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Diploma Thesis

**Comparison of selected mutual funds' performance in
the Czech Republic**

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

DIPLOMA THESIS ASSIGNMENT

Bc. Vojtěch Tolar

Economics and Management

Thesis title

Comparison of selected mutual funds performance in the Czech Republic

Objectives of thesis

The aim of this diploma thesis is a comparison of two established groups of selected mutual funds in terms of their performance, and taking into account the risk and expenses of these funds. The first part of the diploma thesis describes the basic terms of the collective investment in the Czech Republic, its development and current status of this sector. The second part deals with the measuring of funds performance, its indicators and methods. The last part is directly focused on the analysis of the selected mutual funds. The first group is focused on the maximum return on investment and the second group on their safety. This work should help to better understand the problematic of collective investment and help to investors with selection of the appropriate mutual fund.

Methodology

1. Analysis of the current situation in this sector
2. Comparative analysis
3. Technical analysis
4. Fundamental analysis
5. Quantitative analysis

The proposed extent of the thesis

60 pages

Keywords

Investment, collective investment, investment company, investment fund, mutual fund, diversification, portfolio, investment strategy, interest rate, revenue

Recommended information sources

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Declaration

I declare that I have worked on my diploma thesis titled " Comparison of selected mutual funds' performance in the Czech Republic" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 28.11.2018

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Comparison of selected mutual funds' performance in the Czech Republic

Abstract

This diploma thesis is getting in depth of collective investment in the Czech Republic. Regarding the fact that collective investment fulfils a very important role in present financial system and offer a very interesting possibility of evaluation of free financial resources, should help future investors to make their decisions.

The thesis deals in theoretical part with the basic terminology, advantages, disadvantages and other theoretical facts which potential investor should familiarize with before entering the capital market through collective investment and its products.

The first part of practical part sets the goal to confirm that a significant responsibility for correct identification of the client for next investment recommendations and investment consulting is passed on distributors, which means brokers and investment middlemen.

In the second part of the thesis are described actual trends of collective investment and the last part of the thesis confirms that long term environment of extremely low interest rates and following slow normalization of interest environment is more favourable for benchmark investment strategy for management of mixed mutual fund

Keywords: Investment, collective investment, investment company, investment fund, mutual fund, diversification, portfolio, investment strategy, interest rate, revenue

Srovnání výkonnosti vybraných podílových fondů v České republice

Abstrakt

Tato diplomová práce se zabývá kolektivním investováním v České republice. Vzhledem k tomu, že toto odvětví plní v dnešním finančním systému velmi důležitou úlohu a nabízí velmi zajímavou možnost zhodnocení volných finančních prostředků, měla by pomoci budoucím investorům při jejich rozhodování.

Tato práce se v teoretické části zabývá základními pojmy, výhodami, nevýhodami a dalšími teoretickými fakty, se kterými by se měl investor seznámit, předtím, než na kapitálový trh vstoupí.

První část praktické části má za cíl potvrdit, že výrazná odpovědnost za správnou identifikaci klienta pro následné investiční doporučení a investiční poradenství je přenášena na distributory, tedy obchodníky s cennými papíry a investiční zprostředkovatele.

Ve druhé polovině práce jsou popsány aktuální trendy na trhu kolektivního investování a následná analýza 2 konkrétních produktů která potvrzuje, že dlouhodobě přetrvávající prostředí extrémně nízkých úrokových sazeb je příznivější pro benchmarkovou investiční strategii pro řízení smíšeného podílového fondu.

Klíčová slova: Investování, kolektivní investování, investiční společnost, investiční fond, podílový fond, diverzifikace, portfolio, investiční strategie, úroková míra, zisk

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1 Introduction

Collective investment fulfils a very important role in present financial system. Collective investment funds offer a very interesting possibility of evaluation of free financial resources.

Everyone of us during his life makes and then spends his money. The amount of made money is not always enough and so people think about evaluation of their free financial resources. This theme essentially belongs to common life of people of all age categories.

It's normal in developed states of western Europe and the USA that families save for whole their lives part of their free financial resources to capital markets whether it is because of keeping the living standard they were used to during their productive life, because of protection of their financial resources from inflation, savings for their children or simply evaluation of their assets. This trend gradually gets to our area as well.

A growing financial literacy of people contributes to the development of collective investment the most which is connected with willingness of capital markets participants to be involved in people's education and to widen their awareness of investment possibilities. A mass media influence also takes a huge role because media participate in spreading important information for investment behaviour of people.

A trust of people in Czech bank sector is another not so small factor to growing popularity of collective investment branch, mainly a trust in three biggest banks at Czech market – Česká spořitelna, Československá obchodní banka and Komerční banka. Without the help of these important subjects, which primarily secure a distribution of collective investment, the level of financial literacy of Czech people would be growing very slowly.

This diploma thesis looks into problems of collective investment in Czech Republic in detail. It looks into advantages, disadvantages and other theoretical facts which potential investor should familiarize with before entering the capital market through collective investment and its products.

The first part of practical part sets the goal to confirm that a significant responsibility for correct identification of the client for next investment recommendations and investment consulting is passed on distributors, which means brokers and investment middlemen.

The second part of analytical part confirms the trend of long term growth of amount of resources managed by products of collective investment which means open-ended mutual

funds. The biggest growth is expected by mixed mutual funds and equity mutual funds which should confirm the theory that investors tend to more dynamic investment strategies. The whole thesis is set into context of environment of low interest rates and a development of interest environment. A direct connection and bond between long term environment of low interest rates and growing interest of investors in more dynamic investment strategies will be confirmed. Investors are willing to undergo higher market risks to reach higher profit than it is possible to reach with conservative investment strategies or deposit bank products.

The last part of the thesis confirms that long term environment of extremely low interest rates and following slow normalization of interest environment is more favourable for benchmark investment strategy for management of mixed mutual fund.

The collective investment market has significantly stabilized in last years. Statistical data show that the amount of resources in its products, open-ended mutual funds, significantly grows.

2 Objectives and Methodology

2.1 Objectives

The main objective of this diploma thesis is analysis of collective investment in the Czech Republic in detail, its trends and future development.

The practical part should confirm or disprove set hypothesis. The first part of practical part should confirm the hypothesis that key factor for quality distribution of investment products, or rather products of collective investment, is the depth and robustness of implementation of regulatory demands for provision of individual main investment services. Practical part of the thesis should confirm the hypothesis that significant responsibility for right client's identification for following investment recommendations and investment consulting is transferred to distributors, which means to brokers and investment middlemen.

The second part of practical part should confirm a trend of long term growth of amount of resources managed by products of collective investment, which means by open-ended mutual funds. Mixed and equity mutual funds then record a significant growth which should confirm the hypothesis of investors' shift towards more dynamic investment strategies. Finally, there should be confirmed hypothesis that long-lasting environment of extremely low interest rates with following slow normalization of interest environment is more favourable for use of benchmark investment strategy for management of mixed mutual fund.

2.2 Methodology

In order to achieve the above-mentioned objectives, methods of analysis were used, as well as comparative methods for comparing individual products and selected investment strategies in the context of market development. Further technical and fundamental analysis was used.

Reasons for selecting specific products. Česká Spořitelna is the leader of the Czech banking market, it is an important maker of trends in the banking sector and one of the leading distributors of collective investment products. Investment company of Česká spořitelna is one of the largest and oldest investment companies operating at our market. For the analysis, 2 mixed mutual funds were selected from this company with the same risk and different investment strategy. The selected investment horizon is the same for both funds due to objective appreciation.

3 Literature Review

The collective investment, its main substance and function, is defined in the theoretical part of the thesis. The advantages and disadvantages of collective investment are described in the thesis and also detailed excursion into history of this branch. Historic development is described both in foreign countries and in the Czech Republic.

In the second part of the thesis all subjects of collective investment are described including investment companies, mutual funds and investment funds.

The third part looks into institutions related to collective investment, their description and function at capital markets.

