. Unemployment fell to 4.9 % in the Q3 of 2015, one of the lowest rates in the EU, and youth and long-term unemployment also fell. The employment rate reached 75.1% in the Q3 of 2015, well above the EU average of 70.6 %, because more workers were drawn into the labor market. However, the amount of people of working age is expected to fall in the coming years. Social transfers, excluding pensions,

play an important role in reducing poverty and the pension system is relatively successful in preventing old age poverty (European Commission, 2016).

The growth rate of compensation per employee is forecast to accelerate to 3.6% in 2016 and 2017. However, the growth rate of the wage bill is expected to fall, because the projected decline in the working age population in both 2016 and 2017. Lower growth of total wages is expected to contribute to a gradual fall in the growth of household consumption over the forecasted horizon.

The labor market situation in the Czech Republic continues to grow in an environment of healthy economic growth. As an exceptional burst out to growth from EU co-financed investment fades, growth is expected to slow to 2.3% in 2016 before picking up again to 2.7% in 2017. The long-term unemployment rate has also gone down, standing at 2.4% in the third quarter of 2015. The unemployment rate of low skilled workers was stable at 21.9% in the third quarter of 2015. Low skilled workers represent only 7.1% of the citizens of working age (20-64) in 2014, one of the smallest shares in the EU, where the average is 23.4%. Well-educated people create much more market opportunities for new business formations more easily than less-educated people (Hajek, 2015).



Picture 21. Real GDP growth & components. Source: Eurostat, European Commission 2016 winter forecast.

There is an indirect and limited dependency of Czech Republic with Russia and Ukraine (except of energy sector). Direct trade links are on middle or even small level. Russia is the 8th largest export market with 3.2% of Czech export going to Russia and the 6th largest

importer with 5% of import originating from Russia. Czech export to Ukraine are about 1% of total export and import from Ukraine represents 0,8 of total. Moreover, the share of Russian value added brought in Czech gross exports is around 5% only in two industries. However, the final demand from Russia in particular in automobiles produced in the Czech Republic and supplied indirectly through German-Central European Supply Chain is an important driver of export and thus lower growth in Russia could lower Czech export. And there is a great dependency on Russia and Ukraine for its energy. The share of Russian gas in the Czech Republic's total gas consumption is 80% - the 3rd largest share after Finland and Belarus. Moreover, as the whole region is entirely dependent on energy import from Russia, long disruptions in gas supply would adversely affect production in the Czech Republic also through the impact on other countries. But with seasonal demand of gas Czech Republic can easily survive a short-term shortage. There is no direct financial dependency however three is the great dependency on tourism especially including tourists from Russia. The number of Russian tourists to the Czech Republic has significantly grew up in recent years and not Russian are the second largest group of tourists in the Czech Republic only after the one of tourists from Germany (Svejnar, 2013).

Czech Republic is one of the most developed and industrialized economies at the emerging countries in Central and Eastern Europe. The auto industry along with its growing suppliers accounts for nearly 24% of total Czech manufacturing. The country produced more than a million cars for the first time in 2010, over 80 percent of which were exported. On the expenditure side, household consumption is the main component of GDP and accounts for 49 percent of its total use, followed by gross fixed capital formation and government expenditure. Exports of goods and services account for 84 percent of GDP while imports account for 77 percent, adding 7 percent of total GDP (Tradingeconomics.com, 2016)

Czech banking system have steadily increased their capital buffers since 2008, indicating a high ability to protect themselves from loan losses. At the same time, the ratio of non-performing loans has remained quite stable despite sound growth in the denominator (total loans). The results of the stress tests also pointed to the Czech banking sector's high degree of resilience to liquidity shocks. Credit flows have mainly been pressed in recent years but there are signs of new activity in bank lending sector. While remaining positive, private-sector credit flows were pressed in the years following the financial crisis, reaching just 1.8% of GDP in 2014. More recent monthly data suggests an acceleration of credit flows, with total bank lending growing by 8.1% year-on-year in November 2015. Year-on-year growth

in loans for houses grew to 7.6% in the same period. This shows the higher confidence of households to enter the housing market, on the basement of strengthening wage growth and low interest rates. New housing market activity is also shown in growing house prices, after several years of decline, and higher investment in house construction.

The general government deficit is projected to fall in 2016. Data that is based on cash calculations point to an overachievement of the state budget due to better than expected tax collection, mainly from corporate taxes. The Czech Republic is an important beneficiary of European Structural and Investment Funds (ESIF) and will receive about EUR 24 billion during the period 2014-2020. This is equal to 2.0% of GDP annually and 46% of the expected national public investment in areas supported by the ESI funds (European Commission, 2016).

#### 3.4.1 Analysis of current developments of mutual funds in the Czech Republic.

In the space of the last 50 years, the global mutual fund industry has experienced a dynamic growth. Collective investment institutions existing in the emerging markets have received a considerable inflow of assets over the past 15 years. This tendency was changing at the time of decline in economic situation. However, an inflow of assets to these financial institutions can be observed again in the Central Eastern European markets (Dariusz, 2013).

The Czech Republic goes as a contributor to the emerging markets development including investments into mutual funds. In the end of 2013 the world mutual funds contained \$30 trillion and mutual funds of emerging markets had \$2,3 trillion – Brazil, Chili, Mexico, Czech Republic, Greece, Hungary, Poland, China, South Korea, Philippines, Taiwan and South Africa (Baker, 2015). The Czech Republic is a popular destination for foreign capital and has been attracting high volumes of foreign direct investment (FDI) since the very 1990s when the investment industry started to work there. The main attractive factors of the Czech Republic for foreign investors are its central geographical location in Europe combined with developed infrastructure, the availability of suppliers and specialized inputs needed by foreign investors, the high level of life and social stability, healthy competition of costs, financial stability and the availability of finance, investment activity and skilled workforce. Mutual fund management is actively performed by banking sector which is represented by big foreign banking groups such as the Erste Group, KBC Group, Societe Generale, Raiffeisen Group, UniCredit Group and GE Money Group (Investment in the Czech Republic, KPMG, 2015).

A collective investment scheme in the Czech Republic is made like this:

- Standard funds (UCITS)
- Special funds for public
  - Special securities fund
  - Special real-estate fund
  - Special fund of funds
- Special fund of qualified investors, that is for financial institutions and other individuals and corporations that declare in writing that they have experience with investing in securities.

Standard funds and special real-estate funds are functioning as open-ended mutual funds only. Closed-ended mutual funds can be organized only for a limited period of time. Moreover, they have to be liquidated or transformed into open-ended funds as a mandatory next step.

Other special funds can have the form of:

- an open-ended mutual fund,
- a closed-ended mutual fund or
- an investment fund

For investors units of a mutual fund are called "participation certificates" and units in normal investment fund are called as "shares". Mutual funds are not legal entities. Actually, they are acting like aggregates of assets belonging to unit holders and managed by an investment company. An investment fund can be established only as a joint-stock company; it is a separate legal entity that accumulates financial recourses by issuing shares (Czech Republic Regulation, KPMG, 2010).

A minimum fund capital of EUR 1.25 million is required. The foundation of funds, which fulfill EU requirements, must be approved by the CNB. A notification duty to the CNB is only required for special investment funds that do not fulfill these requirements. However, the asset manager of each fund must have the approval of the CNB (Investment in the Czech Republic, KPMG, 2015).

People and institutions hold a total of CZK 361.49 billion (as of 31.3.2015) in domestic and foreign mutual funds offered in the Czech Republic, out of which 77 % of the assets is hold by natural persons and 23 % by legal persons (AKAT CR, 2015).

In the last quarter of 2015 the Czech Republic contained 144 investment funds - it is almost 0,3% of total amount of 55928 investment funds in Europe (against the leader Luxembourg that has 14108 investment funds) (The European Fund and Asset Management Association, 2016).

The Czech Republic is a medium-sized, export-driven and opened country. The Czech Republic attracts a great deal of FDI for its size, and has taken strides to diversify its traditional investments in engineering into new fields of research, development and innovative technology. The structure of FDI has changed in recent years, shifting from manufacturing to other high technology sectors, such as information and communications technology. The Czech Republic aims to become a destination for investments with high value added content (U.S. Department of State, 2015).

		Total as of 31.3.2015	
Type of Fund	Domestic Funds	Foreign Funds	Total
Money market funds	1,019,697,300,CZK	5,602,142,846,CZK	6,621,840,147,CZK
Structured funds <sup>1</sup>	458,389,890,CZK	32,288,341,887,CZK	32,746,731,777,CZK
Equity funds	25,764,982,009,CZK	41,088,425,246,CZK	66,853,407,255,CZK
Bond funds	69,122,900,152,CZK	48,120,933,440,CZK	117,243,833,592,CZK
Balanced funds	68,551,984,010,CZK	48,646,410,876,CZK	117,198,394,886,CZK
Funds of funds	14,495,765,692,CZK	502,097,189,CZK	14,997,862,881,CZK
Real estate funds	4,551,322,038,CZK	1,275,925,467,CZK	5,827,247,505,CZK
TOTAL	183,965,041,091,CZK	177,524,276,949,CZK	361,489,318,041,CZK

Note. 1: Structured funds are successors of secured funds and include guaranteed and secured funds.

Picture 22. Domestic and foreign mutual funds as of 31.3.2015. Source: Akater.cz

#### 3.5 The analysis of macro environment in Russia.

Stagnation of economy that definitely lasts too long grew to recession reveals very old mechanisms of economic policy in Russia. One of the most important questions for Russian economy now are customers demand (unlike to the Czech Republic where domestic demand stays on pleasant for the country level), investment activity, preferential crediting for real sector and outflow of funds. This is all making problems for creating a future forecast of Russian economic development (Frenkel, 2015).

The Russian economy showed impressive growth between the two financial crises of 1998 and 2009. Between 2000 and 2008, the GDP grew by 83%, productivity grew by 70%. While in 1999, per capita GDP by purchasing power parity was \$9,300 (only 25% above the global average), by 2008, this indicator went up to \$21,600 (78% above the global average).

Russia's part in the world economy grew over the same period, from 0.6% to 2.7%. The welfare of the population increased significantly, real wages increased by 3.4 times, and real pensions increased by 2.8 times. But this was before the crisis and sanctions (Kudrin, 2015).

One of the most important questions that should bother Russian economic policy is a great dependency on natural resources. Russia ranks as the world's second largest oil producer and exporter, occasionally creeping up on and overtaking Saudi Arabia. Russian production reached a temporary post-communism peak in 2007, totaling almost 10 million bbl/day. Nearly half of Russian oil mining stays in the hands of private companies whose goal is to maximize profits, and this way producing and exporting as much as possible at given prices, being also concerned with the costs (Benedictowa, 2013).

Country/group of countries	2000-2008	2009–2013
World	4.3	3.2
Developing countries and emerging markets	6.5	5.3
China	10.4	8.9
Russia	6.9	1.0
India	6.7	7.0
UAE	6.2	2.2
Venezuela	4.4	1.2
South Africa	4.2	1.9
Brazil	3.7	2.7

Picture 23. Average annual pre-crisis and post-crisis growth rates (%). Source: calculations based on IMF data, 2014.

With the connection to financial and trade sanctions made by the EU, US and other countries, Russia restricted imports of a wide range of U.S. and European foods (beef, pork, poultry, fish, fruit, vegetables, cheese, milk and other dairy products). Besides, the weakening of the value of the Russian ruble, started in the second half of 2014, put an idea of a new wave of financial crisis. The weaker ruble and Western sanctions on food imports made the inflation to grow. According to IFS, inflation rate in Russia jumped from 7.68 percent to 9.58 percent in the last quarter of 2014 and to 16.2 percent in the first quarter of 2015. High prices caused a big decline in household consumption, personal savings, investment, and government spending (Tuzova, 2016).

Private consumption, previously the main growth driver, fell roughly as much as investment, reflecting a slump in real wages amid high inflation caused by the ruble's depreciation and

the ban on Western food imports. The introduction of a similar ban on Turkish products and heightened risks of additional market turbulence and ruble depreciation. In this context, private consumption growth is expected to remain negative in 2016 and around zero in 2017 given the very weak GDP growth profile. Russia's economy slid into recession in 2015 as pre-existing structural bottlenecks (mainly the excessive reliance on the energy sector and low investment) were overwhelmed by the collapse in oil prices and economic sanctions. The near-term outlook remains rather bleak (with risks of protracted stagnation now prevailing over prospects of a gradual recovery), amid a significant downward revision of the oil price forecast, the extension of sanctions until July 2016, weak business sentiment, persistently high borrowing costs and a likely lack of structural reform momentum ahead of elections. Negative growth of 1.2% is expected for 2016, followed by very weak growth in 2017 (i.e. 0.3%). Inflation is expected to fall to average annual rates of 8.5% and 6.2% in 2016 and 2017, respectively, i.e. still far from the Central Bank of Russia's (CBR) mediumterm target of 4%. Amid lingering concerns over inflation and risks of further market turbulence, the CBR suspended the sequence of monetary easing carried out during the first half of 2015 (bringing the key policy rate from 17% to 11%), although further rate cuts are still considered likely in the course of 2016 (European commission forecast, 2016).

This way the economic forecast for Russia at least till 2017 remains negatively stable.

#### 3.5.1 Analysis of current mutual fund industry trends in Russia.

Nowadays investment funds are playing important role of effective tool of investment attraction and support for growth of economies. This is one of the most important aims of Russian Federation in near future and development of such part of mutual funds as variety of products can provide a high concentration of financial resources and relocate then to industries that experience funding shortage (Aipov, 2016). The attempts of transition of Russian economy from speculative stage to investment one can be accomplished with accelerated development of mutual funds industry. Status of the Russian financial and economic system at the present stage is characterized by unclear economic activities, primitive and conflicting environment of the transformation processes, show us great need for reorganization of the systems and the management of financial resources (Chueva, 2016). The global financial crisis of 2007 has affected Russian mutual funds and revealed a bunch of serious problems such as low quality of risk management and a great lack of information transparency. However, there is a bigger problem that stands behind low risk management —

low investment management at all. Probably this is one of reasons that links Russian investment funds and attention of Russian investors. The right and effective development of collective investment industry in any country can turn out to be one of the most important preconditions for a country economic growth. The importance of the segment must not be underestimated because of its economic and social complex tasks (Sergeeva, 2015; Ramos, 2009).

Banking saving account is still considered as the most reliable saving instrument in Russia, mostly in foreign currency which is supposed to be sold later. The main savers are people form the middle class. In theory, the collective investment schemes through mutual funds is close to the same concept in Europe or America. However, there is a nowadays legislation on mutual funds in Russia presenter in the picture 2. The purposeful arrangement of Russian regulations and requirements can surely help to some management companies get through geographical boundaries and enter foreign markets of mutual funds (mostly to European one).

At the present moment MIF's declarations are written just as a formality and do not give a complete understanding of a fund's investment policy. This way, control over fund's management cannot be exercised in full. However, the factor of fund's reputation is very important and 3-year-old fund can be considered as reliable. Nowadays, the regular traders one the secondary market are closed-end equity funds, real estate funds and index MIF's. Only 30% of mutual investment funds' units are traded in the stock market, 70% of them are not listed (Sergeeva, 2015, Abramov, 2015).

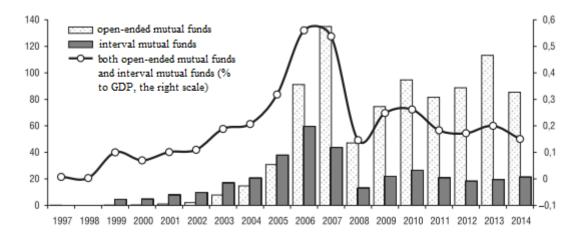
Instead of rising, like others around the world, Russia's home mutual fund market is actually shrinking. With an assessed value of about \$4bn, it made just 0.25% of the country's gross domestic product in 2012. In contrast, Poland's mutual fund industry was assessed about \$37bn, or 5% of GDP at the same year. The reason is that Russia's new mutual fund management industry has its biggest competition in the home front: local bank deposit rates offer investors a reliable and lower-risk alternative to fund investing. Real growth in the size of the market can only be prompted by government reforms and raising the level of financial education among the Russian public. (Fedorova, 2012). According to the data released by the Emerging Portfolio Fund Research, Russia-focused mutual funds saw investments inflow in 2015 (up \$105.6m in the period between 26 November and 2 December 2015). However, the inflow was reduced to zero by \$117.3m outflow within two weeks after,

showing a total of \$11.7m period-end investment outflow from Russia-focused mutual funds (Gorbatikov, 2016).