The last part is dedicated to investment strategies of collective investment funds where individual strategies are characterized in detail.

3.1 Principle of collective investment

The core of collective investment lies in collecting financial resources from individual „small“ investors. By the purchase of profit participation certificates or shares of investment fund the investor entrusts their temporarily free financial resources to the fund and their investments is being taken care of by an expert (fund manager) instead of the investor.

The professional manager takes care of these investments far more intensively than a small individual investor is able to, the manager has incomparably more capacity of resources than an individual investor and within his investing activity is able to put them into various assets and reduce resulting risks from potential negative development of the value of the concrete asset, in proportions which usually can't be reached by the individual investor. Big investments also lower the costs of investing. The investor doesn't have to deal with these activities but at the same time is able to continuously monitor the success rate of the fund which reflects in development of the value – rates of purchased investment facilities which are published in the press and on websites of respective funds on a regular basis.

3.2 Advantages of collective investment for investors and the economy

There are a lot of advantages connected with the collective investment for both investors and the economy itself. The advantages of collective investment for investors are:

- Professionalism with the administration of invested resources
- Lower administrative and time demands for the investor, by this investing becomes easy and comfortable
- Wider possibility of risk diversification
- Decrease in information and transaction costs
- Possibility of purchase of those titles which small investor wouldn't normally be able to get to
- Permanent liquidity of invested resources
- Higher revenue than for example having money in current account by a commercial bank

The benefit for the state economy lies in that if large enough part of population involves in this type of investment then comes the change of temporarily free financial resources of small investors into shares and profit participation certificates of funds of collective investment (long term financial assets). Like this a significant amount of financial resources gets to the capital market which normally they wouldn't be able to reach. They also have a large importance in financing lots of real investments by state and companies with positive impact on economic growth.¹

3.3 Disadvantages of collective investment for the investors

Same as advantages investing via funds of collective investment has its disadvantages.

They mostly are:

- Administrative fees
- Conflict between the investor and the fund manager – we can't affect the focus of the investment
- Risks with investing on capital markets
- No state systems of insurance of collective investment instruments

¹ VALACH, Josef. Investiční rozhodování a dlouhodobé financování. 3rd ed., Praha: Ekopress, 2010, p. 266. ISBN 978-80-86929-71-2.

3.4 History of collective investment

History of collective investment First mentions of collective investment are connected with the name of Dutch merchant and broker Abraham van Ketwich. He asked investors to buy 2000 commercial papers of Eendragt Maakt Magt trust in 1774. Into English it can be translated as „unity makes strength “. Ketwich tried to bring back the trust in financial products after the crisis between 1772 and 1773. He offered investors a possibility of portfolio diversification with low level of initial capital. It was about 500 guildens at that time. A consortium of bankers from Utrecht found an association Vordeeling en Voorsigting in 1776. This association invested mainly into colonial loans. In the 1780s there was a slump of values of these loans and it was fatal for this association. Ketwich established his second trust with a Latin name Concordia Res Parvae Crescunt in 1779. The name was same as for the first trust.²

The results of these trusts weren't successful. The value of Eendragt Maakt Magt trust fell to 25 % of its nominal value in 1803. It was able to pay out these shareholders only in 1824 when the trust finished its economic activity. The settlement with shareholders of Concordia Res Parvae Crescunt trust lasted 114 years.³

Other European countries followed up with Dutch effort. Belgian Société de Belgique found first two collective investment funds in 1822. In the half of the 19th century this type of investment starts to develop in France and Scotland. Foreign and Colonial Government Trust was found in London in 1868. This trust invested mainly into foreign mortgages, railways and other industrial companies. This trust was doing really well and thanks to effective diversification was able to survive the Baring crisis in 1890. In the late 19th century there were 18 trusts in London and more than 100 investment trusts in the whole Britain before the first world war.⁴

In USA, compared to Europe, this type of investment started to develop about several dozens of years later. The Boston Personal Property Trust started its activity in 1893. It was typical for America that investment companies arose by changing from holding type companies. It was the same for The Boston Personal Property Trust. By 1920 there arose 420 closed-ended investment companies in the United States of America. Most of them though had big

² MUSÍLEK, Petr. Trhy cenných papírů. 2nd ed. Praha: Ekopress, 2011, p. 433. ISBN 978-80-86929-70-5.

³ MUSÍLEK, Petr. Trhy cenných papírů. 2nd ed. Praha: Ekopress, 2011, p. 434. ISBN 978-80-86929-70-5.

⁴ MUSÍLEK, Petr. Trhy cenných papírů. 2nd ed. Praha: Ekopress, 2011, p. 435. ISBN 978-80-86929-70-5.

financial problems because of great indebtedness, not enough diversification and illegal activities of their managers.⁵

All funds mentioned above are all categorized as closed-ended type funds. The development of open-ended funds happened much later. The very first open-ended fund was found in America in 1924 and was named The Massachusetts Investors Trust. This fund didn't have stable amount of capital. This ensured the fund great flexibility in the number of issued shares and also high level of liquidity for investors. After their USA visit Brits followed Americans and also started to found open-ended types of funds. The first open-ended fund First British Fixed Trust was found in 1931. It invested into beforehand selected fixed type of commercial papers and beforehand selected time.⁶

The development of collective investment started only in 1980s at Asian markets, especially in Japan and South Korea. On the opposite individual investment started to be put at the forefront in Hong Kong and Singapore.⁷

3.4.1 History of collective investment in CZ

The first mentions about collective investment in our country don't reach that far as for example in England or Benelux states. For the very first time we can hear about collective investment in CZ is the connection with Investment bank which in 1990 found its subsidiary První investiční (PIAS) which is considered the first Czech collective investment institution. PIAS created three funds which were designated for retail investors – Investiční rozvojový fond, Český majetkový fond a Moravskoslezský majetkový fond. Komerční banka together with Československá obchodní banka and Česká spořitelna responded to this move in 1991. There wasn't any special legislation at this time which would regulate collective investment. That's why newly created investment companies derived their activities from the permission granted by Státní banka československá on the base of act n.158/1992 Sb., o bankách a spořitelnách.⁸

⁵ JÍLEK, Josef. *Akciové trhy a investování*. 1st ed. Praha: Grada, 2009, p. 225. Finance (Grada). ISBN 978-80-247-2963-3.

⁶ MUSÍLEK, Petr. *Trhy cenných papírů*. 2nd ed. Praha: Ekopress, 2011, p. 435. ISBN 978-80-86929-70-5.

⁷ MUSÍLEK, Petr. *Trhy cenných papírů*. 2nd ed. Praha: Ekopress, 2011, p. 436. ISBN 978-80-86929-70-5.

⁸ JÍLEK, Josef. *Akciové trhy a investování*. 1st ed. Praha: Grada, 2009, p. 227. Finance (Grada). ISBN 978-80-247-2963-3.

The coupon privatisation though had the main voice during the development of collective investment in the Czech Republic. Ministry of Finance granted over 400 licences to investment privatisation funds in the half of 1991. They then could collect investment points from the holders of investment coupons (DIKs) in the zeroth round which next they could invest to offered stock companies in regular rounds. It all took place on the base of act n.92/1991 Sb., o podmínkách převodu majetku státu na jiné osoby. In the beginning of 1992 newly created investment privatisation funds set off acquisition campaigns based on presentations of attractive offers to the public. Viktor Kožený, the founder of Harvardské fondy HC&C, came with an offer that if citizens invested all their investment points into one of six privatisation funds of HC&C group he would pay them 10 350 CZK by the first year after the end of first wave of coupon privatisation. This offer caught on and more than 617k people entrusted their investment coupons to Mr Kožený and his privatisation funds.⁹

The second wave of coupon privatisation passed off, after the separation of Czechoslovakia, only in Czech Republic and about 6,2 million people were involved. Despite the decrease of interest of citizens to invest their investment points via privatisation funds these funds managed to collect almost 64 % of the whole amount of investment points in the zeroth round of the second wave of coupon privatisation. 353 funds got involved in the second round of coupon privatisation to which already applied the act n.248/1992 Sb., o investičních společnostech a investičních fondech. Within the second wave of coupon privatisation, opposite to the first one, funds could have type of investment funds, open-ended or closed-ended mutual funds. During the second quarter of 1995 commercial papers of funds from this wave of coupon privatisation reached the market. Restituční investiční fond acquired an important position at the collective investment market. This fund after its foundation in 1992 became the biggest fund at the Czech collective investment market. Investment company PIAS was entrusted to manage this fund.¹⁰

After the first and second wave of coupon privatisation there were fast changes in portfolios. Ownership structure created during these years was significantly fragmented. The third, unformal, wave of coupon privatisation became a logical solution. Its purpose was to change portfolios, create unformal associations, complete packages and consecutive sale to strategic

⁹ MUSÍLEK, Petr. Trhy cenných papírů. 2nd ed. Praha: Ekopress, 2011, p. 456. ISBN 978-80-86929-70-5.