11.04.2013, bn rubles/+-

	MIF type		
Categories (funds)	Open-end	Interval	Closed-end
Bond	35.5/+	3.2/+	41.0/+
Stock	54.4/+	0/+	0.02/+
Hybrid investment	9.0/+	3.6/+	66.1/+
Index	2.9/+	0/+	0/+
Money market	1.7/+	0/+	0.03/+
Funds	2.7/+	0.0/+	0/+
Commodity market		0.9/+	0/+
Hedge	-	*/+	*/+
Mortgage	-	-	1.9/+
Venture investment	-	-	*/+
Real estate		-	169.9/+
Direct investment	-	-	*/+
Rental	-	-	169.7/+
Credit	-	-	*/+
Art treasures	-	-	0.3/+

Picture 24. Asset prices and structures depending on mutual investment fund type. Source: Image-Factor analytical agency, "Group Cbond" investment fund. Conventional notation: (+) Such mutual investment fund are presented in Russia Law, (-) Such mutual investment fund are not presented in Russia Law, (\*) The information has not been revealed.



Picture 25. Assets of open-ended and interval mutual funds in Russia, 1997-2014. Source: Abramov, 2015.

All in all, Russian mutual funds industry is lost in deep uncertainty. We can forecast and discuss some economic development facts like GDP or inflation but mutual funds industry needs a proper legislation base, certain higher regulator (not Central Bank that is too overweighed by country's economy). It would be very useful to give some level of confidence to Russian investors to create at least constant demand for mutual funds products.

### 3.6 Conclusion to analytical part and macroeconomic outlook.

Despite some weak positions in world economy like emerging markets, unstable oil prices and fest technological boom that bring a portion of uncertainty we can say that in total the world economy stays in balance with strong growth of American economy. In 2015 the world economy in total had slowed down due to small level of aggregate demand, too volatile financial markets and shrunk commodities prices. Rebalance of Chinese economy will continue to put pressure on world economy in 2016-2017. However, if we are going to speak about at least minimum long-term growth then the first steps of recovery have to be done by countries that are in economic distress now – Brazil and Russia.

The world economy condition definitely has the direct impact on financial system and mutual funds. International mutual funds are key contributors to the globalization of financial markets economies (Kaminsky, 2001). However, the prognosis for world mutual fund industry is not so decisive as for world economy. Investments are additional superstructure to economy and if the economy (as a basis for superstructure) is fluctuating the above structures will fluctuate even more, just like a big tower in windy weather. Volatile markets do not help to calm down the situation.

United Stated are affected with rising income inequality and medical costs are socially-oriented economic factors but it still intends to show the slow growth. There is a hope for Americans that it can be changed to even better situation. November 8, 2016 is the date of president elections. The most important recent event is Federal Reserve decision to raise interest rates for the first time in 7 years. This economy is still the largest and the most important in the world representing 20% of global output. The mutual fund industry for the universe of US mutual funds during 1976–2009 was very bright. Industry assets increased by a factor of 200, the number of active fund families quadrupled (Khorana, 2012). Despite the relevantly positive prognosis about American economy in near future the facts of mutual funds are not positive. Only 1% of mutual funds gave positive results in new 2016 year and 28 percent of large-cap mutual fund managers are beating their benchmarks.

We know that the world economy is fighting with some difficulties while Europe remains in period of moderate growth. Fiscal and monetary policy will support the growth but probably it will not be enough, GDP of the Euro area is expected to grow by 1.7% in comparison to 1.6% last year, and in 2017 the growth should catch 1.9%. Europe where the majority of mutual funds are set up as Undertakings for Collective Investment in Transferable Securities (UCITS) which are governed by European legislation. UCITS benefit from an EU wide "passport" which means that once they are authorized in one EU member state, they can be sold in any other EU member state without the need for additional authorization. Despite the fact of lowing level of international investments in Europe number of UCITS is accounted for 71% of mutual funds' assets. Most cross-border UCITS are registered in Ireland or Luxembourg.

Czech Republic is one of the most developed and industrialized economies at the emerging countries in Central and Eastern Europe. Czech banking system have steadily increased their capital buffers since 2008, indicating a high ability to protect themselves from loan losses. The Czech Republic is an important beneficiary of European Structural and Investment Funds (ESIF) and will receive about EUR 24 billion during the period 2014-2020. The Czech Republic goes as a contributor to the emerging markets development including investments into mutual funds. The Czech Republic is a popular destination for foreign capital and has been attracting high volumes of foreign direct investment (FDI) since the very 1990s when the investment industry started to work there. Savings of people and institutions in domestic and foreign collective investment funds offered in the Czech Republic equal CZK 361.496 billion. In the last quarter of 2015 the Czech Republic contained 144 investment funds - it is almost 0,3% of total amount of 55928 investment funds in Europe.

Stagnation of economy that definitely lasts too long grew to recession reveals very old mechanisms of economic policy in Russia. Russia happened to occur in the circumstances of isolation from world financial markets due to twice lower prices of oil and ruble exchange course in the end of 2014. One of the most important questions that should bother Russian economic policy is a great dependency on natural resources. Russian production reached a temporary post-communism peak in 2007, totaling almost 10 million bbl/day. The weakening of the value of the Russian ruble, started in the second half of 2014, put an idea of a new wave of financial crisis. Private consumption, previously the main growth driver, fell roughly as much as investment, reflecting a slump in real wages amid high inflation caused by the rouble's depreciation. Banking saving account is still considered as the most

reliable saving instrument in Russia. At the present moment MIF's declarations are written just as a formality and do not give a complete understanding of a fund's investment policy. This way, control over fund's management cannot be exercised in full. Instead of rising, like others around the world, Russia's home mutual fund market is actually shrinking. With an assessed value of about \$4bn, it made just 0.25% of the country's gross domestic product in 2012.

So it looks like during upcoming 2 years we can calmly live in modern financial world. Such tools as unemployment, inflation show that crisis will happen but not in near times. The world economy is heated by situation in emerging markets.

# III. PROJECT

# 4 COMPARISON OF MUTUAL FUNDS IN THE CZECH REPUBLIC AND RUSSIA.

Despite the fact of common Slavic roots the Czech Republic and the Russian Federation are two modern countries that have their own important place in the world economy. Their developed economic conjuncture consists of more than half export share of GDP, as for automotive and nature resources export correspondingly. Their central location (center of Europe for the Czech Republic and connection of Europe and Asia for the Russia Federation) helps them to reveal their ambitious potential for future economic plans.

For the Czech Republic mutual funds, we have chosen 3 investment companies that will provide 1 mutual fund each. The same amount of funds was chosen from Russian side so in total we will go through 6 mutual funds. Two of them will be stock funds, two of them will be bond funds and two of them will be mixed ones. All of them are open-end mutual funds because this is the most common and widely spread type; sometimes we can see that mutual fund can be used as a synonym of open-end mutual fund type.

CSOB Asset Management, a.s., Investicni kapitalova spolecnost (Investment Capital Company) KB, a.s., Investicni spolecnost (Investment company) Ceske sporitelny will represent the investment management companies from the Czech Republic.

CSOB Asset Management, a.s. is an investment company that belongs to CSOB group. CSOB is a widely spread universal bank in the Czech Republic establishes in 1964 (in Czechoslovak market at that times). In 1999 CSOB was privatized by KBC Bank, which is a 100% subsidiary of KBC Group. KBC Group is an integrated banking and insurance group that focuses on clients in the following areas: individuals, private banking, SMEs and midsized corporations. Geographically the group is active in its home markets in Belgium, the Czech Republic, Slovakia, Bulgaria and Hungary. The group KBC Asset Management where CSOB AM is grounded manage assets in a value of over 180 billion EUR. From the side of CSOB we would choose a mutual fund called "CSOB Akciovy" (ISIN: 770000001170). This fund has appeared in the end of 1999 year and invests into stocks all over the world especially in the world's major stock markets (particularly the USA, Europe, Asia), plus allocation among individual countries. This fund does not intend to copy any index. The currency in which the value of the unit is determined is the Czech Koruna. The fund can invest from 5% to 35% of their assets into a single issuer depending on different conditions (and it is connected with the following risk – it will be suitable for investors who

are willing to accept the risk of possible the concentration of investments in the same kind of investment instruments.). The typical investor in the fund's investors with above-average investment experience in the capital market, who wants to reach defined investment objectives and long term investment horizon. It is highly exposured to market risk and on middle level is exposured to currency risk. (Csobam.cz, 2016).

Investicni kapitalova spolecnost KB, a.s. IKS KB was founded in 1992 by Komercni banka (Societe Generale Group since 2001). IKS KB leverages on Amundi experience and works with more than 200 thousand retail clients. Amundi is the leading European asset manager with more than 952€ billion in assets under management. From the side of CSOB we would choose a mutual fund called "Amundi funds bond global aggregate" in CZK (ISIN: LU1049752758). It is a sub-fund of Amundi funds and its aim is to outperform the "Barclays Global Aggregate" index. To achieve this fund invests at least two-thirds of its assets in debt instruments issued or guaranteed by governments Countries Organisation for Economic Cooperation and Development (OECD) or issued by corporate entities or financial instruments whose value payments and revenues are derived from a specific basket of underlying assets ("asset backed securities" and "mortgage bonds"), up to a maximum of 40% of its assets. Securities that have the relatively low risk of represent at least 80% of the assets. The fund is likely to have a higher volatility than is the case with conventional investment policies due to its portfolio composition or the portfolio management technique that may be used. (Iks-kb.cz, 2016).

Investicni spolecnost Ceske sporitelny. It was created in December 1991, but its parent company Ceska sporitelna was established in 1825 as the first savings company in the Czech Republic region. The merger of Investicni spolecnost Ceske sporitelny and Erste Asset Management GmbH took place in autumn 2015. Erste Asset Management GmbH is an international asset management company with strong positions in Central and Eastern Europe. Its activity is supported by the financial strength of Erste Group Bank AG. From the side of ISCS we would choose a mutual fund called "Dynamicky Mix FF" (ISIN: CZ0008472347). Benchmark balanced fund consisting of bonds and typically 50 % share of global equities. It is an open-end mutual balanced fund with the status of a funds fund and was founded in 2000 year. The portfolio structure is adapted to the composition of any index (benchmark). The goal of the investment policy is to provide long-term appreciation of investment certificates, particularly by investments in securities of money market funds, bond funds of collective investment and stock funds of collective investment. If stocks are

not doing well, the portfolio manager may decrease their share in part and thus reduce the risk that the portfolio value may fall. (Iscs.cz, 2016).

From Russian side we would choose the following 3 investment companies: "Сбербанк" Управление Активами ("Sberbank" Asset Management), "ВТБ Капитал" Управление Активами ("VTB Capital" Asset Management) and УК "УРАЛСИБ" (management company "UralSib").

"Сбербанк" Управление Активами ("Sberbank" Asset Management) (prior to November 2012 — Troika Dialog Asset Management) is one of Russia's oldest, largest and most successful asset management companies. Includes 23 mutual funds. The company was founded in 1996 and is rightfully called a pioneer of the Russian asset management industry. The company has the largest share in the mutual funds market of Russia, which is about 24.9% of all open-ended retail funds. It also has around \$4,3 billion of AUM. From this company we will choose the oldest and the most famous open-end bond mutual fund "Илья Муромец" ("Ilya Muromets") (ISIN: RU000A0EQ3Q5). It was registered in 1997 and still functioning in the market. This fund is made for catch the growth of securities. The assets of the fund are nominated in rubles and invested into state, municipal and corporate bonds. It aims to rely on growth of credit rating of included companies and the change of interest rates. Those companies must have a tier 1 (blue chips) or 2 of credit score however there can be included companies of tier 3 but their growth potential must be outstanding (Sberbankam.ru, 2016).

The next company is "BTБ Капитал" Управление Активами ("VTB Capital" Asset Management). VTB Capital, the Investment Business of VTB Group, is one of the three strategic business arms of VTB Group, along with the corporate and retail businesses. It was founded in 2008 (for capital business; 1990 – for the VTB group). From this company we will choose "BTБ – Фонд Сбалансированный" ("VTB Balanced fund") (ISIN: RU000A0JR2A5). The aim of the fund is a compromise of long-term investments and the risk limitation. It invests 50% into bonds and 50% into stocks, the percentage may vary a bit and a few percents may be invested into money market. It is functioning from 2007 year. (Vtbcapital-am.ru, 2016)

УК "УРАЛСИБ" (management company "UralSib"). UralSib Asset Management is one of the largest and oldest asset management firms in Russia. It was established in 1996. It belongs to "UralSib Financial Corporation". It holds one of the first positions in Russian

retail funds segment (open-end and interval mutual funds) with a market share of 13% (as for 2012). From this company we will choose "УРАЛСИБ Первый" ("URALSIB The first") (ISIN: RU0005418747). It has started to work in 1999. UralSib The First Fund, is the largest among Russian open-end mutual funds. This is open-end stock mutual fund and it is oriented into log-term investors. Risks of the fund are equal to risks of Russian equity market. The main strategy of the fund is to choose stocks that are underestimated for their fundamental indicators. One more important step is to save some asset in money market while searching for convenient supply and demand levels (Uralsib-am.ru, 2016).

This way we have chosen 6 funds that represent 3 types: stock funds, bond funds and balanced funds. However, inside their category they also can have different characteristics to reflect the market and world economy situation.

Name	Value	Type	Date of creation	Entrance fee	Manager's fee	Recommended time horizon	Risk profile
ČSOB Akciový	1514,69 CZK mil = \$63 mil	Stock	14.10.1999	3 %	2 %	7 years	5/7
DYNAMICKÝ MIX FF	662 CZK mil = \$26 mil	Balanced	26.06.2000	1.50%	1.70%	5 years	4/7
Amundi funds bond global aggregate	190 381.20 CZK mil = \$7932 mil	Bonds	30.10.2007	1%	0,80%	3 years	4/7
Ilya Muromets	4 644 820 727,90 RUB = \$71,5 mil	Bonds	26.03.1997	N/A	1,5%	Long-term	1/3
VTB Balanced fund	172 686 618.98 RUB = \$2,7 mil	Balanced	31.10.2007	N/A	2,5%	1 year	N/A
URALSIB the First	2 811 841 504,03 RUB = \$43,3 mil	Stocks	13.02.1999	N/A	3,5%	Long-term	Risk equal to risk of Russia n Equity market

Table 3. Comparability table on important data of chosen mutual funds. Source: Uralsibam.ru, Vtbcapital-am.ru, Sberbank-am.ru, Iscs.cz, Csobam.cz, Iks-kb.cz, Investfund.ru, Akatcr.cz. 2016.

As a benchmark for performance evaluation it will be useful to choose "MSCI Emerging Markets Europe Index". The MSCI Emerging Markets Europe Index captures large and mid-cap representation across 6 Emerging Markets (EM) countries in Europe. It is Russia (49.3%), Turkey (20.39%), Poland (18.34%), Greece (5.52%), Hungary (3.97%) and Czech Republic (2.49%). With 84 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.



Picture 26. Index performance - net returns (USD). Source: Msci.com, 2016.

To evaluate the performance of fund the time of 1 year will be used. The net return will be compared with the price of a fund's share without taking management fees into consideration. In the graph of MSCI Emerging Markets Europe we can see that during the period 2015-2016 there was a slight recovery but it still shows -4,3% loss from the date of March 31 2015. The recovery is visible during last three months (the net return has increase to 14,3%). This shows a positive dynamic of Emerging Markets development.

	Price per unit, 31.03.2015	Price per unit, 4.01.2016 (+/- 1 week)	Price per unit, 31.03.2016	Change of unit price, 31.03.2015 - 31.03.2016, %	Benchmark change, 31.03.2015 - 31.03.2016, %	Change of unit price, 1.01.2016 - 31.03.2016, %	Benchmark change, 1.01.2016 - 31.03.2016, %
"CSOB Akciovy"	1.0368 CZK = 0.0432 USD	0.9761 CZK = 0.0406 USD	0.9407 CZK = 0.0391 USD	-9.4%		-3.6%	
"Bond global aggregate"	2657 CZK =	2552 CZK =	2552 CZK =	-3.95%		-0.08%	

	110 USD	106 USD	106.3 USD				
"Dymamicky Mix FF"	1.4195 CZK = 0.059 USD	1.3612 CZK = 0.0567 USD	1.3278 CZK = 0.0553 USD	-6.4%	-4.3%	-2.3%	+14.3%
"Ilya Muromets"	21580 RUB = 332 USD	25048 RUB = 385 USD	25932 RUB = 398 USD	+20.1%		+3.5%	
"VTB Balanced Fund"	9444 RUB = 145 USD	9084 RUB = 139 USD	9726 RUB = 149 USD	+2.9%		+7.9%	
"Uralsib the First"	15.5 RUB = 0.2384 USD	16.7 RUB = 0.2569 USD	18.5 RUB = 0.2846 USD	+19.3%		+10.7%	

Table 4. Performance evaluation of selected mutual funds in comparison with the chosen benchmark. Source: Uralsib-am.ru, Vtbcapital-am.ru, Sberbank-am.ru, Iscs.cz, Csobam.cz, Iks-kb.cz, Investfund.ru, 2016.

Looking at the table 3 we can analyze the performance evaluation of selected funds. The most notable fact is the negative performance of international funds in the Czech Republic and positive performance of Russian funds. The fact the Russian funds are more close to the benchmark can be explained by the thing that the benchmark contains 49% of Russian companies' securities and 2,5% of the Czech ones. The benchmarks' performance during last three months of the year is much better than its performance during 31.03.2015 -31.03.2016. This situation has found itself in the performance of Czech funds. We can see a decline in the level of negative performance of Czech funds in 1.01.2016 - 31.03.2016 than in 31.03.2015 - 31.03.2016 (even of the numbers are still negative they are showing the decrease of negative numbers which are moving to the positive half). This is can be connected with better economic situation and moderate growth in Europe and positive prognosis for next two years that is supported by fiscal and monetary policy. But it is worth noticing that the numbers for yearly change represent 12 months and other number represent just 3 months of changes. The bigger share of decline in the level of negative performance among selected Czech funds belongs to "CSOB Akciovy" which "growth" was from -9.4% to -3.6%. Probably it is connected with good combination of economic growth in Europe and America where the funds' assets are invested. From Russian funds we can see "VTB Balanced Fund" that showed almost the same level of growth and even to positive side. It is mixed fund that includes stocks and bonds invested into Russian economy and has the higher level of growth among selected Russian funds. Other 2 funds showed growth too but it was quite moderate in comparison with yearly growth. It is also possible to sat that Russian funds were more active in their changes (the total change in the module is equal to |30.2|) and movements that Czech funds (the total change in the module is equal to |13.77|); it can be connected with more active development of emerging markets which are doing theirs steps to adding value into world economy. If we pay attention to the unit prices we can say that Czech funds are presented as more affordable investment than Russian funds however there are exemptions like "Bond global aggregate" with its price of 2657 CZK (which is much bigger in comparison with other two selected Czech funds) and "Uralsib the First" with its price of 18.5 RUB (which is much smaller in comparison with other two selected Russian funds). This leads us to the conclusion that mutual funds are very alive financial instruments that react on different economical events (global and local) and it is really made for any investors initial contribution – big or small.

# 4.1 Prediction of mutual fund industry trends.

In this chapter we well create a prediction of chosen mutual funds based on fundamental analysis, technical analysis, psychological and intermarket analysis. In is important to go through every point because it will depict the full situation of mutual fund state in Czech and Russian markets. World economy has just partially returned to before crisis level and some countries are projected to have upwards waves (like the Czech Republic) and some countries will have a few years of stagnation (like Russia). It is worth saying that our project has analytical character and made for scientific purposes. It cannot be considered as a guide for making decisions on investing.

## 4.1.1 Performance prediction with the fundamental analysis.

Fundamental analysis is "fundamental" for sure because it creates the basis for analysis and predictions. Before going to other types of analysis it is crucial to understand the economic environment. Fundamental analysis estimates the inner value of a security by evaluating the most important factors that can influence the economy, industry or a company. Fundamental analysis requires some time to be completed. Fundamental analysis also allows to estimate if a security underestimated or overestimated (Kevin, 2015).

# 4.1.1.1 Global fundamental analysis.

World economy is a great connection of all the countries' economies that can be sensitive to any small change. Moreover, developed financial system increases the strength and sensitivity of world economy. It has both positive and negative sides. If a country has some comparable advantage it can increase the trade and export level and its neighbor countries can buy a product or service that the country produce with lower cost, for example, Brasilia with world famous coffee production. However, if a country happens to have a crisis, that crisis can be spread with big amount of countries due to high level of connections, for example financial crisis in America in 2007. It also directly refers to world mutual fund industry because it all represent the process of investments and any sphere of a country needs investments for future and constant development. Coffee needs care for grounds by people so there is a need for investments into working force and human capital. Financial centers of America need investments into IT technologies and virtual security. And despite all other possibilities of investments, mutual funds allow to invest into development of huge world companies or industries which shows an importance of fundamental analysis for mutual fund investments.

#### 4.1.1.1.1 World GDP.

Nowadays we are the witnesses of a global GDP slowdown due to the following factors: the growth of unemployment in developing countries because of decrease in usage on labor force (growth of technical equipment), high volatility in financial markets of developed countries, low commodities prices which resulted on global trade. However, slowdown in this case meant just a slowdown without any negative consequences. Global growth, currently estimated at 3.1 percent in 2015, is projected at 3.4 percent in 2016 and 3.6 percent in 2017. The growth will be slow due to the above mentioned emerging markets situation (that is diverse for world prognosis and is challenging) and will continue to weigh on world growth in 2016–2017 (IMF, 2016). GDP shows the amount of products and services produced in a country and, in other words, it is a result of researches and investments into a country at all. So GDP projected positively will say that conjuncture enjoys its development and economy works well, and vice versa.

For the development of selected mutual funds in this situation investments into emerging markets will be a decisive factor. "CSOB Akciovy" in our opinion is not so exposed to changes on emerging markets due to high investments (62%) into stocks of American

companies which we know enjoys some stable growth now and is partially protected from world GDP slowdown. Its 33% of investments into Europe will also play a positive role as Europe economy will be supported by inner aggregate demand. "IKS KB" and their "Bond global aggregate" have around 30% of bonds invested in USA economy so it also supposed to be safe from emerging markets fluctuations in total however there are some investments to Italy (13%), United Kingdom (4%) Spain (2%) where there is not so decisive development as in America. "Dymamicky Mix FF" is quite diversified as it is mixed fund of funds and there are a lot of investment options like equities, bonds (including government bonds), money market and others. Almost 24% of assets are invested into American economy so at least partially we are sure in positive numbers here. They can be supported in 16% of assent in Europe and 7% in Japan. However more than 50% of assets are invested in "other" regions and in this case diversification might bring some uncertainty into fund.

As for "Ilya Muromets" performance we can say that it is Russia oriented bond fund that invests his bigger part of assets into Russian blue chips (around 82%). It has also 11% of bonds belong to euro companies. As Russian blue chips are included in the funds we most likely will stably low results in near future. However, as this fund is looking for credit rating changes so long-term period Russian companies have a good chance for recovering. "VTB Balanced Fund" is a mixed fund that has almost 49% of stocks and almost 48% of bonds. It will bring some level of variety into its performance. It is also very flexible fund that is oriented on current market situation and its actively managed structure is a bit less exposed to current situation in Russian equity market. Sometimes it may keep assets in stocks of international companies and it will consist in around 5%. "Uralsib the First" is a stock funds and its strategy technically similar to the strategy of "Ilya Muromets". The fund prefers to invest into stocks of blue chips in Russia and appreciate companies with underestimated value. However, in comparison to "Muromets" it has around 37% of stocks from international companies so probably it will survive this period of instability with smaller losses than above mentioned Russian funds.

Despite the fact that Russian funds look less positively on the background of chosen Czech ones we should consider that the Czech ones are world oriented funds and their diversification include USA and obviously European assets while Russian funds are inner-oriented and almost at all reflect the Russian economic reality.

#### 4.1.1.1.2 Global inflation.

Headline inflation has broadly moved sideways in most countries, but with renewed declines in commodity prices and weakness in global manufacturing weighing on traded goods' prices it is likely to soften again. Core inflation rates remain well below inflation objectives in advanced economies. Mixed inflation developments in emerging market economies reflect the conflicting implications of weak domestic demand and lower commodity prices versus marked currency depreciations over the past year (IMF, 2016). Inflation directly influence both prices and return from investments especially of fixed-income ones.

"CSOB Akciovy" is a stock funds and inflation can only indirectly influence the funds through the profit of the companies that the fund's assets are invested in. Diversification plays hare a very positive role because this fund has it aim to win the inflation and investments into different countries is a good step for future performance. The only thing to go through here is the expected rise of inflation in Euro area in 2017 but it will not have a big influence on the fund because it has around 33% there. In 2017 there will be expected push of inflation in USA which can also be a question but for other funds. "Bond global aggregate" is highly exposed to inflation expectations due to its bond nature. We understand that there will be no sharp and at the same time fast and unexpected changes however that small risk can be very pushing for some impatient investors. Inflation is dangerous for bond funds due to bund's credit nature, but "Bond global average" has almost 25% of assets invested into AAA credit rating companies and almost 34% into BBB companies. "Dymamicky Mix FF" represents mixed funds and inflation only partially dangerous for it. It has around 40% of bonds investments which are exposure to inflation risk. However, some assets might be invested into emerging markets bonds which increases the risk.

"Ilya Muromets" is a bond fund which makes it quite risky when inflation goes high. For Russia it is very important question now but the bottom of recession is almost left behind and inflation is projected to fall in 2016 and 2017. So probably risk of high inflation is not applicable here in long-term position. It also prefers companies with high credit quality but it may contain 3 tier companies but only with high growth potential. "VTB Balanced Fund" is also very flexible due to its balanced nature. It has both stock and bonds in its portfolio. As additional bonus of 5% in stocks of foreign companies it may provide a tiny additional protection. However as is it said above the pick of inflation in Russia is expected to go away and in medium run and long run it does not curtail for the fund. "Uralsib the First" basically tries to bit the Russian RTS index and has almost nothing to deal with inflation. It is a stock fund and exposed to Russian equity market risks.

#### 4.1.1.1.3 Global unemployment.

Unemployment is one of the key indicators that show the economy development. There is a simple fact that stands behind it – people with job have more disposable income to spend and this way they can also spend it on their investments. Moreover, additional workers in a company may push the production and company's functioning which can positively affect company's market value. The low unemployment level and inner privet consumption will support each other in both America and European Union in next few years. While in Russia the unemployment rates stay stable and low there are consequences of high unemployment presenting: low privet demand but just due to inflated wages, and so investments are low. However, till 2017 the unemployment will increase a bit till 6% because some countries will not be able to allow themselves to cut costs without cutting the stuff. Labor market conditions continue to improve and the strengthening recovery in the Euro area should provide the basis for further net job creation and a lower unemployment rate, however it is different in EU Member States (European Commission, 2016).

"CSOB Akciovy" most likely will feel quite fine due to the fact that bigger part of its assets is invested into American economy. Around 33% of it are invested into Europe and the forecast will vary depending on the direct Member State where the assets are invested because unemployment rates are different there. "Bond global aggregate" will face the same questions as "CSOB Akciovy" but in bigger scale because around 30% invested in USA and the rest in "others" including Italy, Portugal, Germany, France, United Kingdom and others where unemployment rate very for sure despite the total unemployment in Europe. Unemployment is expected to decrease in Spain and Portugal because they have benefited from recently implemented labor market reforms. "Dymamicky Mix FF" has around 16% of invested into European equities so even European unemployment will influence on the fund most likely it will not be sufficient due to high level of diversification.

In short-term period Russian funds will not be effected by Russian unemployment rate because it will stay on one level and investors' disposable income will not vary. However, there is a question about long-term period. In my opinion the unemployment rate will not go higher because till 2017 a recovery period is expected and it will happen not because of inner factor like cutting costs on workers but most likely due to outer factors like changes in political relationships on global level global economic cycle where emerging markets will recover. "Ilya Muromets" that invests into Russian blue chips will continue to reflect the economy situation in Russia and unemployment rate fluctuations apparently will not affect

it a lot. However, if it happens because of companies will save money on people the fund will not be affected for too long because the money will go to corporate development. "VTB Balanced Fund" and "Uralsib the First" will the same result in similar situation.

#### 4.1.1.1.4 Global current account.

Any country does not want to have a deficit in current accounts because it will show to its neighbors that there is something wrong in its economy. This time it is not applicable to Europe which current accounts are benefiting from low commodities prices. However, that are two factors to pay attention to: different current accounts of Member States and prognosis for strengthening of oil prices in 2017. America is famous for its great public debt and a great digit of negative current account while Russia has positive sum of current accounts.

"CSOB Akciovy" this fund has a lot of investments into American economy. Despite the fact that American current account has negative sign it does not disturb it to be one of the most successful economies in the world. Moreover, some prognosis of American economy shows no slowdowns so we can see that it is possible to functioning with such numbers. But we still should be informed about it and take it into consideration. "Bond global aggregate" is a bond that has around 30% of investments into America which is strong but as we already know has deficit of current account and also around 7% invested into Eurozone which is fine now but there is its Member States and future oil price growth that can negatively affect this point of investments. "Dymamicky Mix FF" has the same scenario of actions like for unemployment – if the deficit of current account will happen it will not affect the fund in a big degree.

Actually we can say that for all three funds chosen for Russia: "Ilya Muromets", "Ilya Muromets" the situation of positive current account will most likely help to develop the funds.

# 4.1.1.1.5 Global interest rates.

The most interesting news here is that Federal Reserve – the central Bank of America – rises its interest rates after 7 years of stability in this area. It tightened financial conditions all over the world. Even though a gradual normalization of US monetary policy without any serious upheavals is assumed, the financial environment in most emerging and developing economies looks likely to become more challenging. Europe is quite stable with its interest rates around zero and Russia is vice versa to America lowers its short-term interest rates for

17% to 11% (European Commission, 2016). So we cannot say that a rise in interest rates is a positive situation. Rising interest rates influence on price of already issued bonds so their price is becoming lower to meet the requirements of new yields. However, bonds were bought with old bigger prices and this pushes investors to redeem their bonds holdings and managers will have to sell bonds to rise some cash for redemption payments. For bonds funds it is definitely a thing to worry about. This negatively influence on bond funds NAV and called redemption risk. For stocks it has the same impact on it – the prices of stocks are falling because consumers will spend less money and companies will have less profit which will affect their market capitalization but not very soon. Small profit will not allow to pay appropriate amount of dividends and will decrease the value of a company.

"CSOB Akciovy" is a stock fund that has invested around 62% of its assets into American firms. It is a decisive action as we see that Federal Reserve is gradually increasing the interest rate. It is too dangerous due to the effect of it that will not appear immediately. However, we know that Fed is going to rise the interests gradually so we can expect the following increase. It may somehow effect the amount of investors of the fund. "Bond global aggregate" is a bond fund with around 30% of assets invested into American economy. Moreover, the funds currency is CZK but it is hedged in USD. Bond funds are definitely exposed to redemption risk as we said above especially those that are invested into US. 30% is a substantial number for a bond fund. "Dymamicky Mix FF" has a favorable place now. Despite the fact that it has around 40% of assets in bonds of different type only around 23% are invested into American economy. It is a well-known fact that American economy influence on other countries especially on emerging ones and 40% of bonds at all is a thing to worry. But diversified funds apparently will not be exposed to redemption risk in a big degree.

"Ilya Muromets" is a bond fund and is very conservative by its nature. But all bonds here belong to Russian economy which on the other hand is lowering the interest rate even if it is only a short-term one. The expected changes of world interest rates can only indirectly influence on Russian companies and it might be considered only in a long run. "VTB Balanced Fund" is a mixed fund that contains around 49% of bonds assets invested into Russian economy. Stocks and bonds will enjoy a favorable environment of lowering interest rates and probably even benefit from increasing amount of money in the economy. Fund share is just the same product as any other in the market and availability of disposable income can push the demand for it. "Uralsib the First" is a stock fund the invested into Russian economy so it will not face almost any change in this part of global fluctuations.