¹⁰ LIŠKA, Václav. Kapitálové trhy a kolektivní investování. 1st ed. Praha: Professional Publishing, 2004, p. 339. ISBN 80-86419-63-0.

investors. There emerged a new trend thanks to Moto invest group led by Pavel Tykač at the end of 1995. This investment group thanks to rented capital tried to make a big number of hostile takeovers of important privatisation funds. Their actions were for the most part successful.¹¹

During spring months of 1996 almost 100 collective investment funds changed into common holding companies. These companies got out of state regulation of collective investment, significantly reduced information duty, substantially lowered diversification of portfolios, dropped the liquidity of their instruments. At the same time a large amount of non-transparent acquisition deals were made which negatively reflected into market prices of shares of holdings. This trend was started by the HC&C group led by Viktor Kožený.¹²

Symptoms of market failures occurred many times during coupon privatisation, especially not fulfilling the information duty by fund managers, not willingness to emit shares of investment privatisation funds to investors, abuse of entrusted assets and not respecting the regulation laws. The amendment of the act o investičních společnostech a fonděch brought an important change in 1998. This amendment brought tightening of rules for portfolios diversification of investment and mutual funds and especially the obligation to transform investment funds and closed-ended mutual funds, founded before this amendment, into open-ended mutual funds. This all must have been done by the end of 2006. Another important step for Czech collective investment was changing licences of collective investment subjects. Komise pro cenné papíry started this move on 31.3. 1999 and the result was a significant decrease of investment companies, from former 112 ended only 31 after changing licences. The revitalization process peaked in 2004 when the new act adjusting collective investment took effect, specifically act n.189/2004 Sb., o kolektivním investování.¹³

¹¹ MUSÍLEK, Petr. Trhy cenných papírů. 2nd ed. Praha: Ekopress, 2011, p. 457. ISBN 978-80-86929-70-5.

¹² LIŠKA, Václav. Kapitálové trhy a kolektivní investování. 1st ed. Praha: Professional Publishing, 2004, p. 340. ISBN 80-86419-63-0.

¹³ VESELÁ, Jitka. Investování na kapitálových trzích. 2nd ed. Praha: Wolters Kluwer Česká republika, 2011, p. 704. ISBN 978-80-7357-647-9.

Table 1 - Economic Indicators of Holdings in the Czech Republic (1996)

Name	Original name	Controlling firm	Price in CZK (1996)	Price in CZK (1997)	Change v %
Appolon Holding	AGB I	Motoinvest	139	20	-75,6
AGB Holding	AGB II	Motoinvest	506	60	-88,2
Bankovní Holding	Bankovní IF	PIAS	1270	1071	-15,7
2.C.S. Holding	CS fond kap. Růstu	Motoinvest	23,7	5,4	-77,2
C.A.S. 9 Holding	YSE IF	Motoinvest	827	136	-83,6
Harv. Prům. holding	Harv. Div. IF	HC&C	638	172	-73,0
Harv. Fin. Společnost	Harv. Růst. IF	HC&C	704	188	-73,3
PPF Holding	PPF 1. Český	PPF	500	235	-53,0
YSE Holding	YSE IF	Stela Group	335	153	-54,3

Source: own processing, 2018

3.5 Subjects of collective investment

The main subjects of collective investment are investment companies, mutual funds and investment funds. Next, I will describe these subjects in more detail.

3.5.1 Investment company

Investment company is a legal person with its headquarters in Czech Republic. This company, on the basis of permission from Česká národní banka, is authorized to manage investment funds or foreign investment funds alternatively do administration of investment funds or foreign investment funds or pursue the activity mentioned in § 11 odst. 1 písm. c) to f) ZISIF.¹⁴

3.5.2 Mutual fund

Mutual fund is made by assets and liabilities. Property right to property in mutual fund belongs together to all shareholders depending on ratio of their profit participation certificates values. None of the shareholders is however allowed to ask to separate property in mutual fund, divide mutual fund or dissolve mutual fund. Regulations of Civil code about co-ownership aren't used for mutual fund.¹⁵

Since it doesn't have legal personality all of its activities are secured by investment company and that's why there is no possibility in presence during general meeting where investor could present his opinions. Investment company gains its means for investment by emitting and selling profit participation certificates. By the purchase of this certificate the shareholder invests his resources into mutual fund which increases the value of invested money by investing at financial markets. It's necessary to say invested money stay as the property of the investor and investment company only manages them within the mutual fund.¹⁶

3.5.2.1 Open-ended mutual fund

There is a right connected with the purchase of profit participation certificate for the investor. He can sell it back to fund which emitted the certificate for a price which equals actual value to the date when the application for the repurchase was given. The number of profit participation certificates, which mutual fund emits, isn't usually limited.

¹⁴ Act No. 240/2013. In: *Sb., o investičních společnostech a investičních fondech*. 2018. §7, [cit. 2018-05-06].

¹⁵ Act No. 240/2013. In: *Sb., o investičních společnostech a investičních fondech*. 2018. § 102, [cit. 2018-05-06].

¹⁶ Finanční vzdělávání: Společný vzdělávací projekt finančních asociací a MFČR [online]. 2018 [cit. 2018-05-06]. Available from: <http://www.financnivzdelavani.cz/webmagazine/page.asp?idk=364>

The administrator of open-ended mutual fund is obliged to secure the repurchase of the certificate within 2 weeks (depends on the fund type, can be even 2 years).¹⁷

Profit participation certificates of open-ended mutual funds aren't traded at organized capital markets. That's why we don't find any discount.

3.5.2.2 Closed-ended mutual fund

On the opposite from open-ended mutual funds there is no repurchase right for the investor for certificates emitted by closed-ended mutual funds. Statute of closed-ended mutual fund is created on undefined time period or defined time period longer than 10 years. It allows shareholders to repurchase their certificates after 10 years from the day of fund origin and next in period mentioned in statute, longer than 1 year, no less than every other 10 years. After 10-year period of time from the fund origin shareholder has a right to repurchase his certificate at fund cost.¹⁸

Liquidity of investments into these mutual funds is lower because it's dependent on finding another investor who would be interested in buying the profit participation certificate. Because of these qualities there is a not negligible amount of discount (it varies from 10 to 15 %). The amount of discount is usually higher than in investment funds however investor usually can't reach the value before the termination of the fund.¹⁹

3.5.3 Investment fund

Investment fund is a legal person (in most cases stock company) which gains its investment resources via shares subscription. In comparison to classical stock companies' tougher rules relate to investment funds by which every state protects its citizens who invested their financial resources at capital market. Investment fund is found for undefined period of time during which fund doesn't have the duty to repurchase shares from the investor – shareholder. The investor – shareholder however can sell his shares to another investor (comparable to closed-ended mutual funds) and get his financial means even before the

¹⁷ Act No. 240/2013. In: *Sb., o investičních společnostech a investičních fondech*. 2018. § 128-130, [cit2018-05-07].