#### 4.1.1.1.6 Global exchange rates.

As EU export markets growth is expected to decouple further from non-EU developments it would lower the exchange rate sensitivity of euro area companies' exports and contribute to the changing role of exchange rates in adjustment. As for exchange rates of America and EU there will be a question to what extent the monetary differences should be expected to show up in exchange rate changes. Technically, the tightening policy in America should strengthen the dollar and support the exchange rate with euro (European Commission, 2016). But in total the exchange rate are remaining low.

Despite the fact that "CSOB Akciovy" has CZK as its main currency it is still exposed to currency risk. The Fund invests in securities that are denominated in currencies other than the fund's currency, it is likely that the value investment will be affected by foreign exchange fluctuations. A significant portion of foreign currency investments, however, is generally secured. Due to its long-term character the fund may not benefit from fluctuating world exchange rates. "Bond global aggregate" is rather international bond fund and it has a lot of issues connected with many different currencies. Despite all the guaranties of OECD governments on bond return there are still a lot of other countries with different currencies the might fluctuate. The fund had a negative contribution from underweight in duration as rates ended globally down during last months. Except other positive diversification opportunities global exchange rates can unexpectedly influence on the fund (however the fund's assets are hedged in USD). As for "Dymamicky Mix FF" the currency of the fund is CZK and it has license in the Czech Republic, however we can see that it has investments in CZK, EUR and USD. This shows funds exposure to currency risks but as we know Euro and Dollar areas are aimed to be more weighted and there are no big changes expectations here. "Ilya Muromets" is a bond fund investing into Russian economy however it has around 11% of bonds from international companies and it may only help the fund due to short term depreciation of Ruble. However, it is not worth to rely only on that fact because it might not bring a total recover to the fund and the situation may change, the ruble can go stronger and bonds price might change. "VTB Balanced Fund" is a mixed fund and connected to exchange rates fluctuation even less than "Muromets" due to only around 5% of securities invested into international companies. The total price of the fund in global specter might change however inside the country the price stays as it is. "Uralsib the First" can de only indirectly influenced by depreciated Ruble because around 30% of the stocks invested into natural resources companies in Russia. So if their profit is influenced by exchange course it may correspondingly influence the price of theirs shares include in the fund.

## 4.1.1.1.7 Global economic cycle phases.

Economy just as history does not grow as a straight line – it can be expressed more as a wave. And those waves are intended to repeat themselves. In the atmosphere that has prevailed for at least 30 years, it is not possible to understand business and policy changes without understanding the economic cycle (Borio, 2014). Since 2015 we are started the slow recovery cycle are at least in America the signs show that there will be no crucial economic changes for 2 years ahead.

Here we can fairly say that all funds most likely will benefit from stable developing environment of recovery economic cycle. Even investors expectation for more calm conjuncture can buff the development of a fund. International funds like "CSOB Akciovy" that invests into USA, Europe and Asia, "Bond global aggregate" that follows the "Barclay Global Aggregate" index and "Dymamicky Mix FF" with its diversification into stocks and bonds may not have any downwards flows because of economic cycle phase. Russian echelon of funds probably will not feel comfortable with emerging markets situation where Russian companies in which "Ilya Muromets", "VTB Balanced Fund" and "Uralsib the First" invest. However, such situation will prolong the stage of recovery and postpone the stage of growth which recession in developing countries will slow the growth until those countries will go through it and insert into growth stage.

## 4.1.1.2 Sector fundamental analysis.

The development of sectors that funds invest in has the same level of importance as other fundamental conditions and type of assets. For example, one can choose safety of bonds as investment asset type but invest into agriculture which is not so popular as technical sphere.

"CSOB Akciovy" is very diversified in this respect. If we pay attention to its content, we will see numerous spheres starting from Walt Disney stocks till Master Card company. However, we can have a look at positions that have the biggest shares in "CSOB Akciovy" fund to understand which sphere are the most preferable here. Around 4,3% (the biggest share of assets invested) of shares are invested in Nomura ETF - Nikkei 225, a fund that tracks Nikkei 225 Average, that contains shares of 225 the most successful Japan's companies listed in the First Section of the Tokyo Stock Exchange (like Panasonic,

Mitsubishi, Pioneer, Casio). However, it is difficult to define a dominating sector of economy here. However, the second highest share belongs to "Apple Inc." which is easily referred to technical sector of world (particularly American) economy. 2,48% belongs to "Nestle Ag" – one of the biggest provider of food products. 2,3% invested into "Wells Fargo Company" which meant investment into banking sphere and 2,2% in "AT&T" which is referred to telecommunication. All in all, we can see that "CSOB Akciovy" is highly diversified stock fund in the question of economic sectors and it protects the fund from loses that may be caused by slowdown in one or another sector.

"Bond global aggregate" is trying to beat its benchmark "Barclay Global Aggregate Index" which by itself consists of 4 indexes: the US Aggregate Bond Index, the Pan-European Aggregate, the Asian-Pacific Aggregate, and the Canadian Aggregate Indices. However, there is no specific information available for determining the prevailing sector of investments. The same situation for "Dymamicky Mix FF".

"Ilya Muromets" is a conservative bond fund however it prefers to invest into very modern and developing sectors of economy like finance – where there are about 21% of fund's assets invested, electrical power engineering – 16,8%, metallurgy – 11,1%, mechanical engineering – 7.8%, transport, real estate, money and others. It invests into inseparable from our life industries that might be affected by financial changes but not in a big degree. At minimum those sectors have a great potential for recovery if damaged because this is those industries provide products even on B2B level to satisfy the very basic needs of people.

"VTB Balanced Fund" looks a bit more modern and conceptual than "Muromets" fund and has a great variety of sectors where its assets are invested. Around 31% are invested into energy, 21% in finance, 5% in natural resources, 6,6% in electrical power engineering, almost 6% in telecommunications and others. The main companies where the shares of the fund invested are Surgutneftegaz (Russian oil and gas company – 7,2%), Lukoil (Russian oil company – 7,2%), Gazprom (Russian gaz company – 5,2%), Norilsk Nickel (Russian nickel and palladium mining company – 3,5%), Bashneft (Russian oil company – 2,7%). It confirms fund high centralization on energy sector, however due to its high diversification it is almost not affected.

"Uralsib the First" for now keeps around 30% of its assets in money, however almost the same amount invested into oil and gas sector. 13% are invested into transport, 13% are in metallurgy and mining sector, 9% and 5% invested into building and finance

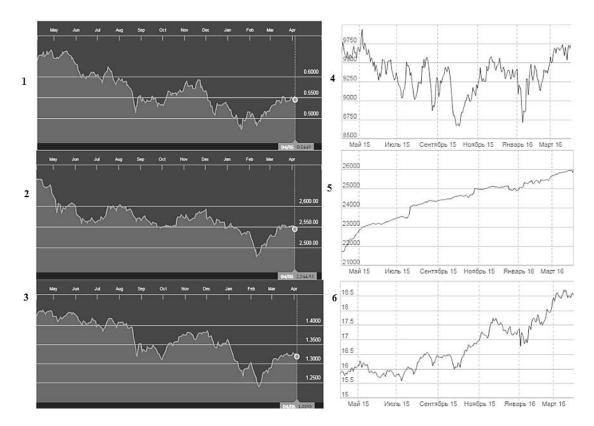
correspondingly, and others. This fund has also determined its sector clearly, however for some reasons an amount of assets is having rest in money (which is probably connected with the loses of NAV of the fund or it is just a part of fund's strategy). It shows not such a high level of diversification as "VTB Balanced Fund" for example and probably is exposed to some risks in the chosen sector.

It the situation with sectoral fundamental analysis we can see almost magical features of diversification that helps fund to avoid a high influence of economic situation in the world or even benefit from it if some sectors perform in better degree that other fall.

## 4.1.2 Performance prediction with the technical analysis (TA).

Technical analysis is a very specific tool of mutual funds' performance studying. It is not preferable but it is possible to say just looking at the performance graph how the fund will behave in future. Technical analysis is closely connected with psychological and fundamental analysis because the graph usually shows the people's reaction to the world economy activity.

This aggregate picture of selected funds (picture 33) proves that world economy activity influence on mutual funds. It is absolutely clearly visible on the side of Czech mutual funds (picture 33; 1,2,3). Despite the fact that the price of a funds' shares is different we can see a common direction in their movements. Funds "CSOB Akciovy" and "Dymamicky Mix FF" have quite the same downward slope in September-October of 2015 and all three Czech funds have a fall in middle February of 2016. However, all the graphics look like downwards corridors, which may show the negative dynamic in the price of funds. These corridors are made of bullish down trend-line and bearish upper trend-line. It is difficult to imagine a proper technical analysis on yearly graph but still it is possible to see some patterns that can help to define expected future development of a fund. In the "Appendix A" of the work we can see a technical analysis if yearly graph of "CSOB Akciovy". There are some patterns that show possible future downward direction. In red there is an ascending triangle – a figure of continuation. The prevailing direction is downward so the continuation of it is expected. In green and orange it is possible to notice the double bottoms – reversal pattern. Before the greet one the downward direction is detected and after the figure the direction has change, the same situation is for orange double bottom. In purple there is a price channel for valleys correction.



Picture 27. Graphics of selected funds. The price per a share of a selected fund with duration of 1 year since the date of access (7<sup>th</sup>, April 2016). 1 - "CSOB Akciovy" (CZK), 2 - "Bond global aggregate" (CZK), 3 - "Dymamicky Mix FF" (CZK), 4 - "Uralsib the First" (RUB), 5 - "Ilya Muromets" (RUB), 6 - "VTB Balanced Fund" (RUB). Source: Invertmentfund.ru, 2016; Bloomberg.com, 2016.

Technical analysis for "Bond global aggregate" is presented in "Appendix B". On this yearly graph we can see a downward price channel made in yellow. It is quite a long-term direction however in the end of the graph we can find an upside down head and shoulders in black color and it gives a hope to the fund that downward direction will change to upward because this figure is a reverse pattern. And as an additional technical detail – from March to May we see a deep price channel which is also downward.

In the end of "Dymamicky Mix FF" graph in "Appendix C" we can see a not finished double bottom in blue. It says that probably in a few months we can expect the price in the amount of January 2006 level, however in long-term the double bottom should reverse its previous direction so the price should go down. There are also two price channels in pink and green. In red there is a double bottom that has reversed the prices in December 2015.

"Uralsib the First" in the "Appedix D" shows that in the end of the graph there is an upward price channel in brown color which is supposed to continue in near future. There is also an

ascending triangle in red. However, the triangle is a figure of continuation so the downward trend was supposed to continue. The reason of such fund behaviors can be found in closer technical analysis, manager's style drift or global economy conditions. There is also a small double bottom in blue that depicts the price change in December 2015.

"VTB Balanced Fund" in "Appendix E" shows a small head and shoulders figure at the very and in green color. That means that in near future we can expect a small fall in the price of the fund. However, the fall might be bigger in in log-term because there is a bigger head and shoulders (uncompleted) in yellow color. There was a successful period of growth from September till mid-November which is shown with long price upward channel.

Alas, it is difficult to organize a technical analysis of the "Ilya Muromets" fund because its graph shows stable growth probably because of some specific manager's technique.

## 4.1.3 Performance prediction with intermarket analysis (ITA).

Interdependence between financial products like stock, bonds, commodities and currencies can't be denied. Everything in financial world is connected just like in the Einstein's law about energy conservation - energy of an isolated system remains constant and it transforms from one form to another. So volatility of stocks can effect on outflow from stocks that will result in the inflow to bond market because investors will be aware of high volatility.

There is a connection between US dollar and oil prices so the rise of prices pushes the dollar up. But rising oil prices did not always boost the dollar. The entrance of alternative sources of energy, the growth of economic power in the developing countries contributed to changes in the demand/supply balance for oil as well as its influence on different economies, whose currencies changed significantly against the USD and it is possible to say that the connection is opposite, not parallel (Laidi, 2009). The last fall of oil prices was magnificent, however during last few months the prices went stronger what motivated the dollar to grow. American's Fed decided to raise interest rates which made the dollar a bit more expensive to use, so we can expect smaller activities with that currency and it can affect "CSOB Akciovy", "Bond global aggregate" and "Dymamicky Mix FF", considering the fact that "CSOB Akciovy" invests around 62% of its assets into American economy it can be influenced in a bigger degree than "Bond global aggregate" and "Dymamicky Mix FF" because their share in American's economy are equal to 30% and 23% correspondingly. Also it can affect not a fund's NAV but the fees on the distributions and management.

There is another connection between ones of the most popular financial instruments like stocks and bonds. The typical situation in intermarket aria is that bonds' prices are normally in the same trend in the same direction with stock prices (Murphy, 2004). Here is interesting situation for such mixed funds as "Dymamicky Mix FF" and "VTB Balanced Fund". Probably in this situation the "VTB Balanced Fund" is in a bit better situation because as Fed in America rises interest rates which influence on bonds' yield (they are rising) and bonds' prices are falling in this way. It can affect negatively "Dymamicky Mix FF" because some amount of assets invested in American economy including bonds. However, the other part of the fund is invested into bonds and stocks of other countries so it can corer the loss (but there is also a risk that the expensive dollar will affect other countries). "VTB Balanced Fund" does not have assets invested in America so the situation can influence on in only indirectly.

The other interdependence connects other important financial instruments: commodities trend in the opposite direction of bond prices (Murphy, 2004). It can be relevant both for American, Russian and European situation. The recent situation with a grate decline in crude oil prices can affect bonds and their prices will rise which is quite profitable situation for "Ilya Muromets" – Russian bond fund, however, there is a question that who will wish to invest in the bond fund which support emerging country in recession period? The fund can benefit only partially. Europe on the other side enjoys the low oil prices because of busted internal demand and it definitely will positively rise bonds prices and "Bond global aggregate" (CZK) can benefit from it. American assets are in dilemma here – as Fed raises interest rate the bonds' prices should fall but on the other side low oil prices should bust the price of bonds. It is quite complicated task because it is difficult to define which factor is more relevant due to its equal importance for global economy.

# 4.1.4 Performance prediction by psychological analysis (PA).

When making investment decisions investors usually think about achieving their personal goals while taking into account some constraints that they may face. It can be obtaining a high rate of return on their investments while avoiding high risks or maybe just to maintain liquidity. The aim can also be the receipt of stable income without a need to sell and cashing the investments. However, people are still thinking that stock market is too risky to invest despite the fact that from historical point of view shares have massively outperformed their direct competitor – bank deposits. Risk remains one of the most sensitive area of investing

into market. Psychological connection here can be represented by the following situation. By selling a number of loss-making investments simultaneously, an investor can reduce the pain of loss since the pain of loss from each additional sale is reduced as a result of the diminishing sensitivity of loss. There is also an evidence that the accuracy of perception of risk and risk tolerance are related to a personality characteristic called "cognitive reflection". Cognitive reflection is the ability to resist the first impulse. It is the tendency to reflect and think about the problem rather than following initial inclinations. People who are good in cognitive reflection tend to be also good at evaluating risky investment situations and tend to accept the risk (Frederick, 2005). Not only investors are people who take part into investing process but also investment managers. Such psychological factor as memory can easily influence a manager's perception. To some extent people are more tend to remember only what they want to remember. Though, it is worth to mention that inaccurate memories can lead to poor decisions. A psychological investigation showed that investment manager memory of the past performance of their investments was better that the actual performance of those investments. People are tending to have their own image of being good investors and want to believe that their investment decision have been good (Redhead, 2008).

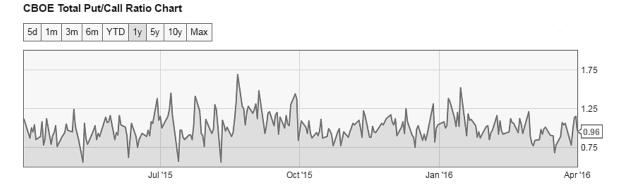
It has been suggested that financial firms should educate their clients not only about financial knowledges but also about psychological issues that clients may experience during investment process.

#### 4.1.4.1 Put/Call Ratio.

As a quite alive organism a financial market has its mood and senses. To understand the common senses in the market one can by calculating of put/call ratio. This is very basic ratio that will show the dominating mood of the market: if it is bullish or bearish. It is calculated in a quite simple way and equal to trade volume of put options divided on trade volume of call options. A put option is representing a contract that gives to an owner the right (but not the obligation) to sell some amount of underlying asset. On the other hand, a call option represents the contract that gives to an owner the right (but not the obligation) to buy some amount of underlying asset. So dividing the above mentioned positions we will receive the level of relationships of selling and buying intentions which will represent the mood of the market. If the amount is below 1 we will understand that the market has bullish mood and investors are intended to buy securities with the hope that the price will grow and they want to hedge market strength. When the number is well below 1 there is possibility that the

market is too bullish and soon it will turn to bearish mood. The opposite is right for the amount that is above. The market has bearish mood which means that investors are intended to sell the securities with the thoughts that the price will fall and hedge against the market weakness. They want to bet on decline and investors will move towards instruments that are expected to gain when the price decline. When the amount is well above 1 bearish market can turn to bullish.

The most famous put/call ratio is calculated by Chicago Board Options Exchange (CBOE) and according to the latest data the ratio is equal to 0,96 (April, 1<sup>st</sup> 2016). However, the ratio is going around 1 showing the mixed mood on market. Nowadays, the put/call ratio has tendency of slow move to bullish mood that depicts the will of investors to buy with the hope of growth and to hedge against the market strength.



Picture 28. Put call ratio by Chicago Board Options Exchange. Source: Ycharts.com, 2016.

"CSOB Akciovy" most likely will benefit from the situation because it is actively managed fund has plenty of shares from world-famous companies. If the market shows bullish expectations, then the fund can wait for the increase of NAV. It is more connected to people's mind with famous names and marketing campaign. "Bond global aggregate" is a big bond fund of fund and probably in the relation to put/call ratio will look a bit clumsy to react fast. Moreover, it looks like to be more exposed to location factor due to its high diversification. However, it still invests globally and there is a chance that the fund will benefit from the situation as investors all over the world are ready to buy. "Dymamicky Mix FF" is also a fund of funds but with investments into mixed assets. It can also benefit from the given put/call ratio and there is a possibility of usage fund's assets that are kept in money market and to buy additional securities to be on the wave of bullish market.

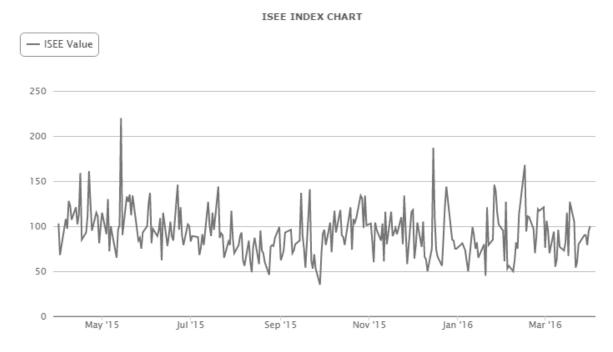
"Ilya Muromets" Is a bond fund which is more tightened to interest rates and government companies than to psychology of put/call ratio, however we can say that Russian economy is expected to recover in 2017 which can attract the potential investors. Probably, on the wave of bullish market some investors will wish to buy shares of bond funds that invests into developing economy. "VTB Balanced Fund" as a mixed fund of Russia economy can also receive some positive moments from the given put/call ratio. Half of the fund is invested into stock of the developing country and bullish wave can help to add some value to its NAV. "Uralsib the First" can definitely benefit from bullish mood because it is tightened to Russian equity market possibilities and risks.

#### 4.1.4.2 *ISEE* index.

ISE Sentiment Index is an index that also represents the relationships of put and call options however just some specific ones. The ISE Sentiment Index is a unique put/call ratio that only uses long customer transactions to calculate bullish/bearish market wave. Long transactions are considered to be the best representatives of market mood because investors often buy call and put options to express their actual market view of a particular stock. Market makers are excluded because they are not considered as representatives of true market sentiment due to their specialization. As such, the ISEE calculation method allows for a more accurate measure of true investor sentiment than traditional put/call ratios. It is calculated through dividing customer opening long calls by customers opening long puts and multiplying the result by 100. The index is then stated as above 100 or below 100. If it is above 100, more customers have opened long call options than put options which means that the market has optimistic mood. If the index is under 100, then more customers have opened long put options than call options which shows pessimistic mood. The current value of ISEE for April 1<sup>st</sup> 2016 is exactly 100, but during the last week it has been fluctuating from 60 to 100 (Ise.com, 2016). According to this we have opposite result – investors are willing to sell more than buy. Probably this index shows more clear results that simple put/call index because the second one includes all participants of the market and reflects more clear psychological atmosphere of investors.

"CSOB Akciovy" will benefit from the situation that goes around the put/call ratio. Here we see the index that more truly reflects the mood of average investor and normal people. In my opinion, the situation with ISEE index is a bit negative (but close to neutral) level the fund most likely will not be affected due to its strong investment position in well-known

companies. Understanding that the fund invests into companies that through their products contact with normal people on everyday basis can attract more investors to "CSOB Akciovy". "Bond global aggregate" is a bond fund of funds and probably interact with more sophisticated investors who went to the next level of such activity and clearly understand their aims. Investing into fund of funds require double attention to what is going on to the market which directly refers to market maker which can also invest into the fund so I suppose that put/call ratio will be more sufficient here. "Dymamicky Mix FF" as an actively managed mixed fund of funds and probably it is really more "dynamic" than "Bond global aggregate" and ISEE ratio will be important here. It least neutral position of this index is more applicable here.

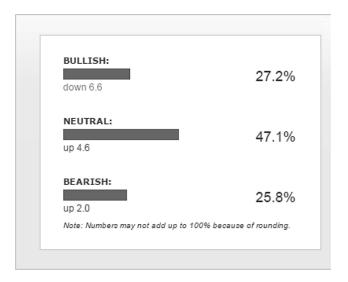


Picture 29. ISEE chart. Source: Ise.com, 2016.

"Ilya Muromets" in my thoughts also can contain both normal investors and market makers so it will not be under the influence of ISEE index. It is very popular mutual fund in Russia and situation when put/call ratio and ISEE ratio are together at almost neutral position will not affect the fund in a high degree. "VTB Balanced Fund" is a mixed fund and according to ISEE index during last week (under 100) investor have some plans to sell some actives however the index went to neutral position and did not reflect on the fund. "Uralsib the First" is stock fund that totally reflects the situation of Russian equity market, so probably the index when it was under or around 100 could negatively influence of the fund, however for now it shows the neutral situations and people are not sure about future economic development.

## 4.1.4.3 The American Association of Individual Investor Sentiment Survey.

American Association of Individual Investors is a very interesting organization. It is a non-profit project that gathers users interested in investing and organizes special educational courses for them. It was founded in 1978 by James Cloonan. It has an aim of teaching individuals to organize their own portfolios and to beat average S&P500 returns, while accepting lower-than-average levels of risk. AAII organizes surveys for their members the result of which will show members' feelings about where the stock market is directed in next 6 months. The AAII Investor Sentiment Survey measures the ratio of individual investors who are bullish, bearish, and neutral on the market for the next six months; individuals are gathered from the ranks of the AAII membership every week. Only one vote per member is accepted (Aaii.com, 2016).



#### Change from last week:

Bullish: -6.6 Neutral: +4.6 Bearish: +2.0

Long-Term Average:

Bullish: **38.6**% Neutral: **31.1**% Bearish: **30.3**%

Picture 30. The American Association of Individual Investor Sentiment Survey. Survey results for week ending 3/30/2016. Data represents what direction members feel the stock market will be in the next 6 months. Source: Aaii.com, 2016.

The picture of Investor Sentiment Survey goes along with the results of put/call ratio. The market is expected to be bullish or neutral. And the results can be associated with ISEE index because plus-minus a few days the index was equal exactly to 100 which is neither bullish nor bearish.

"CSOB Akciovy" is supposed also to be neutral because it is directly connected to American stock market through its investments. We can see a significant change here from the last month. People were more bullish however this position lost 6,6% and people decided to be neutral which reflected in additional 4,6%. This is very tricky because it can further go the

both sides in next 6 months. "Bond global aggregate" has 30% of its assets invested into American market and neutral positions of those 30% technically will not affect the fund. "Dymamicky Mix FF" here has the same position on American market mood due to its investments there are equal to around 23%. Neutral position will neither help nor damage the fund.

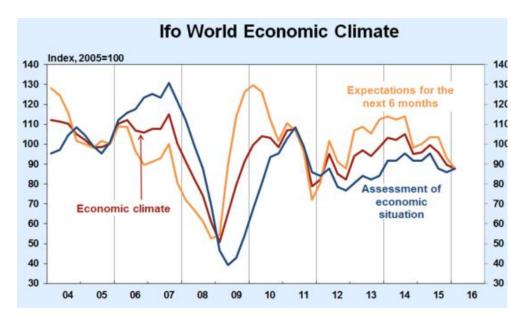
As the survey reflects the opinion of American families I cannot believe that it can influence on Russian part of fund. It can be brought to life only partially due to high influence level of American economy on other countries and through the dollar connection. Nowadays the ISEE index shows neutral level and "Ilya Muromets" and "VTB Balanced Fund" have nothing to do about it. "Uralsib the First" in its prospect has a line that it considers international market situation but its assets are also unvested into Russian economy.

## 4.1.4.4 The Ifo World Economic Climate Indicator.

This indicator is represented by CESifo Group Munich which includes the Center for Economic Studies (CES), the Ifo Institute and the CESifo GmbH (Munich Society for the Promotion of Economic Research). They are saying that Ifo world economic climate continues to cloud over in 2016. The Ifo Index for the world economy fell from 89.6 points to 87.8 points this quarter of 2016, moving away more from its long-term average (96.1 points). While calculations of the current economic situation improved slightly, expectations were less positive than last quarter. The sharp decline in oil prices seems to be having no total positive economic influence. Growth in the world economy continues to lack motivation. The environment in the Commonwealth of Independent States and the Middle East clouded over, especially because of poor economic prospects. In Europe the index is slightly less positive about future economic developments than in October 2015. The US dollar is still measured to be somehow over-valued. Survey contributors across all countries nevertheless expect the dollar to continue to rise on average over the next half of year (Cesifo-group.de, 2016).

As the index says the current economic improved slightly but the prognosis has fallen a bit. Indexes are showing the neutral level of investors mood but Ifo World Economic Climate Indicator reveals more negative expectations. So the common prognosis can fell a bit too. "CSOB Akciovy" can be influenced by this negative outlook as it invests a lot in American economy which is quite sensitive to world news. It definitely can be exposed to the changes that the index describes. "Bond global aggregate" has the same situation. It invests also in

the countries that as probably more sensitive to the world economy conditions or may be the hero of the news itself. Despite the fact that it invests into bonds that are guaranteed by OECD the world economic climate is for everybody and it may touch all the countries. "Dymamicky Mix FF" it is mixed fund of funds that among other investments do ones also in global equities. It increases its sensitivity to world economic climate changes including negative ones.

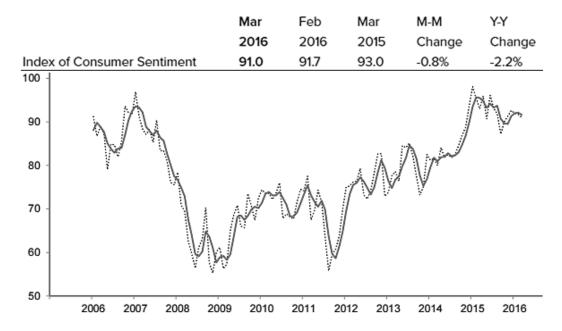


Picture 31. IFO World Economic Climate. Index in 2015 is taken as 100%. Source: Cesifo-group.de, 2016.

Russian funds are also the pert of world economic climate so negative expectations can be reflected also here through investments, currency and production. "Ilya Muromets" is a fund that integrated to Russian economy through core business of the country that is connected to the government. In the case of deep radical changes in expectations of world economic climate it will definitely influence on the fund. But we should not forget the real situation of economy mood is quite fine and it will more likely stimulate the fund. "VTB Balanced Fund" has the same situation and it is long-term oriented despite the fact that the fond is quite young and invest in bigger variety of products and companies. "Uralsib the First" as it was mentioned before is tightened to Russian economy and will react the same as it does in the case of changing expectations.

#### 4.1.4.5 The index of consumer sentiment University of Michigan (MCSI).

It is a telephone survey made by University of Michigan, USA, that collects answers on consumer expectations about the general economy situation mostly in USA. Consumer confidence crawled up in late March due to more promising economic expectations, but this improvement still left the Sentiment Index a bit below last month's level. Despite the recent small monthly fluctuations, the total level of confidence remained almost unchanged during the past nine months: sentiment index in the 1st quarter of 2016 shown the average 91.6, just a little bit different from the 91.3 in the Q4 or the 90.7 in the Q3 of 2015. This stability mirrored more positive personal finances issues by less favorable prospects for the economy. Consumers expected that the slower speed of economic growth will more than likely put an end to further declines in the unemployment rate. The index is becoming more and more valuable for investors because it gives a picture of if consumers feel like spending money or nit and how it will influence on the overall situation (Sca.isr.umich.edu, 2016).



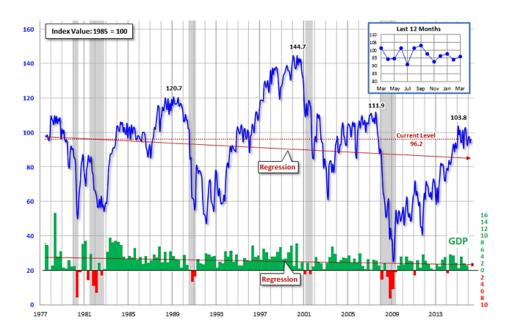
Picture 32. The index of consumer sentiment University of Michigan (MCSI). Source: www.sca.isr.umich.edu, 2016.

"CSOB Akciovy" will have a positive affect from the result of the survey due to it is made in America and American households are participants of the survey. The fund also can orient on this index because this index had not been changed a lot during last 9 months. The fund has around 62% of assets invested into American economy so in case of better expectations and bullish market mood the fund can gain in NAV. "Bond global aggregate" does not have a lot of assets invested into American economy but still has some and cam partially benefit from the expectations revealed in the survey. "Dymamicky Mix FF" which has quite diversified assets and probably will not have the same level of benefits from the result of the survey like two above mentioned funds.

Russian funds "Ilya Muromets", "VTB Balanced Fund" and "Uralsib the First" have just indirect connection with the expectations of American households and will partially benefit from the positive expectations of them. It will be a good news if American citizens will decide to reveal their expectations internationally and invest into Russian economy through funds or funds of funds.

## 4.1.4.6 The index of consumer confidence (Conference Board Consumer Confidence).

The Conference Board is a global, independent business membership and research association that does its work for people. They have created the index of consumer confidence tracks sentiment among households or consumers. The results are based on surveys organized with asking families. The audience that belongs to the survey is randomly chosen U.S. household. Usually around 3000 households are being interviewed. In March consumers were more positive about the short-run position than in February. The proportion of consumers expecting economy to improve over the next six months increased moderately from 14,5% to 15%, while those expecting business conditions to worsen reduced from 11,6% to 9,2% consumers' valuation of current conditions showed a moderate weakening, while expectations about the short-term turned more positive. On balance, consumers do not expect the economy to grow significantly in the near future nor do they see it worsening (Conference-board.org, 2016).

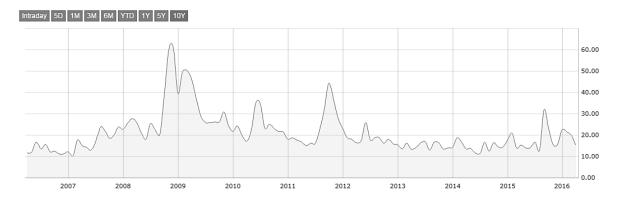


Picture 33. Conference Board Consumer Confidence Index (USA). Source: Dshort.com, 2016.

Actually the index of consumer confidence might have almost the same effect as the index of consumer sentiment. Definitely, confidence seems to be more reliable source than sentiments but they are all connected with people psychology and beliefs on economy direction. As this survey connected to the American households and positive or negative expectations on economy we can draw a parallel of influence of index of consumers' confidence on funds' performance with the index of consumers' sentiments on studied funds.