¹⁸ Act No. 240/2013. In: *Sb., o investičních společnostech a investičních fondech*. 2018. 142 a § 146, [cit. 2018-05-07].

¹⁹ VALACH, Josef. *Investiční rozhodování a dlouhodobé financování*. 3rd ed. Praha: Ekopress, 2010, p.269, ISBN 978-80-86929-71-2.

termination of the investment fund. Liquidity of investments into investment funds is lower than into open-ended mutual funds.²⁰

The number of shares of investment fund usually doesn't change during the existence of the fund. Prices of shares of investment fund usually suffer higher fluctuations than profit participation certificates of open-ended mutual funds. The risk is higher when investing to investment fund instead of open-ended mutual funds. Fees are being paid when buying or selling, cost can even be a negative difference between the price of the purchase and the sale (if positive, then profit). The important factor is also the height of discount or bonus. We can count this on the basis of formula $1 - (\text{share rate} / \text{property per share}) \times 100$. If the share rate is lower than market value of the property per share then we talk about discount. On the other hand, we call the difference as a bonus (share rate higher than market value of the property per share). If the discount is higher than 10-15 % then it's commonly known that investors don't have enough faith in the fund manager or management. If bonus is gained this situation can say about either an unusual situation the fund is in or about a high faith in the quality of fund manager or management of investment fund.

3.6 Institutions related to collective investment in CZ

One of the basic conditions of functional economy is trustworthiness and stability of capital market in order to interest and attract the highest number of investors. This trustworthiness and stability can't be ensured by only market mechanisms. That's why the activity of participants of capital market must be regulated by group of restrictive and limiting rules in form of law acts. Within the Czech capital market there is no special institution to perform the supervision of collective investment so that's why this function is on the basis of act n.256/2004 Sb., o podnikání na kapitálovém trhu handed to Česká národní banka. Other important institutions are Asociace pro kapitálový trh CZ and depository of collective investment fund.

3.6.1 Česká národní banka

As mentioned above Česká národní banka performs the supervision of the whole capital market. ČNB strengthen the faith of investors and emitents of investment facilities in capital market mostly by contributing to investor protection and development of capital market and

²⁰ Finanční vzdělávání: Společný vzdělávací projekt finančních asociací a MFČR [online]. 2018 [cit. 2018-05-15]. Available from: <http://www.financnivzdelavani.cz/webmagazine/page.asp?idk=366>

support of education in this area. We understand this as following – support of healthy development and transparency of capital market, market discipline and competitiveness of providers of services at capital markets, prevention of system crisis, support of issue activities, protection of investors and clients and strengthening of faith of the public in capital market. In the collective investment sector the important control authority is entrusted to the depository of collective investment fund however even the activity of the depository is being supervised by ČNB. The supervisor of capital market performs a control focused on observance of set regulation. The supervisor itself can't stop the deals of losing trades, violation of rules of transparency or behaviour with customers. It is though obliged to intervene during imperfections with its tools which can even be a removal of activity or implementation of forced management. According to act n.6/1993 Sb., o České národní bance supervision of capital market includes deciding about applications of granting licences, permission, registration and previous consents according to special legal regulations, control of observance of terms set by granted licences and permissions, control of observance of laws, to which ČNB is authorized by law or special legal regulations, control of observance of regulations and measures issued by ČNB, gaining information needed for execution of supervision and its exaction, verify its truthfulness, completeness and up-to-datedness, assign measures to correction and sanctions and control of administrative wrongs and offences.²¹

3.6.2 Asociace pro kapitálový trh v ČR

AKAT ČR was founded in 2008 by merger of two associations – Asociace pro kapitálový trh (AKAT) and Asociace fondů a asset managementu ČR (AFAM ČR). AKAT unite the most important domestic investment companies, foreign fund managers offering their products in CZ and other subjects which provide services in the collective investment area. Mission and philosophy of AKAT is to strive for development of collective investment in the Czech Republic and its convergence to standard conditions in developed countries. With this objective, the Association participates in making conditions and rules which should help to promote principles of honest business connections, protection of good manners and strengthening of general faith in collective investment. In correlation with general obligatory legal regulations, Stanovy Asociace, Etický kodex and Závazné pokyny Association directs,

²¹ ČNB: Česká národní banka [online]. 2018 [cit. 2018-05-18]. Available from: <http://www.cnb.cz/cs/index.html>

regulates and controls activities of its members. AKAT ČR focuses its activities into several areas which leading are four of them: improvement of voluntary self-regulation of members, law, communication with investors and their education, international activities.²²

3.6.2.1 Self-regulation

Improvement of voluntary self-regulation of members of AKAT ČR means gradual completion and specification of Závazné pokyny and other documents obligatory for AKAT members such as Etický kodex, Komunikační kodex prezentace výkonnosti otevřených podílových fondů a metodiky. The objective of Association is gradual convergence of rules included in these documents to standards of fund-developed countries and especially improvement of control of their observance, making conclusions from cases of their violation and of course as well active prevention of such cases.²³

3.6.2.2 Law

In the area of law Association actively tries to influence legal environment in which subjects of collective investment operate. Within these activities of AKAT there is also put a big emphasis on development of cooperation with ČNB and Ministry of Finance ČR as well as with deputies and senators more precisely with relevant committees of both chambers. AKAT ČR considers necessary to constantly strengthen its position as an important specialized partner during preparation of all legal and tax norms affecting capital market and the area of collective investment.²⁴

3.6.2.3 Communication

Work with public and education of investors became integral to Association activity. Members of Association are convinced that it is very purposeful to systematically together strive for presentation of new situations in fund industry, to develop activity in area of education of investors. Association tries through its activities to familiarize the wide investment public with what collective investment is, what advantages it has, what risks it contains and how to evaluate them, how they relate to potential profits, what differences there are among individual fund types, to explain what investment horizon is and so on.

²² AKAT: Asociace pro kapitálový trh v ČR [online]. 2018 [cit. 2018-05-18]. Dostupné z: <http://www.akatcr.cz>

²³ AKAT: Asociace pro kapitálový trh v ČR [online]. 2018 [cit. 2018-05-20]. Available from: <http://www.akatcr.cz>

²⁴ AKAT: Asociace pro kapitálový trh v ČR [online]. 2018 [cit. 2018-05-20]. Available from: <http://www.akatcr.cz>

Thanks to this AKAT hopes it will build faith in collective investment among citizens and widen the number of investors.²⁵

3.6.2.4 International activities

In the area of international activities Association develops actions mostly in connection with membership in European Fund and Asset Management Association (EFAMA). Activities within EFAMA help Association when dealing with questions about collective investment and asset management related with functioning of our country within European structures, with observation of European and world trends in area of collective investment. Next to EFAMA Association cooperates also directly with group of national associations of subjects of collective investment both in member states of EFAMA and other countries.²⁶

3.6.3 Depository of collective investment funds

The depository of collective investment funds is according to ZISIF law legal person which performs this activity on the basis of contract about performance of depository, further just depository contract. Depository makes contract with investment companies or investment fund itself. Main activities of depository are management of property of investment funds and foreign investment funds. Next it is to open and run accounts and evidence of all financial movements contained in fund property.

The function of depository in the Czech Republic can be performed just by a bank with its headquarters in the Czech Republic or a foreign bank which has its subsidiary in the Czech Republic.

Every fund of collective investments must have only one depository. If statutes of this fund allow to create an investment compartment depository of this fund performs activity of depository even for this investment compartment.

²⁵ AKAT: Asociace pro kapitálový trh v ČR [online]. 2018 [cit. 2018-05-20]. Available from: <http://www.akater.cz>

²⁶ AKAT: Asociace pro kapitálový trh v ČR [online]. 2018 [cit. 2018-06-02]. Available from: <http://www.akater.cz>

3.7 Classification of investment funds according to legal adjustment

On the basis of ZISIF investment funds divide to funds of collective investment and funds of qualified investors. Funds of collective investments can be further divided to standard and special funds.

3.7.1 Fund of collective investment

Fund of collective investment is a legal person with its headquarters in the Czech Republic, mutual fund. Its function is to collect financial resources from the public by emitting profit participation certificates and collective investment of collected financial resources on the basis of set investment strategy on the principle of risk diversification in favour of shareholders and other management of the property. Mutual fund or stock company with variable capital can be also considered as fund of collective investment.²⁷

Standard fund meets requirements of European Union law and is listed by ČNB. If fund doesn't meet these requirements it is considered as special fund. Special funds aren't registered by ČNB.²⁸

3.7.2 Fund of qualified investors

By ZISIF fund of qualified investors is a legal person with its headquarters in the Czech Republic. It is authorized to collect financial resources or other resources from qualified investors by emitting member commercial papers or qualified investors become its partners. Then it can do the collective investment of collected financial resources or other resources on the basis of set investment strategy in favour of these qualified investors and further to manage their property.²⁹

Other also mutual fund whose purpose is to collect financial resources or other resources from qualified investors by emitting profit participation certificates and collective investment of collected financial resources on the basis of set investment strategy in favour of owners of these profit participation certificates and further management of this property. And newly also a trust funds whose statute defines more qualified investors as beneficiaries

²⁷ Act No. 240/2013. In: *Sb., o investičních společnostech a investičních fondech*. 2018. § 93, [cit. 2018-06-02].

²⁸ Act No. 240/2013. In: *Sb., o investičních společnostech a investičních fondech*. 2018. § 94, [cit. 2018-06-05].

²⁹ Act No. 240/2013. In: *Sb., o investičních společnostech a investičních fondech*. 2018. § 95, [cit. 2018-06-05].

which is a founder of this trust fund or the one who increased property of this trust fund by a contract. Trust fund is as well established to invest on the basis of a set investment strategy in favour of its beneficiaries.³⁰

3.8 Investment strategy of funds of collective investment

Investment strategy of individual funds including content of their portfolio and forms of their management must be exactly defined in the fund statute. Fund statute is legally obligatory document containing all legally prescribed information for the public. These statutes are compulsorily approved by regulation authority of financial market and manager of the fund, its management or investment company managing the fund must comply with it.³¹

Investment strategy of the fund and its portfolio composition is some of the basic and most important investment criteria because investment focus together with assets structure contained in the portfolio relates both with its expected performance and risk. At financial markets, we find lots of funds of collective investment which can be divided by those criteria's to:

- Equity funds
- Funds of money market
- Funds of long term bonds
- Funds of real assets
- Derivative funds
- Funds of funds
- Guaranteed funds³²
- Index funds
- Exchange traded funds

³⁰ Act No. 240/2013. In: *Sb., o investičních společnostech a investičních fondech*. 2018. § 95, [cit. 2018-06-5].

³¹ REJNUŠ, Oldřich. *Finanční trhy*. 1st ed. Ostrava: Key Publishing, 2008, p. 486 ISBN 978-80-87071-87-8.

³² REJNUŠ, Oldřich. *Finanční trhy*. 1st ed. Ostrava: Key Publishing, 2008, p. 487 ISBN 978-80-87071-87-8.

I will shortly characterize these funds on the next pages.

3.8.1 Equity fund

Funds of this type invest collected resources mainly into shares of companies listed at stock markets. They are marked as the most risk ones. Therefore, in this case the profit in short time period is very uncertain and it can easily be that the profit will be negative during several months or even a year or more. With the rising time of the investment the probably of profit also increases and after ten years it is common (not certainty) that the cumulated profit is higher than the one to investments to lower risk investments in short time period.³³

Diversification is a great advantage of mutual fund. Investor who bought one concrete share takes risk of a bad choice. It can happen that he didn't have luck and even though most firms are doing well only his one is not and the value of his chosen share is decreasing while other are going up. The defence is to diversify portfolio – diversification. The investor doesn't buy a big number of one share but for example shares of dozens various companies from different industries. When one fails others can save the whole investment. Disadvantage for a small investor are high transactional costs. During the purchase, he pays the fee ten times to the broker who buys concrete shares by investor's name at the stock exchange. Costs of diversification can be elegantly got around by investment into open-ended mutual fund of share type.³⁴

There exists a great number of funds of collective investment focused on administration of stock portfolios. They differ by on which type of shares they focus. It depends on the quality but also on business activity of their issuers. From the position of quality or risk of purchased shares we can define these equity funds:

- Funds investing into blue chips shares
- Funds investing into shares of medium-sized companies
- Funds focused on shares of small companies³⁵

³³ Finanční vzdělávání: Společný vzdělávací projekt finančních asociací a MFČR [online]. 2018 [cit. 2018-06-10]. Available from: <http://www.financnivzdelavani.cz/webmagazine/page.asp?idk=366>

³⁴ Investujeme.cz [online]. 2018 [cit. 2018-06-10]. Available from: <http://investice.finance.cz/podilove-fondy/druhy-podilovych-fondu/fondy-penezniho-trhu/>

³⁵ REJNUŠ, Oldřich. Finanční trhy. 1st ed. Ostrava: Key Publishing, 2008, p. 487 ISBN 978-80-87071-87-8.

From the position of business activity of company whose shares are being purchased into portfolio we can define these equity funds:

- Universal funds
- Sectoral funds³⁶

Of course, we can find other criteria of dividing and comparing equity funds. Combinations of individual funds are even possible.

3.8.2 Fund of money market

These are the most common funds of collective investment. These funds of money market invest collected resources into short term bonds and at interbank market. Risk of these investments is very low and liquidity is high. Therefore, their profit isn't usually much higher than profit from deposits on term bank accounts. That's because short term character of investments of these funds limits credit risk and at the same time lowers market risk (it allows to react quickly even on unexpected development of interest rates at the money market).³⁷

In some cases, often domestic funds, there are more risk bonds issued by companies in portfolios of funds of money market – funds of money market with higher risk strategy. Fund portfolios, which are seen as the most conservative part of investment spectrum and which should contain really just quality and safe short-term bonds, contain also more risk investments. The result is that fund is money market do earn a little bit more during some parts of economy cycle because of higher risk investments but in the moment firms aren't doing very well or when there are problems in form sector, firm bonds start to lose their value which reflects in the value of funds which invest into these bonds. Funds with the higher risk strategy can have their value more fluctuated (value can decrease). We could see this trend by the majority of domestic funds due to the financial crisis in the second half of 2008.³⁸

³⁶ REJNUŠ, Oldřich. Finanční trhy. 1st ed. Ostrava: Key Publishing, 2008, p. 487 ISBN 978-80-87071-87-8.

³⁷ Finanční vzdělávání: Společný vzdělávací projekt finančních asociací a MFČR [online]. 2018 [cit. 2018-06-10]. Available from: <http://www.financnivzdelavani.cz/webmagazine/page.asp?idk=366>

³⁸ Investujeme.cz [online]. 2018 [cit. 2018-06-10]. Available from: <http://investice.finance.cz/podilove-fondy/druhy-podilovych-fondu/fondy-penezniho-trhu/>

Even though it is the lowest risk category of funds some decreases happened during the crisis months. Affected funds with higher risk strategy were those which tried to offer higher profit through investment to firm bonds or to state bonds of foreign markets which offered higher profit for higher risk (Iceland). The result of this strategy was unprecedented drop of value of funds of money market. When investing onto these funds it is important to focus mainly on the whole costs of fund. In times when fund of money market earned 8 % the 1 % costs didn't seem so substantial but at the moment funds have the potential to earn just 2 % p.a. costs are very important. It goes hand in hand with tax burden.³⁹

3.8.3 Bond fund

Structure of assets of bond funds is made mainly by bonds with mid-term period of maturity (about five years). The higher risk arises from the fact that during maturity of mid-term bonds the estimation of development of future interest rates is quite uncertain (inflation risk). This longer maturity allows to reach higher profits and also extra profit if interest rates at the bond market unexpectedly decrease.⁴⁰

In case investor considers investment for a longer time bond funds can be an alternative to money market which is on the opposite determined for more short-term investments. Even though bonds are labelled as something positive it is necessary to count on that to certain conditions performance of bond market can be negative.