#### 4.1.4.7 VIX.

VIX is a name for Chicago Board Options Exchange Volatility Index. It is a leading measure of market expectations of near-term volatility constructed from S&P 500 Index (SPX) option prices. In other words, this index measures investors' fear or the level of uncertainty. The current meaning is doing around 15\$ for VIX option. The standard borders for the index are the following: if it is less 20 – the situation is corresponding to less stressful one and if it is higher than 30 – it shows the higher level of stress on the market (Cboe.com, 2016).



Picture 34. Chicago Board Options Exchange Volatility Index. Source: Cboe.com, 2016.

For now, the index shows the times of quite stable conjuncture and small stress. It is the time when funds can take a rest and reorganize their strategies if needed because they will not be able to do it when index goes higher. Now investors are not afraid to invest and funds can benefit on attracting the right amount of investors to go further in their development. "CSOB Akciovy" can prepare itself for further changes in the monetary policy of America and "Bond global aggregate" can take its time for thinking about its diversification strategy and how the countries that it invests in will react to the changes in American or even Chinese economy. "Dymamicky Mix FF" can think about how the fund of funds will be structured. Russian funds can think about how the development of emerging countries (including Russia) will influence on world economic climate indicator and put/call ratio so to understand the following steps of the companies that they invest in.

## 5 RISK AND COST ANALYSIS.

Despite the fact of careful analysis of important economic are as world, U.S., E.U., the Czech Republic and Russia and detected correlation of economy development of funds' performance there is still a risk of default of prediction. Even if a small economical factor will change its development direction it can more or less influence the whole countries' economies and sphere including mutual funds industry. All in all, the economic situation connected with many other parts of people life as cultural, political and social ones. Moreover, they are connected also internationally and unexpected changes in one country (especially such country like America) can influence the overall situation in other country. Prices of financial instruments can fall or rise, business cycle can finish its growth stage, fall in demand or supply can happen even due to demography reasons or an issuer of debt instruments will not be able to pay its debts. Surely, unexpected changes will bring costs and loses to industries and companies (of course positive changes in opposite will bring profit not the loss).

# 5.1 Risks with forecasting by FA, TA, ITA and PA.

Fundamental analysis includes the careful examination of big events, news and indicators that directly or indirectly connected with mutual funds – "fundamentals" in other words, that can influence the demand and supply in the industry. The news can be accounting, economic, politic, market, industry and news from different companies. It is important to ask what-if questions to stand on the right path of understanding the risks of such kind of analysis (Tjung, 2010). Such questions will help to estimate all potential situations that may receive a development. In correlation with the project it is possible to ask the following questions:

• What if the price of oil will significantly start to rise/fall? Analyzing this risk of fundamental analysis, it is clear that the situation can influence on the whole world economy not only some separate countries. The rise of prices may happen because of global changes in the oil extractions amounts and the fall in the price of this commodity may happen because of scientific invention of new source of energy. It will influence on the financial products tightened to oil like futures and stocks of oil companies all over the world. The following fall in oil prices may have different effect. For Russia in the first turn it will mean a huge change in the exchange rates. Ruble will be negatively affected by this situation.

- What if the Federal Reserve (American's central bank) will decide to raise the interest rate? This important indicator is a key for bonds prices which represent relatively safe financial instrument that people use with the aim to protect their investments and safe it from inflation. Investors intend to trust bonds and what if their price will change in the case of interest rate sudden changes? There will be no possibility to make relatively safe investments with acceptable return and banking saving accounts will be winners here.
- What if emerging markets will not be able to recover till 2017? There is the information that in 2017 the bigger amount of emerging markets will recover from recession and will add to the global economic development that fill finish the consequences on world financial crisis in 2007. However, if developing countries will not be able to do it is possible that a new crisis in the world economy will have bigger strength than the one in 2007 because some countries were not able to get well and meet and support active actions against world economic crises that may happen because of proper conditions in world business cycle.
- What is there will be more migrants to European Union? Europe has received a lot of migrants and the new flaw of them is expected in warm time of the year. There will be a need for documental process and in increasing costs for safety. If it is possible to think about further situation there is a danger for Schengen area and its cancellation will influence on communication between countries including financial flows.

Technical analysis represents inductive analysis of past movements and this definition is a risk of technical analysis of being too subjective. Technical analysis is a set of techniques for developing a forecasts of financial prices completely by analyzing the history of the particular price of investment product. The thing is that the results of the technical analysis highly depend on the chartist that is providing the analysis and on his/her experience in the relevant field. The more qualitative aspect of technical analysis involves recognition patterns in the data that are thought to herald trend reversals, such as "flags", "head and shoulders" patterns, and so on (Menkhoff, 2006). There is a risk of wrong recognition of a pattern that is depicted in an instrument's graph. It can influence on both understanding the current situation and definition of future performance. It is also important to recognize the type of the figure – is it reverse or continuation. Otherwise the price of an instrument will be projected in a wrong way. Moreover, using the technical analysis on its own without any

additional analysis can increase the risk of financial analysis being uninformative (Lo, 2000). Technical development of computers and calculating technics can reduce but not to eliminate the risk of building a wrong pattern or mismatching some picks and valleys. The costs of the happened risk situation can be quite big and reflect even the opposite amount of expected profit because of a pattern defined in a wrong way the expected direction of the graph can go to any direction, for example of the pattern defined as reverse but it happened to be continuous the graph will go to opposite to defined direction.

Intermarket analysis is a risky way to analyze the market by itself because it has to consider a lot of global information to reveal additional connection between different financial instruments. To consider proper intermarket analysis, we have to understand the correlation with geographical location of a market, its size and importance in the world economy, the level of its integration into the world economy. Some bonds of a countryside company that has around 50 workers definitely will not create some special intermarket situation. There is also a risk that the connection between two products can be highly influenced by some third issue. Moreover, intermarket analysis is relatively young way of working with data and it requires more time for researches. The cost of the risk is also quite high because the defined direction of financial products correlation can go opposite to real one. However, the relationships in intermarket analysis are rather difficult then simple and it may happen that the prices will go not in opposite way but to just a bit different like a bit higher or lower.

Predictions with psychological analysis may have even smaller base under them that intermarket analysis because it is a very subjective substance (similar to technical analysis). There are a lot of indexes that are based on the surveys of normal people that even probably do not have special economic education. On one hand it is a strange thing because we are receiving opinion about world economic from a person that connected we it only through product and services markets, but in the other hand we are receiving a clear opinion from a typical consumer that can reflect the tendencies of economy. A typical survey involves around 3000 households that provide their personal thoughts on the future of the market in near half of year and estimation of market's companies. However, psychology is a very old science and its usefulness is proved by very old experience of help to people so we cannot exclude the importance of the analysis. The costs of risks it psychological analysis seem to me not so serious as in technical analysis because psychological effect is a bit prolonged in time. At least a person need to hear an economical new, then probably discuss it with friends, make a decision to buy or sell an asset, go to a bank or reach his/her computer or phone to

do it. A human is a social creature so psychological effect of news or events need some time to spread.

# 5.2 Risks associated with investments in selected types of mutual funds.

Despite some common economic issues of the whole economy there is a need to define risks that are connected with selected mutual funds because the structure and the type of a funds can play a significant role in risks and costs exposures.

#### 5.2.1 Risks associated with investments in money market mutual fund.

In the selected mutual funds there is no such fund that invests the whole its assets into money market but every fund has a part of assets that is invested there so there is a need to define such kind of risks. Despite the fact that a money market fund is probably one of the safest places to invest it still exposed to some risks that can influence on investment decision. As a rule, if a fund manager sees a great liquidity in the stock market and it results in the lowering of their prices the manager prefers to sell those stocks and to invest money into money market to go through high liquidity period without significant loses. It is a logical decision, however there is a significant risk that inflation will make the investments into money market much smaller. The most exposed to the inflation risk fund is "Uralsib the First' that holds around 30% of its assets into money market. It is written in its fund prospectus that the manager is able to invest money into money market to keep it from volatility in stock markets. Actually, the bigger part of funds prospects includes the possibility of investment of funds' assets into money market. The 2 other Russian funds also have such kind of investments but not such significant: "Ilya Muromets" has less than 0.5% and "VTB Balanced Fund" has around 2% invested into money market. From the Czech funds only "Dymamicky Mix FF" has visible share in money market equal almost to 5%. However, there is not a big risk of sharp inflation changes neither in Europe nor in Russia so those investments into money markets can still be considered as quite safe. It is good to be save but it is worth comparing rates of return from money market and stock market for example. Money market typical return in 2-3% but stocks are able to provide return in the size of 8-10% so keeping funds' assets in money market for too long can lead to lose of return opportunity.

#### 5.2.2 Risks associated with investments in bonds mutual funds.

Bond mutual funds are also considered as long-term funds with high level of safety but as all investments they are also exposed to some risks like interest rate risks, inflation risk, credit risk (which is connected with rating risk). In my opinion one of the most applicable risk here is credit risk. Bonds are by their nature are debt instrument and investors are building their wealth on the fact that someone will use their money and return it back with some additional percentage. But if there is a risk that the band issuer will not give the investment back the question is rising why does bond exist and why to invest in bond? First let us have a look at "Ilya Muromets" fund which is a bond fund positioning itself as one investing into blue chips companies with only high stable credit rating and in companies with tier 3 but that are going to develop successfully. The risk the blue chips will not pay the debt back is relatively small but the smaller part of tier 3 companies is a little bit more exposed to such king of risk. "Ilya Muromets" invests around 82% of its assets into bonds. The other fund with a notable share of bonds is "VTB Balanced Fund" with 49% of assets invested in bonds. It is a mixed fund with the other part invested into stock of Russian equity market. In case of debt will not be return due to diversification the fund will lose only part of investments, however the risk of in is low because it is also positioning itself as blue chips investor. As a parallel to bond and mixed fond in Russia we can talk about the following funds in the Czech Republic: "Bond global aggregate" and "Dymamicky Mix FF". As a mixed fund "Dymamicky Mix FF" the credit risk here is less applicable then for "Bond global aggregate". Probably "Bond global aggregate" is more under the credit risk than bond fund from Russia "Ilya Muromets" because "Bond global aggregate" has a variable diversification on geographical point. Despite the fact that credit ratings have the same base but companies located in different countries are exposed to much more different risks.

## 5.2.3 Risks associated with investments in equity mutual funds.

Some individual retail investors are aware of investing into stocks due to high risks (but we all know that the risk and return are in parallel correlation – the higher the risk the higher the return). Their awareness has a true base under because stocks are risky financial product by their nature. The most famous and applicable risks of stock mutual funds are liquidity risk and market risk. Funds that will be discussed here are "CSOB Akciovy", "Dymamicky Mix FF", "VTB Balanced Fund" and "Uralsib the First". They are all have a significant level of assets invested in stocks so they all can be exposed to those risks but in different degree

because of different diversification principle. "CSOB Akciovy" has all his assets invested into American economy and it is both advantage and disadvantage. Disadvantage is that the American market exposed to market risk in a high degree because of high level of speculations. Stock bubbles and crises are illustrated with colorful examples from American economy history. "Dymamicky Mix FF" has around 23% invested in American equities and it defines its exposure to market risk – not so relevant but still it will be a pity to lose around 23% of investments. Russian selected funds do not refer to American stock markets but those are still stock investments that include market and liquidity risks. Russia is classified as emerging country and such countries are a recession now. More over economic conditions in Russia now are more connected to political side of the question then with economics directly. The market risk is quite far but liquidity risk can be applied here because Russian companies have to intensively support their functioning and liquidity of their stocks.

#### 5.2.4 Risks associated with investments in mixed mutual funds.

Technically mixed funds keep mixed risks of equity funds and bond funds. And actually mixed funds were created with the aim to beat equity funds risks and bond funds risks. Such funds have to maintain flexibility to avoid risks like interest rate risks, inflation risk, credit risk, liquidity risk and market risk. The amount of risks applied to mixed funds is bigger than for equity funds and bond funds separately, but mixed mutual funds have diversification as their weapon to effectively fight with all the mentioned here risks. To be more informant about how a mixed mutual fund is fighting with the risk the first thing to do is to read fund's prospectus where the information is described in details. For investing into "Dymamicky Mix FF" it is important to remember that if an investor does not prefer the current situation in equity market, portfolio manager can partially reduce their share, and thereby reduce the risk of decline in value of the portfolio. "VTB Balanced Fund" prospectus says that the funds are actively managed and the investment process goes through very careful estimation and analysis of perspective sphere of Russian economy and companies that issue securities.

# 6 CONCLUSION FOR INDIVIDUAL AND INSTITUTIONAL INVESTORS ABOUT RECENT AND FUTURE DEVELOPMENT TRENDS OF SELECTED MUTUAL FUNDS IN THE CZECH REPUBLIC AND RUSSIA.

Before deciding where to invest one have to decide if he/she needs or feel like investing. It is not just putting one's savings into one place, signing the contract but it is a difficult and active process where there are a lot of participants: investors, investment companies, interdependent investment products and numerous economic conditions that influence on investments and on each other.

For example, emerging markets are currently stuck in recession (that soon is expected to fade away) but "CSOB Akciovy" in our opinion is not so exposed to changes on emerging markets due to high investments (62%) into stocks of American companies which we know enjoys some stable growth now but Federal Reserve is gradually increasing the interest rate so it may negatively affect the fund as rising interest rates will decrease the amount of money in the economy and this way decrease the profit of American companies as consumers will spend less. Moreover, the fund invests in securities that are denominated in currencies other than the fund's currency, it is likely that the value of investment will be affected by foreign exchange fluctuations.

"Bond global aggregate" have around 30% of bonds invested in USA economy so it also supposed to be safe from emerging markets fluctuations in total however there are some investments to Italy (13%), United Kingdom (4%) Spain (2%) where there is not so decisive development as in America. Also it is highly exposed to inflation expectations due to its bond nature. But it is still investing globally and there is a chance that the fund will benefit from the positive situation defined by put/call ratio situation as investors all over the world are ready to buy and this desire is supported by the index of consumer sentiment by University of Michigan that says that consumers are confident in their decisions due to promising economic expectations.

"Dymamicky Mix FF" is quite diversified and almost 24% of assets are invested into American economy so at least partially it is possible to be sure in positive numbers here. Inflation only partially dangerous for the fund as it has around 40% of bonds investments which are exposure to inflation risk. However, some assets might be invested into emerging markets bonds which increases the risk. "Dymamicky Mix FF" has around 16% of invested

into European equities so European unemployment will influence on the fund and most likely it will not be sufficient due to high level of diversification. The currency of the fund is CZK and it has license in the Czech Republic, however we can see that it has investments in CZK, EUR and USD. This shows funds exposure to currency risks. But there is no place for worries because The American Association of Individual Investor Sentiment Survey showed that investors will behave on "neutral" level (neither bullish nor bearish).

As for "Ilya Muromets" performance I can say that it is Russia oriented bond fund that invests his bigger part of assets into Russian blue chips (around 82%). Inflation is very important question now but the bottom of recession is almost left behind and inflation is projected to fall in 2016 and 2017. Probably risk of high inflation is not applicable for "Ilya Muromets" in long-term position. "Ilya Muromets" invests into Russian economy however it has around 11% of bonds from international companies and it may only help the fund due to short term depreciation of Ruble. The fund refers to invest into developing sectors of economy like finance – where there are about 21% of fund's assets invested, electrical power engineering – 16,8%, metallurgy – 11,1%, mechanical engineering – 7.8%.

"VTB Balanced Fund" is a mixed fund that has almost 49% of stocks and almost 48% of bonds. It will bring some level of variety into its performance. It is also very flexible fund that is oriented on current market situation and its actively managed structure is a bit less exposed to current situation in Russian equity market. "VTB Balanced Fund" looks a bit more modern and conceptual than "Muromets" fund and has a great variety of sectors where its assets are invested. Around 31% are invested into energy, 21% in finance, 5% in natural resources, 6,6% in electrical power engineering, almost 6% in telecommunications and others. The main companies where the shares of the fund invested are Surgutneftegaz (Russian oil and gas company – 7,2%), Lukoil (Russian oil company – 7,2%). Bullish wave can help to add some value to fund's NAV.