Same as equity funds we could divide their types by issuer we can by the same criterion divide bond funds too. They can define on:

- Funds of state bonds
- Funds of municipal bonds
- Funds of bank bonds
- Funds of corporate bonds⁴¹

When investing into bond funds inflation takes an important role. It is necessary to remind basic rules which have impact on the bond development. Bonds in the first place react to

³⁹ Investujeme.cz [online]. 2018 [cit. 2018-06-10]. Available from: <http://investice.finance.cz/podilove-fondy/druhy-podilovych-fondu/fondy-penezniho-trhu/>

⁴⁰ Finanční vzdělávání: Společný vzdělávací projekt finančních asociací a MFČR [online]. 2018 [cit. 2018-06-10]. Available from: <http://www.financnivzdelavani.cz/webmagazine/page.asp?idk=366>

⁴¹ REJNUŠ, Oldřich. Finanční trhy. 1st ed. Ostrava: Key Publishing, 2008, p. 488 ISBN 978-80-87071-87-8.

inflation, further changes of interest rates. If inflation expectations grow interest rates and bond profit grow as well but at the same time bond price decreases. Due to this market value of profit participation certificates of bond funds can decrease. Generally, we can say that bonds belong into every portfolio and their share develops form type of investor. Meaning of bonds is important thanks to their small dependence (independence) on development of equity markets. Including bonds into portfolio we achieve necessary diversification from the view of investment classes (money market, bonds, shares, properties) which helps to the total performance. Bonds (mainly state) can be marked as a main stone of defensive part of portfolio on which we can build further.⁴²

3.8.4 Fund of real assets

Funds of real assets are focused on markets of real investments whether to commodities or to properties in domestic or foreign country. These funds invest into properties or shares of construction companies and try to search those which promise positive growth of price and above-average profit. Because properties market is very often affected by speculative deviations the higher promise of appreciation (related with expected fast growth of prices in the area) is connected with higher risk of investment. At some moment turnaround can happen quite suddenly at these markets. Development of prices at this market can change the direction if investors start to believe that property prices became overvalued and they start to get rid of them. This can lead to rather swift decrease of their prices and to decrease of prices of mutual funds which invested at these markets. Rate of risk of investments into mutual funds of real assets can differ very significantly. Investments into real assets leaning on the process of convergence of prices, for example real asset markets of new member countries of EU, are probably less risky than investments into funds of real assets in countries where this background of price development misses or where regulation of bank financing of purchase of properties is benevolent.⁴³

3.8.5 Derivative funds

From general point of view, we can consider derivative funds as relatively risk funds investing into various types of financial or commodity derivatives. They are futures or options which can be traded at the stock exchange. The strategy of security is very important

⁴² Investujeme.cz [online]. 2018 [cit. 2018-06-15]. Available from: <http://investice.finance.cz/podilove-fondy/druhy-podilovych-fondu/fondy-penezniho-trhu/>

⁴³ Finanční vzdělávání: Společný vzdělávací projekt finančních asociací a MFČR [online]. 2018 [cit. 2018-06-16]. Available from: <http://www.financnivzdelavani.cz/webmagazine/page.asp?idk=366>

in these funds and that's because the leverage effect is very often used in this type of investment.⁴⁴

3.8.6 Funds of funds

Funds of funds came with an interesting thought aiming for much higher diversification of risks than classic mutual funds. Fund of funds instead of concrete shares of bonds purchases profit participation certificates of other funds into its portfolio so there is some kind of squared diversification. That is quite interesting thought. Important thing is how can an investment company deal in these funds with costs. Not only it has to pay same basic costs for all funds (costs for administration of portfolio, trade fees and other fix costs) but it pays all these costs once more at the level of funds which it buys into its portfolio. It comes about that the fees are doubled. And at this level it is necessary to distinguish between good and bad fund of funds from the view of costs. There are very few of these funds so investor has to be very careful during choosing. We can often come across the fact that more it is more suitable not to invest into equity fund of funds but rather into equity fund which invests classically – purchases concrete shares. Higher costs of fund of funds decrease their profit potential in comparisons with classic funds.⁴⁵

3.8.7 Index funds

Main attribute of index funds is their high transparency. Their assets are put together from chosen, often the most important world stock exchange, usually share indexes. They are usually held for a long time regardless of the development at the capital market. Because of this the value of their profit participation certificates copies the development of mentioned indexes. Index funds are usually passively administrated that's why the fee structure is minimal in these funds.⁴⁶

3.8.8 Guaranteed funds

Rather conservative approach of domestic households leaded to birth of offers of various guaranteed funds (also secured or structured). During the creation of portfolio of these funds financial derivatives or other risk financial instruments are used in combination with quality,

⁴⁴ REJNUŠ, Oldřich. Finanční trhy. 1st. ed. Ostrava: Key Publishing, 2008, p. 489 ISBN 978-80-87071-87-8.

⁴⁵ Investujeme.cz [online]. 2018 [cit. 2018-06-17]. Available from: <http://investice.finance.cz/podilove-fondy/druhy-podilovych-fondu/fondy-penezniho-trhu/>

⁴⁶ REJNUŠ, Oldřich. Finanční trhy. 1st ed. Ostrava: Key Publishing, 2008, p. 489 ISBN 978-80-87071-87-8.

the most often state, fixed interest-bearing bonds. This portfolio guarantees that the value of fund assets can't decrease even in the case of negative development under so called guaranteed level.⁴⁷

In the past guarantee of return minimal 100 % of invested amount predominated. It meant for investor that if a negative development of markets happened in the end he got exactly the amount he invested in the beginning. Lately guarantee of at least a minimal profit starts to expand. An example is a promise of return of 105 % of originally invested amount in the end of investment regardless of the market development. Investors like this level of security, they often lack the knowledge of general rule: higher the guaranteed minimal return lower potential profit above the guarantee. It is logical that I have to pay more insurance when I want to be more secured. Funds differ from one another by the spread of minimal and maximal appreciation.⁴⁸

3.8.9 Exchange traded fund

Exchange traded funds (ETFs) or funds traded at the stock exchange were created in America as indexed investment instruments whose shares were freely traded at the stock exchange. Portfolio of these funds composed originally of share indexes with passive administration widened by bonds, derivatives, commodities, currencies and other during the time. Today we even have actively administrated ETF. The most important attribute of these funds, by which they differ from standard mutual and investment funds, is the fact that commercial papers issued by them are traded at the stock exchange. Other strangeness is how these funds are found. The process is opposite to classic mutual and investment funds. ETFs are firstly created and then their commercial papers are being offered to potential investors. A sponsor is necessary here and it usually is some investment company or investment bank.⁴⁹

Opposite to classic mutual and investment funds investors don't pay any entrance and exit fees in ETFs. They pay only commissions for buys/sells which are roughly the same as if trading with shares at the stock exchange. It can be said that investor also pay lower administrative fees in ETFs. Other difference is publishing of actual value which happens

⁴⁷ REJNUŠ, Oldřich. Finanční trhy. 1st ed. Ostrava: Key Publishing, 2008, p. 490 ISBN 978-80-87071-87-8.

⁴⁸ Investujeme.cz [online]. 2018 [cit. 2018-06-19]. Available from: <http://investice.finance.cz/podilove-fondy/druhy-podilovych-fondu/fondy-penezniho-trhu/>

⁴⁹ REJNUŠ, Oldřich. Finanční trhy. 2nd ed. Ostrava: Key Publishing, 2010, p. 570, *Ekonomie* (Key Publishing). ISBN 978-80-7418-080-4.

during the whole day. In ETFs investors can use intelligent stock exchange instructions, trade on credit and implement short sales.⁵⁰

⁵⁰ REJNUŠ, Oldřich. Finanční trhy. 2nd ed. Ostrava: Key Publishing, 2010, p. 572, Ekonomie (Key Publishing). ISBN 978-80-7418-080-4.

4 Practical Part

Analytical part in its first part looks into distribution of investment instruments with a special focus on investment instruments of collective investment and analysis of investment services which are provided to retail clients by important brokers the most often.

Second part looks into actual trends at the collective investment market in the Czech Republic with usage of resources of professional association Asociace pro kapitálový trh České republiky (AKAT).

In the third part an analysis of chosen products of collective investment is made, concrete products of investment company Erste Asset Management GmbH subsidiary Czech Republic.

4.1 Distribution of investment instruments

4.1.1 Investment services

Providing of investment services is regulated by act n. 256/2004 Sb. o podnikání na kapitálovém trhu, in its later version (ZPKT), executive regulations of ČNB (Czech National Bank) and relevant European legislation. Providing of investment services is possible only on the basis of permission granted by ČNB (Czech National Bank).

Duty of broker (OCP = Obchodník s cennými papíry) and investment middleman (IZ = Investiční zprostředkovatel) during negotiations with client is to provide investment services with special care. Making effort of special care mainly means that OCP acts qualified, honestly, fairly and in the best interest of clients including potential clients.⁵¹

OCPs use three main investment services for distribution of investment instruments to retail clients. Services are defined by ZPKT according to § 4 Investiční služby art. 2 a) **accepting and handing instructions regarding investment instruments over**, art. 2 d) **managing of assets of costumer if its part is an investment instrument on the basis of free consideration in the area of contractual agreement and** art. 2 e) **investment consulting regarding investment instruments.**

⁵¹ Act No. 256/2004, *o podnikání na kapitálovém trhu*. 2004. § 15, [cit. 2018-06-5]

4.1.2 Accepting and handing instructions over

Content of this service is particularly accepting of instruction regarding investment instrument from client and its overhanding to processing and communication with client regarding instructions assigned by him, but not individual parameters of the instruction. Clients give instructions particularly to buy or sell concrete investment instrument. Clients themselves decide to buy or sell concrete investment instruments according to their consideration and have clear vision of shape of their own investment portfolio. Before providing this service, it is necessary to run an **adequacy test**. Content of information inquired from clients to run the adequacy test, to evaluate if an investment service or investment instrument is suitable to client's knowledge and experience, is generally set by legal regulation. The adequacy test consists in evaluation if instruction of buy or sell investment instruments by client are adequate to his knowledge and experience with those investment instruments. In case instructions don't match client's knowledge and experience OCP accepts and executes his instruction but at the same time he is obliged to notify the client of the fact that concrete investment instrument is inadequate for him. In case client declines the adequacy test OCP can accept and execute the instruction from client but is obliged to notify the client of the fact that he can't evaluate adequacy of investment instrument and that concrete investment instrument can be inadequate to his knowledge and experience. Notification must be connected with every individual instruction of purchase or exchange whose subject is an investment instrument which is inadequate for the client.

4.1.3 Investment consulting

Investment consulting regarding investment instrument is providing of individual consulting which is heading directly or indirectly to purchase, sale, note, placement, payoff, possession or other treatment with concrete investment instrument or to usage of law on this treatment regardless if it is provided on the basis of customer's, potential customer's or broker's voice.⁵²

For individual consulting is typically considered a piece of advice which is presented to client as suitable i.e. considering his individual needs, his knowledge, experience with investment instrument, financial background and investment goals. The essence of

⁵² Act No. 256/2004, *o podnikání na kapitálovém trhu*. 2004. § 4 Investiční služby, art. 5, [cit. 2018-06-5]

investment consulting is to recommend client suitable product alternatively to suitably assemble/review his investment portfolio according to results of his suitability test. Before providing this service, it is necessary with unprofessional clients to do a **suitability test**. Information content inquired from client during the suitability test is generally set by legal regulation, OCP obligatorily inquire client's investment targets (investment horizon, relationship to risk, demanded profit etc.) financial situation and background and his knowledge and experience with investment instruments and services. These findings help OCP to understand specific needs of client and to recommend suitable investment instruments or rather complex portfolio solutions. From my research OCP doesn't do continuous suitability test during providing investment consulting i.e. during possession of investment instruments which are recommended to client as suitable in investment consulting doesn't do obligatory, regular monitoring of suitability of investment instruments.⁵³

4.1.4 Management of customer's assets

Fundamental element of this service which can be also called as Portfolio management or Management of assets is formulation of investment strategy on the basis of evaluation of terms and requirements of concrete client and actual and expected market situation. Realization of investment strategy is completely under control of provider of this service. This service is defined by concrete investment strategy agreed with client within "Smlouva o obhospodařování cenných papírů". Target of the service is within client's accepted risks reach maximal profit of invested resources through investments at the capital market. Before providing this investment service it is necessary to do a suitability test which is set by law. OCP obligatorily inquires client's investment goals (investment horizon, relationship to risk, demanded profit etc.), financial situation and background and his knowledge and experience with investment instruments and services. These findings help OCP to understand specific needs of client and to recommend suitable investment strategy for complex portfolio solution. In case of investment service Management of customer's assets continuous evaluation of suitability of given investment strategy is applied.

⁵³ Own research (Komerční banka, a. s., Česká spořitelna, a. s., Československá obchodní banka, a. s.)

4.1.5 Basic differences of individual investment services

Basic difference in these services is rate of responsibility for individual investment decision and rate of protective mechanisms against unprofessional customer.

During providing investment service Accepting and handing instructions over regarding investment instrument is significant rate of responsibility delegated on the client. Considering OCP judges just adequacy of investment instrument and in case of discrepancy between knowledge and experience with investment instrument has duty just to notify client of this fact, the responsibility for decision to buy or sell the investment instrument directly on the client. That's all happening within compliance with all rules defined in ZPKT and in Order No 308/2017 (Vyhláška n. 308/2017 Sb., o podrobnější úpravě některých pravidel při poskytování investičních služeb).

Within investment service Management of customer's assets, the responsibility for individual buying or selling decisions of investment instruments is completely delegated on the provider of this service, investment company, and it's within the rules of investment strategy defined by a contract and also all rules defined in ZPKT and in Order No 308/2017 (Vyhláška n. 308/2017 Sb., o podrobnější úpravě některých pravidel při poskytování investičních služeb).

Investment consulting is the most complicated service in this area because a high rate of responsibility is delegated on the provider of the investment service. He though doesn't purchase individual investment instruments which are suitable for the client whether it is an individual investment instrument or complex portfolio of investment instruments. Only based on the results of the suitability test OCP recommends suitable investment instrument or complex portfolio of investment instruments. Own investment decision and its realization, purchase or sale of investment instrument, is in client's hands. OCP is responsible for right result of the suitability test which is decisive factor for recommendation of investment solution. In case information provided by client to evaluation of this suitability test aren't true the wrong recommendation can happen in which case responsibility is on the OCP.

4.1.6 Adequacy and suitability tests

Legal scope defines what areas OCP should research and what information are relevant for providing concrete investment service. As I mentioned in the previous chapter 4.1.2, within the adequacy test those are findings and appraisals if set investment instrument is adequate

to knowledge and experience of the client. Within the suitability test research of knowledge and experience with set investment instrument is widened by findings of client's investment goals (investment horizon, sensitivity and relationship to risk, demanded/expected profit etc.) and his financial situation and background.

Actual methodology, algorithms of evaluation and following parameters for determination of adequacy and suitability of investment instruments are set by individual OCPs themselves in which case they give this methodology, working procedures and processes to validation to regulator, ČNB (Czech National Bank), which executes supervision over capital market.