"Uralsib the First" is a stock funds and it prefers to invest into stocks of blue chips in Russia and appreciate companies with underestimated value. "Uralsib the First" basically tries to bit the Russian RTS index. The fund can be only indirectly influenced by depreciated Ruble because around 30% of the stocks invested into natural resources companies in Russia. So if their profit is influenced by exchange course it may correspondingly influence the price of theirs shares include in the fund.

Individual and institutional investors have something in common: they are all investors and have to define their own investments aims. This is one of the most important conditions of investment process and without the aim there will be wrong investment result. So to decide in which of the above mentioned selected funds to invest it is important to determine what kind of result an investor is willing to have. It is twice sufficient because the aim of the investment will determine the risks that the investor is available to accept. Every investor even institutional one has its own risk awareness level. Do you agree to wait while high inflation level will experience an outflow or do you agree to go through expected recession in the sector the fund is investing bigger part of its assets? Careful attention to all the details will help to choose a fund and at least basic knowledge of investment principles will help to avoid a lot of difficult questions.

#### **CONCLUSION**

Mutual fund industry is vividly developing and this is the moment to understand where in development is doing. America is enjoying current situation and mutual fund industry positively effects on American economy. More and more individual retain investors are deciding to join a mutual fund to manage their savings. The same refers to the Czech Republic and Russia. Despite the fact that the level of mutual fund industry development there is not the same as in America the passion to go further and to attract new investors is felt in both countries.

Now theory can provide sufficient base for further development and modern macro-economy accepts mutual funds with open arms. It is known than stocks mutual funds increase the possibility of economic bubbles but the positive effect of mutual funds cannot be overestimated.

The modern state of macro-level environment shows that world economies are equally important and adaptation of such instrument as mutual fund can be a benefit for every country. Developed economies will add mutual funds to their list of profitability and developing countries can bust their economies with mutual funds that will attract new investments.

The project of comparison and performance evaluation showed that mutual funds both in the Czech Republic and Russia are actively functioning and they are both can be compared to the reality of chosen benchmark – MSCI Emerging Markets Europe which shows a slight recovery of emerging markets during last quarter. It will positively influence on economic development of both countries which in it turn will put the base for mutual funds development. The chosen mutual funds of the Czech Republic showed moderate decline while Russian ones show moderate growth.

All stated aims and objectives have been fulfilled. The first aim about theoretical information was fulfilled with literature review of available bibliographical resources like books, articles are official documents of reliable entities. The second aim about analyzing of macro-level environment and mutual funds trends was fulfilled by careful analysis of current economic situation in correlation with current state of mutual fund industry along with graphical information. The third aim about preparing a project of performance comparison of selected mutual funds and detecting the aspects of their potential development was fulfilled with studying of available fund information and with means of induction and deduction the

comparison was organized. The aspects of potential development were created with the base of current economic and funds' facts with the analysis and strength and weaknesses that can perform of underperform in future. The aim about abdicable conclusion was fulfilled by analysis of fund performance and connection the information with investors aims. The last fifth aim about submitting the project to risk and cost analysis was fulfilled with analysis of weaknesses and their potential influence on funds' performance.

All in all, mutual funds are useful extents of investment industry but investors have to use it wisely to receive from them what they want.

## **BIBLIOGRAPHY**

- 1. ABRAMOV, A., AKSHENCEVA, K., RADYGIN, A. (2015). Effectiveness of mutual funds: theoretical approach and experience from Russia. *Economic Policy*, 10 (4), s. 60-86.
- 2. AIPOV, A.N. (2016). Exchange traded funds (ETF): specific features of the instrument and the development prospects in the Russian securities market. *Finance and Credit*, 7 (697), s. 42-50.
- 3. AKAT CR. (2015). Fund investments increased by more than 13 % from the beginning of the year. (Online). Retrieved from http://www.akatcr.cz/download/3371-tz20150814\_2q\_2015.pdf
- 4. AKAT CR. (2015). Report on activity of the association for the capital market for 2014/2015 and objectives and tasks for the next period. (Online). Retrieved March 20, 2016, from http://www.akatcr.cz/download/3299-akat-cr\_eng\_2014-15.pdf
- 5. AMERICAN ASSOCIATION OF INDIVIDUAL INVESTORS. (2016). (Online). Retrieved March 20, 2016, from http://www.aaii.com/sentimentsurvey.
- 6. ANDERSON, S. C. & AHMED, P. Mutual funds: fifty years of research findings. New York: Springer, 2005, 166 s. ISBN: 978-0387-25307-7.
- 7. ASHWORTH, D. (2015). *How your bond mutual fund could face liquidity risk and why.* (Online). Retrieved March 21, 2016, from http://finance.yahoo.com/news/bond-mutual-fund-could-face-204853357.html
- 8. BAKER, K.H., FILBECK, G., KIYMAZ, H. Mutual funds and exchange-traded funds: building blocks to wealth. New York: Oxford Univercity Press, 2015, 704 s. IBSN: 978-0190207-434.
- 9. BALDWIN, W. (2015). *Ratings for 1,471 mutual funds*. (Online). Retrieved March 21, 2016, from http://www.forbes.com/sites/baldwin/2015/06/26/ratings-for-1471-mutual-funds/#655acc2e1c1b
- 10. BEATTIE, A. (2016) 4 psychological traps that are killing your portfolio. (Online) Retrieved March 21, 2016, from http://www.investopedia.com/articles/financial-theory/11/psychological-factors-that-hurt-your-portfolio.asp
- 11. BENEDICTOWA, A., FJÆRTOFTB, D., LØFSNÆSC, O. (2013). Oil dependency of the Russian economy: an econometric analysis. *Economic Modelling*, 32, s. 400–428.

- 12. BERNHARDT T. (2016). Yes, funds come and go—without government help. (Online). Retrieved March 21, 2016, from https://www.ici.org/viewpoints?tag=Mutual%20Fund
- 13. BME CONSULTING. (2007). The EU market for consumer long-term retail savings vehicles. (Online). Retrieved March 20, 2016, from http://ec.europa.eu/internal market/finances/docs/cross-sector/study en.pdf
- 14. BOGLE, J.C. (2010). Common sense on mutual funds. 10<sup>th</sup> edition. Hoboken: John Wiley and Sons, 2010, 656 s. IBSN: 978-0-470-13813-7.
- 15. BORIO, C. (2014). The financial cycle and macroeconomics: What have we learnt? *Journal of Banking & Finance*, 45, s. 182–198.
- 16. BRECHT, K. (2015). No market trades in a vacuum: using intermarket analysis. (Online). Retrieved March 21, 2016, from https://tickertape.tdameritrade.com/investing/2015/08/using-intermarket-analysis-97341
- 17. BROWN, M. (2016). *How mutual funds differ around the world*. (Online). Retrieved from http://www.investopedia.com/articles/mutualfund/08/foreign-mutualfunds.asp
- 18. BRYANT, C., SHARMAN, A., MILNE, R. (2015). *Volkswagen starts to cut investment after emissions scandal*. (Online). Retrieved March 21, 2016, from http://www.ft.com/intl/cms/s/0/ab3de3aa-6db6-11e5-aca9-d87542bf8673.html
- 19. CES IFO GROUP MUNICH. (2016). (Online). Retrieved March 20, 2016, from www.cesifo-group.de
- 20. CHICAGO BOARD OPTIONS EXCHANGE. (2016). (Online). Retrieved March 20, 2016, from www.cboe.com.
- 21. CHUEVA, T.I., NIYAZOVA, G.M., METSLER, A.V., SHKURKIN, D.V. (2016). Approaches to the Development of Endowment Funds in Russia as an Instrument of Mixed Financing of the Social Sphere. *International review of management and marketing*, 6(S1), s. 261-266.
- 22. CONFERENCE BOARD CONSUMER CONFIDENCE. (2016). (Online). Retrieved March 20, 2016, from www.conference-board.org
- COUNCIL ON FOREIGN RELATIONS. (2015). The Credit Rating Controversy.
   (Online). Retrieved March 21, 2016, from http://www.cfr.org/financial-crises/credit-rating-controversy/p22328.

- 24. COX, J. (2016). *Just 1% of mutual funds are positive in 2016*. (Online). Retrieved March 21, 2016, from http://www.cnbc.com/2016/02/29/just-1-of-mutual-funds-are-positive-in-2016.html
- 25. CREMERS, M., FERREIRA, M. (2015). (Online). Indexing and Active Fund Management: International Evidence. *Social Science Research Network*, 1-73. Available at SSRN: http://ssrn.com/abstract=1830207
- 26. CSOB ASSET MANAGEMENT, a.s. (2016). (Online). Retrieved March 21, 2016, from www.csobam.cz
- 27. CZECH NATIONAL BANK. (2016). *Global economic outlook March*. (Online). Retrieved March 20, 2016, from http://www.cnb.cz/miranda2/export/sites/www.cnb.cz/en/monetary\_policy/geo/geo \_2016/gev\_2016\_03\_en.pdf
- 28. DARIUSZ, F. (2013). Returns and persistence of investment fund performance in the Czech Republic. *Prague economic papers*, 3, s. 324-342.
- EMERGING MARKETS COMMITTEE. (2009). The Development of the Collective Investment Schemes Industry in Emerging Markets 2005 to 2007. (Online). Retrieved March 20, 2016, from http://www.iosco.org/library/pubdocs/pdf/IOSCOPD311.pdf
- 30. ERNST AND YOUNG. (2015). European mutual funds. An introduction to UCITS for US asset managers. (Online). Retrieved March 21, 2016, from http://www.ey.com/Publication/vwLUAssets/EY-european-mutual-funds/\$FILE/EY-european-mutual-funds.pdf
- 31. EUROPEAN COMISSION FORECAST. (2016). European Economic Forecast. Winter 2016. (Online). Retrieved March 20, 2016, from http://ec.europa.eu/economy\_finance/publications/eeip/pdf/ip020\_en.pdf
- 32. EUROPEAN COMMISSION. (2016). Country report Czech Republic 2016. (Online). Retrieved March 20, 2016, from http://ec.europa.eu/europe2020/pdf/csr2016/cr2016\_czech\_en.pdf
- 33. FEDOROVA, A. (2012). Russia's small mutual fund industry battles with bank alternatives. (Online). Retrieved March 21, 2016, from http://www.investmenteurope.net/regions/cee/russias-small-mutual-fund-industry-battles-with-bank-alternatives/
- 34. FINK, M. P. *The Rise of Mutual Funds, An Insider's View. Second Edition.* New York: Oxford University Press, 2011, 360 s. ISBN: 978-0199753505.

- 35. FREDERICK, S. (2005). Cognitive reflection and decision making. Journal of *Economic Perspectives*, 19(4), s. 25-42.
- 36. FRENKEL, A., SERGEENKO, Y., TICHOMIROV, B., ROSCHINA, L. (2015). Russia economy is in crisis. *Economic policy*, 10 (4), s. 113-155.
- 37. GORBATIKOV, E., KHUDKO E. (2016). Russian financial markets in December 2015. *Russian economic developments*, 1, s. 10-16.
- 38. GREENBERGER, P. (2015). *Eye on the market*. (Online). Retrieved from https://www.raymondjames.com/pdfs/eye-on-the-market/151216.pdf
- 39. HAJEK, O., NEKOLOVÁ, J., NOVOSÁK, J. (2015). Determinants of new business formation some lessons from the Czech Republic, *Economics and Sociology*, 8(1), s. 147-156.
- 40. HALDANE, G. A. (2014). *Speech: The age of asset management?* (Online) Retrieved March 20, 2016, from http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech72 3.pdf
- 41. HASLEM, J. Mutual funds: risk and performance analysis for decision making. Oxford: Blackwell publishing, 2003, 592 s. ISBN: 0-631-21561.
- 42. HONG KONG GOVERNMENT. (2015). *Mandatory Provident Fund*. (Online). Retrieved March 21, 2016, from http://www.gov.hk/en/about/abouthk/factsheets/docs/mpf.pdf
- 43. INTERNATIONAL MONETARY FUND. (January, 2016). *World economic outlook*, 2016. (Online). Retrieved March 20, 2016, from https://www.imf.org/external/pubs/ft/weo/2016/update/01/pdf/0116.pdf
- 44. INTERNATIONAL MONETARY FUND. (January, 2016). *World economic outlook*, 2016. (Online). Retrieved March 20, 2016, from https://www.imf.org/external/pubs/ft/weo/2016/update/01/pdf/0116.pdf
- 45. INTERNATIONAL SECURITIES EXCHANGE. (2016). (Online). Retrieved March 20, 2016, from www.ise.com/market-data/isee-index.
- 46. INVESTEMNT COMPANY INSTITUTE. (2015). Worldwide regulated open-end fund assets and flows. Fourth quarter 2015. (Online). Retrieved March 20, 2016, from https://www.ici.org/research/stats/worldwide/ww\_q4\_15
- 47. INVESTICNI KAPITALOVA SPOLECNOST KB, a.s. (2016). (Online). Retrieved March 21, 2016, from www.iks-kb.cz

- 48. INVESTICNI SPOLECNOST CESKE SPORITELNY. (2016). (Online). Retrieved March 21, 2016, from www.iscs.cz
- 49. Investment Company Institute. (2010). *Understanding the Risks of Bond Mutual Funds: Are They Right for Me?* (Online). Retrieved March 21, 2016, from https://www.ici.org/pubs/faqs/faqs\_bond\_funds
- 50. JAGRIC, T, PODOBNIK, B., STRASEC, S. & JAGRIC, V. (2007). Risk-adjusted performance of mutual funds: some tests. *South-Eastern Europe Journal of Economics*, 2, s. 233-244.
- 51. KAMINSKY G., LYONS R. (2001). Mutual Fund Investment in Emerging Markets: An Overview. *World Bank Economic Review*, 15 (2), s. 315-340.
- 52. KEVIN, S. Security analysis and portfolio management. Delhi: PHI Learning Pvt. Ltd, 2015, 368 s. IBSN: 978-81-203-5130-1.
- 53. KHORANA A., SERVAES H. (2012). What Drives Market Share in the Mutual Fund Industry? *Review of Finance*, 16 (1), s. 81-113.
- 54. KHORANA A., SERVAES H., TUFANO, P. (2003). *The World of Mutual Funds*. (Online). Retrieved March 21, 2016, from: http://facultyresearch.london.edu/docs/world\_of\_funds.pdf
- 55. KLEPPER, L., SULLA, A., VITTAS, D. (1998). The Development of Mutual Funds Around the World. (Online). Retrieved March 20, 2016, from http://siteresources.worldbank.org/DEC/Resources/MFNov03.pdf
- 56. KOTUS, J., PECHANOVA, K. (2013). *Investment funds in the Czech Republic new developments*. (Online). Financier Worldwide Magazine. Retrieved from http://www.financierworldwide.com/investment-funds-in-the-czech-republic-new-developments/#.Vu61\_YFFwnj.
- 57. KUDRIN, A., GURVICH, E. (2015). A new growth model for the Russian economy. *Russian journal of economics*, 1 (1), s 30-54.
- 58. KUOSMANEN, T. (2007). Performance Measurement and Best-Practice Benchmarking of Mutual Funds. *Springer science + business media*, 28, s. 71-86.
- 59. LAIDI, A. Currency trading and intermarket analysis: how to profit from the shifting currents in global markets. Hoboken: John Wiley & Sons, 2009, 279 s. ISBN: 978-0-470-22623-0.

- 60. MARQUIT, A. (2013). Fundamental Analysis for Beginners. (Online). Retrieved March 21, 2016, from http://money.usnews.com/money/blogs/the-smarter-mutual-fund-investor/2013/01/07/fundamental-analysis-for-beginners
- 61. MATTING, A. *Industrial Dynamics and the Evolution of Markets in the Mutual Fund Industry*. Springer Science & Business Media, 2009, 243 s.
- 62. MCWHINNEY, J. (2005). *A brief history of the mutual fund*. (Online). Retrieved March 21, 2016, from: http://www.investopedia.com/articles/mutualfund/05/mfhistory.asp
- 63. MENKHOFF, L., TAYLOR, M.P. (2006). *The Obstinate Passion of Foreign Exchange Professionals: Technical Analysis*. (Online). Retrieved March 21, 2016, from http://www.econstor.eu/bitstream/10419/22464/1/dp-352.pdf
- 64. MERKEL, S. (2016). What are the advantages and disadvantages of mutual funds? (Online). Retrieved March 21, 2016, from http://www.investopedia.com/ask/answers/10/mutual-funds-advantages-disadvantages.asp
- 65. MOBIUS, M. *Mutual Funds: An Introduction to the Core Concepts.* Singapore: John Wiley & Sons, 2007, 250 s. ISBN: 978-0470-82143-5.
- 66. MORNINGSTAR official web-page. (Online). Retrieved March 21, 2016, from http://corporate.morningstar.com/us/
- 67. MURPHY, J.J. *Intermarket analysis: profiting from global market relationships*. Hoboken: John Wiley & Sons, 2004, 288 s. IBSN: 0-471-02329-9.
- 68. MURPHY, John J. Trading with Intermarket Analysis: A Visual Approach to Beating the Financial Markets Using Exchange-Traded Funds. 1st edition. Hoboken: John Wiley & Sons, 2012, 256 s. IBSN: 978-1118314371.
- 69. NORTHCOTT, A. The mutual funds book: how to invest in mutual funds & earn high rates of returns safely. Florida: Atlantic publishing company, 2009, 288 s. ISBN: 978-1-160138-0001-2.
- 70. PANKRATOVA, L. *Payevye investicionnye fongs v RF*. Voronezh: IPC Voronezh. gos. un-ta, 2008, 158 s. IBSN: 978-5-9273-1273-3.
- 71. PATTON, M. (2015). *National debt tops \$18 trillion: guess how much you owe?*(Online). Retrieved March 21, 2016, from http://www.forbes.com/sites/mikepatton/2015/04/24/national-debt-tops-18-trillion-guess-how-much-you-owe/2/#654f10d0698e

- 72. PERRY, B. (2016). Evaluating country risk for international investing. (Online). Retrieved March 21, 2016, from http://www.investopedia.com/articles/stocks/08/country-risk-for-international-investing.asp
- 73. POZEN, R., HAMACHER, T. *The Fund Industry: How your money is managed. 2nd ed.* John Wiley and Sons, 2015, 544 s. ISBN: 978-1-118-920994-0.
- 74. RAMOS, S.B. (2009). The size and the structure of the world mutual fund industry. *Eur. Fin. Manage.*, 15, s. 145-180.
- 75. REDHEAD, K. Personal Finance and Investments: A Behavioural Finance Perspective. Oxon: Routledge, 2008, 936 s. IBSN: 978-0-415-42859-0.
- REILL, F. K. & BROWN, K. C. Investment Analysis and Portfolio Management, 10th edition. Mason: South-Western, Cengage Learning, 2012, 1080 s. IBSN: 978-0-538-48210-3.
- 77. RUSSEL INVESTMENTS. (December, 2015). The Fed Awakens. 2016 Annual Global Market Outlook. (Online). Retrieved March 20, 2016, from http://www.theglobeandmail.com/globe-investor/investment-ideas/research-reports/article28034323.ece/BINARY/2016Global+Market+Outlook\_Canada\_EN\_FINAL.pdf
- 78. RUSTAGI, H. (2013). *Types of risks associated with mutual fund investments*. (Online). Retrieved March 21, 2016, from http://www.moneycontrol.com/news/mf-classroom/typesrisks-associatedmutual-fund-investments\_967960.html
- 79. SANTOS, K. (2016). *Corporate credit ratings: a quick guide*. (Online). Retrieved March 21, 2016, from https://www.treasurers.org/ACTmedia/ITCCMFcorpcreditguide.pdf
- 80. SCHMIDT, M. (2016). *Mutual fund ratings: are they deceiving?* (Online). Retrieved March 21, 2016, from http://www.investopedia.com/articles/mutualfund/09/mutualfund-rating-systems.asp
- 81. SCHOENBERGER, C.R. (2013). Currency risk in mutual funds: take it or hedge? (Online). Retrieved March 21, 2016, from http://www.wsj.com/articles/SB10001424127887323899704578585713504465292
- 82. SEIC. (2015). Global Asset Management Product Guide. Interval Fund (INF). (Online). Retrieved March 21, 2016, from http://www.seic.com/IMS/SEI\_Interval\_Fund\_US.pdf

- 83. SERGEEVA, I., MAITAH, M., SMUTKA, L., NIKIFOROVA V., VASILYONOK, V. (2015). The development of Mutual funds in Russia. *International business management*, 9(6), s. 1257-1262.
- 84. SIMONYI, A. (2016). *The refugee crisis will define Europe's future*. (Online). Retrieved March 21, 2016, from http://www.huffingtonpost.com/andrassimonyi/the-refugee-crisis-will-define-europe-future\_b\_8102994.html
- 85. SOLOBUTO, N. Secrets of investing into mutual funds. Saint Petersburg: Piter, 2007, 144 s. IBSN: 978-5-91180-354-4
- 86. SURVEYS OF CONSUMERS UNIVERSITY OF MICHIGAN. (2016). (Online). Retrieved March 20, 2016, from www.sca.isr.umich.edu
- 87. SVEJNAR, J. (2013). The Czech Republic and economic transition in eastern Europe. *Academic Press*, s. 434.
- 88. TAYLOR, P. (2013). The role of credit rating agencies in the international financial system. (Online). Retrieved March 21, 2016, from https://www.fitchratings.com/site/dam/pdf/comms/UN-Paul-Taylor-10-Sep-2013.pdf
- 89. THE EUROPEAN FUND AND ASSET MANAGEMENT ASSOCIATION. (2016). Trends in the European investment fund industry in the fourth quarter of 2015 & results for the full year of 2015. (Online). Retrieved March 20, 2016, from http://www.akatcr.cz/download/3513-quarterly\_statistical\_release\_q4\_2015.doc
- 90. THE FEDERAL FOUNDATION FOR THE PROTECTION OF INVESTORS AND SHAREHOLDERS RIGHTS IN RUSSIA. (2010). *Voucher privatization, check investment funds in Russia*. (Online). Retrieved March 20, 2016, from http://www.fedfond.ru/CHIF.htm
- 91. THE MUTUAL FUND EDUCATION ALLIANCE. (2016). *Understanding risk*. (Online). Retrieved March 21, 2016, from http://mfea.com/learn/investing basics/content tabbed/understanding risk.fs
- 92. TJUNG, L. Forecasting Stock Prices. Luna Tjung, 2010, 81 s. IBSN: 978-0557601110.
- 93. TRANG, K.H. (2015). *How to invest in 2016: best ideas from top investment banks*. (Online). Retrieved March 21, 2016, from http://www.forbes.com/sites/trangho/2015/11/15/how-to-invest-in-2016-best-ideas-from-top-investment-banks/2/#36414a5e356c

- 94. TUZOVA, E., QAYUM F. (2016). Global oil glut and sanctions: The impact on Putin's Russia. *Energy Policy*, 90, s. 140–151.
- 95. TYSON, E. *Mutual Funds for Dummies*, 6th edition. Indiapolis: John Wiley & Sons, 2010, 408 s. ISBN: 978-0470623213.
- 96. U.S. DEPARTMENT OF STATE. (2015). *Czech Republic investment climate statement 2015*. (Online). Retrieved March 20, 2016, from http://www.state.gov/documents/organization/241745.pdf
- 97. UNITED NATIONS. (2015). *World Population Prospects*. (Online). Retrieved March 20, 2016, from http://esa.un.org/unpd/wpp/publications/files/key\_findings\_wpp\_2015.pdf
- 98. UNITED NATIONS. (2016). World Economic Situation and Prospects 2016. (Online). Retrieved March 20, 2016, from http://www.un.org/en/development/desa/policy/wesp/wesp\_current/2016wesp\_ch1\_en.pdf
- 99. VERSHININA, A., TROFIMOVSKAYA, A. & FATIN, M. Mutual funds at equity market of Russia. Moscow, MESI, 2013, 151 s. IBSN: 978-5-7764-0792-5.
- 100. WAGGONER, J. (2016). *More than 20% of mutual funds shuttered over last five years*. (Online). Retrieved March 21, 2016, from http://www.investmentnews.com/article/20160310/FREE/160319998/more-than-20-of-mutual-funds-shuttered-over-last-five-years
- 101. WALTERS, A.B. (2008). *The value chain of a collective investment scheme* and the impact thereof on the individual investor. (Online). Retrieved from http://uir.unisa.ac.za/bitstream/handle/10500/1754/dissertation.pdf \
- 102. WORLD BANK. (2004). Czech Republic: assessment of governance of the collective investment fund sector. (Online). Retrieved March 20, 2016, from http://www
  - wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/12/10/000 386194\_20121210062153/Rendered/PDF/NonAsciiFileName0.pdf
- 103. YIH, J. (2016). *Assessing Different Measures of Risk*. (Online). Retrieved March 21, 2016, from http://retirehappy.ca/assessing-different-measures-of-risk/
- 104. ВТБ КАПИТАЛ УПРАВЛЕНИЕ АКТИВАМИ ("VTB CAPITAL" ASSET MANAGEMENT). (2016). (Online). Retrieved March 21, 2016, from www.vtbcapital-am.ru

- 105. СБЕРБАНК УПРАВЛЕНИЕ АКТИВАМИ (SBERBANK ASSET MANAGEMENT). (2016). (Online). Retrieved March 21, 2016, from http://www.sberbank-am.ru/eng/start.wbp
- 106. УК "УРАЛСИБ" (MANAGEMENT COMPANY "URALSIB"). (2016). (Online). Retrieved March 21, 2016, from www.uralsib-am.ru.

### Web-pages.

- 107. 10 Emerging Markets Funds For The Long-Term. (September 9, 2013).
  (Online). Retrieved March 20, 2016, from <a href="http://www.forbes.com/sites/gurucentral/2013/09/09/10-emerging-markets-funds-for-the-long-term/#77b04b8c7090">http://www.forbes.com/sites/gurucentral/2013/09/09/10-emerging-markets-funds-for-the-long-term/#77b04b8c7090</a>
- 108. 2016 Mutual Fund trends: Taking a closer look, interview with Paul Kraft. (2016). (Online). Retrieved March 21, 2016, from http://www2.deloitte.com/us/en/pages/financial-services/articles/mutual-fund-industry-outlook.html
- 5 European Mutual Funds to Invest In. (2015). (Online). Retrieved March 21,
   from http://www.nasdaq.com/article/5-european-mutual-funds-to-invest-in-cm518801
- 110. 6 advantages of investing in a mutual fund (2007, April 2). (Online).

  Retrieved March 21, 2016, from http://www.rediff.com/money/2007/apr/02mfseries.htm
- 111. 7 common types of mutual funds. (Online). Retrieved March 21, 2016, from http://www.getsmarteraboutmoney.ca/en/managing-your-money/investing/mutual-funds-and-segregated-funds/Pages/seven-common-types-of-mutual-funds.aspx#.VvBeetLhDIV
- 112. 9 Disadvantages of Investing in Mutual Funds. (Online). Retrieved March 21, 2016, from http://www.investorguide.com/article/11139/disadvantages-of-investing-in-mutual-funds-igu/
- 113. Chart patterns. (Online). Retrieved March 21, 2016, from http://stockcharts.com/school/doku.php?id=chart\_school:chart\_analysis:chart\_patte rns
- 114. Checklist for Investing in a Mutual Fund. (Online). Retrieved March 21, 2016, from https://www.tradeking.com/education/mutual-funds/selecting-mutual-funds

- 115. Closed End Fund. (Online). Retrieved from http://www.investopedia.com/terms/c/closed-endinvestment.asp
- 116. Compare and Evaluate Mutual Funds. (Online). Retrieved March 21, 2016, from http://www.investing-in-mutual-funds.com/compare-mutual-funds.html
- 117. Credit Rating Agency. (Online). Retrieved March 21, 2016, from http://financial
  - dictionary.thefreedictionary.com/List+of+international+credit+ratings+agencies
- 118. Czech Rep. Economic Outlook. (2016). (Online). Retrieved March 21, 2016, from http://www.focus-economics.com/countries/czech-republic
- 119. Czech Republic GDP Growth Rate 1996-2016. (2016). (Online). Retrieved March 21, 2016, from http://www.tradingeconomics.com/czech-republic/gdp-growth
- 120. Czech Republic Regulations. (2010). (Online). Retrieved March 21, 2016, from
  - https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/Lists/Expired/Fund-manage/Czech\_Republic\_Funds\_Mtg\_regulation\_2010.pdf
- 121. Disadvantages of Mutual Funds. (Online). Retrieved March 21, 2016, from http://www.nasdaq.com/investing/disadvantages-of-mutual-funds.stm
- 122. Distributing our knowledge. Fund distribution: UCITS and alternative investment funds (AIF). (2014). (Online). Retrieved March 21, 2016, from https://www.pwc.ie/media-centre/assets/publications/2014-pwc-ireland-distribution-knowledge-12-05-2014-1.pdf
- 123. Equity market department of Bank of Russia is closed. (March 3, 2014). (Online). Retrieved March 21, 2016, from http://www.banki.ru/news/lenta/?id=6273869
- 124. Financial Risk and Its Types. (February 24, 2012). (Online). Retrieved March 21, 2016, from http://www.simplilearn.com/financial-risk-and-types-rar131-article
- 125. Investment in the Czech Republic. (2015). (Online). Retrieved March 21, 2016, from https://www.kpmg.com/CZ/cs/IssuesAndInsights/ArticlesPublications/Factsheets/D ocuments/KPMG-Investment-in-the-Czech-Republic-2015.pdf
- 126. Market Risk. (2016). (Online). Retrieved March 21, 2016, from http://www.investinganswers.com/financial-dictionary/investing/market-risk-2360

- 127. Mutual Fund Classification Criteria. (Online). Retrieved March 21, 2016, from http://www.investing-in-mutual-funds.com/mutual-fund-classification.html
- 128. Mutual Funds: Different Types of Funds. (Online). Retrieved March 21, 2016, from http://www.investopedia.com/university/mutualfunds/mutualfunds1.asp
- 129. Risks of mutual funds. (Online). Retrieved March 21, 2016, from http://www.getsmarteraboutmoney.ca/en/managing-your-money/investing/mutual-funds-and-segregated-funds/Pages/Risks-of-mutual-funds.aspx#.Vst8q4FFwng
- 130. The Guardian view on global migration: it's part of Europe's future. (2015). (Online). Retrieved March 21, 2016, from http://www.theguardian.com/commentisfree/2015/nov/12/the-guardian-view-onglobal-migration-its-part-of-europes-future
- 131. U.S. Economic Outlook. (2016). (Online). Retrieved March 21, 2016, from http://www.focus-economics.com/countries/united-states
- Why are mutual funds subject to market risk? (Online). Retrieved March 21, 2016, from http://www.investopedia.com/ask/answers/101315/why-are-mutual-funds-subject-market-risk.asp

#### LIST OF ABBREVIATIONS

CEO Chief Executive Officer

NAV Net Asset Value

US United States of America

U.S. United States of America

SEC Security and Exchange Commission

EMC Emerging Markets Committee

GDP Gross Domestic Product

AUM Assets Under Administration

CIS Collective Investments Schemes

EU European Union

E.U. European Union

QIF Qualified Investment Fund

UCITS Undertakings for the Collective Investment in Transferable Securities

CSC Czech Securities Commission

CZK Czech Koruna

CHIF Check Investment Funds

UK United Kingdom

NASDAQ National Association of Securities Dealers Automated Quotations

IPO Initial Public Offer

NYSE New York Stock Exchange

IFRS International Financial Reporting Standards

IFSC International Financial Service Center

IT Information Technologies

EPO Employee Stock Option

S&P Standard and Poors

LLC Limited Liability Company

P/E Price/Earnings

USDX U.S. Dollar Index

LIBOR London Interbank Offered Rate

CISCA Collective Investment Schemes Control Act

OECD Organization for Economic Co-operation and Development

Fed Federal Reserve

EM Emerging Markets

FANG Facebook, Apple, Netflix and Google

USD US Dollar

ECB European Central Bank

AIF Alternative Investment Fund

Q Quarter

EUR Ruro

RUB Ruble

ESIF European Structural and Investment Funds

FDI Foreign Direct Investment

CBR Central bank of Russia

CNB Czech National Bank

UAE United Arab Emirates

IMF International Monet Fund

bbl Barre

i.e. For example

MIF Mutual Investment Fund

ISIN International Securities Identification Number

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