4.1.6.1 Possible methodology of application of adequacy and suitability test

During the adequacy and suitability test the same area of research and evaluation are knowledge and experience of the client with investment instruments and services. It means if OCP provides investment services Accepting and handing instructions over and Investment consulting he can use this information identically and set some kind of Knowledge/Experience-based profile of the client. This profile can be seen as client's characteristic. It will be evolving in time because by introducing the investment instrument to the client and its possession client improves his knowledge of this instrument and mainly deepens his experience with this investment instrument. It is matched by legal set duty of OCP within an unprofessional customer before providing any investment service to always find out/check if there wasn't any change with the customer. At one point client can have only one Knowledge/Experience-based profile.

Within Investment consulting service these areas are widened by researching and evaluating of needs and financial situation of the client particularly his investment goals, investment horizons, his sensitivity and relationship to risk, demanded/expected profit and also his financial situation.

Clients with defined Knowledge/Experience-based profile then can have at one moment more investment goals with different perception of risk and length of investment horizon. Typically, short term investment goals with demand on high liquidity of resources without the risk of fluctuation of value of investment and long-term goals with demand on maximization of profit with willingness to undergo market risks of fluctuation of investment value (for example resources for children). This parameter defines Riskiness of investment goal. It is a characteristic of every investment solution or transaction. Riskiness of investment goal describes and evaluates financial situation of the client and defines client's

ability to financially endure investment risks matching to his investment goals which relate with recommendation of concrete investment instrument or complex investment portfolio.

For investment service Accepting and handing instructions over the only parameter is Knowledge/Experience-based profile.

Investment consulting service has two parameters - Knowledge/Experience-based profile and Riskiness of investment goal. This sorting logically allows at one moment to satisfy client's needs with more investment goals, with different investment horizon and mostly with different client's demand on undergone market risks and demanded/expected profit.

4.1.7 Analysis of methodology of providing investment services in Česká Spořitelna

Česká spořitelna, a.s. (The Czech Savings Bank) is in the long term one of the leading providers of investment services in the Czech Republic. As licensed OCP it is a distributor and maker of investment instruments. During provision of investment services, it applies a methodology of determination of Knowledge-based client profile and Riskiness of investment goal as separate client 's characteristics and individual investment solution/transaction.

This sorting allows to flexibly provide individual investment services with minimal range of inquired information and necessary to its provision.

4.1.8 Knowledge-based client profile in Česká spořitelna

Česká spořitelna, a.s. (The Czech Savings Bank) defines knowledge and experience of a client with investment instruments and investment services and on the basis of their results assigns client's Knowledge-based profile. It is inquired on the basis of conversation with the client when questions related to his knowledge and experience with investment instruments and services are asked and then his answers are recorded and evaluated in consulting application. It is necessary to always find out/check the Knowledge-based client profile before provision of any investment service when it is an unprofessional customer/client. ZPKT defines categories of costumers in which case unprofessional customer is being provided by the highest level of protection. It means a duty to apply the adequacy and suitability test, more precisely Knowledge-based client profile and Riskiness of solution of the goal dependent on the type of investment service, duty to provide all legally demanded information before the provision of investment service, during and after the provision of

investment service and thoroughly use the rules of treatment with the instruction and rules about executing instructions. All clients who don't meet requirements for categories Professional customer or Qualified counterparty are categorized into Unprofessional customers. Knowledge-based client profile is updated in case there is an expected change of client's knowledge and experience with investment instruments or in case the date of last update is older than 720 days.

Picture 1 - Knowledge-based client profile

www.investicnicentrum.cz MPV 1/12/2012/883

Client's Knowledge Profile

Client's name and surname / Name
Address / Registered Office
Personal number / ID No.

New client Update

Client's Knowledge Profile

KP1 / Client with little knowledge of investment instruments
 KP2 / Client with basic knowledge of investment instruments
 KP3 / Client with good knowledge of investment instruments
 KP4 / Client with excellent knowledge of investment instruments

1. Have you ever dealt in the framework of your studies or profession with finances/investments?
 YES ▼ NO ▼

2. Do you use or have you used in the past any investment instruments?
 YES ▼ NO ▼

2a. Do you make the decisions on finances/investments by yourself, or do you get advice from an expert?
 BY MYSELF EXPERT ▼

2b. How long have you been investing and how often do you invest? ▼
 FOR A LONG TIME REGULARLY ▼
 FOR A SHORT TIME IRREGULARLY ▼
Check always one of the two options ▼

3. Do you know any investment instruments?
 NO ► KP1 YES ►

The client will answer the above questions
 YES ▲ NO ▼

Client without Knowledge Profile

3a. Do you know any of the following types of investment instruments?
1. Premium deposits / mortgage bonds / bonds with fixed coupon / premium bonds
 YES NO

Source: Česká spořitelna, a. s., 2018

Picture 2 - Knowledge-based client profile part 2

* Do you know that in these types of investment instruments (without taking into account the credit risk of the issuer and the maximum amount of deposit insurance) when they are held until maturity, you get back as a minimum the amount put into the investment?

YES ► KP2 NO ► KP1

2. Other bonds (than in group 1), bond mutual funds, mixed funds investing primarily in bonds, real estate fund

YES NO

* Do you know that in these types of investment instruments, the return on the amount invested is not guaranteed, their value may slightly fluctuate in time, but they can bring you a higher yield than secured investment instruments?

YES ► KP3 NO ► KP2

3. Equities, equity mutual funds, mixed funds investing primarily in equities, other alternatives

YES NO

* Do you know that in these types of investment instruments, the return on the amount invested is not guaranteed, their value may fluctuate more (more considerably) in time, but in the longer term they have a higher (more significant) yield potential?

YES ► KP4**/KP3 NO ► KP3

** Only if the answer is YES also in the types of investment instruments in Group 2, otherwise KP3

Place _____ Date _____ Signature _____
for Česká spořitelna, a.s.

* There is only one possible supplementary question: Identify the highest number of the group of types of investment instruments (1-3), where the answer is YES and ask a question.

ERSTE BANK
Private Banking

The service is provided by Česká spořitelna, a.s.


Source: Česká spořitelna, a. s., 2018

4.1.9 Riskiness of solution of the goal in Česká spořitelna

It precisely specifies needs and financial situation of the client, mainly his investment goals, investment horizon, sensibility and relationship to risk, demanded/expected profit, financial situation.

It is a characteristic of every investment solution/transaction. Recommendation of suitable concrete investment instrument or complex portfolio of investment instruments or investment strategy provided within investment service Management of customer’s assets can be an investment solution. Client can have more Riskiness solutions of the goal when having set Knowledge-based profile.

Picture 3 - Riskiness of solution of the goal in Česká spořitelna, part 1



Target resolution risk

Name and surname / Name Birth Certificate

Address / Registered office

Client knowledge profile

- ZP1- / Client with little knowledge of investment instruments
- ZP2* / Client with basic knowledge of investment instruments
- ZP3* / Client with good knowledge of investment instruments
- ZP4* / Client with excellent knowledge of investment instruments

* Detailed characteristics of the knowledge profiles on the backside

1 | Which type of investment service do you prefer? investment consultancy asset

2 | I am interested in investing in these horizons: 3 years 3 to 5 years 5 years or more

3 | What are your investment objectives?

saving funds for profit/appreciation for the horizon(s):

3 years 3 to 5 years 5 years or more


other investment objective (please indicate specific investment objective) for the horizon(s):

3 years 3 to 5 years 5 years or more

4 | Which of the scenarios of probable development of the value of your investment for the selected time horizon, during which you are not likely to need your funds, is the most appropriate to you?

For the short-term horizon of 3 years, I choose the scenario:


1 2 3 4



Scenario 1
I accept a short-term, slight fluctuation in the value of the investment if it can achieve better appreciation in the longer term*.

For the medium-term horizon of 3 to 5 years, I choose the scenario:


1 2 3 4



Scenario 2
I accept a slight fluctuation in the value of the investment if it can achieve better appreciation in the longer term*.

For the long-term horizon of 5 or more, I choose the scenario:


1 2 3 4



Scenario 3
I accept a more significant fluctuation in the value of the investment if it allows achieving more significant appreciation in the medium-term and long-term horizons*.

For the long-term horizon of 5 or more, I choose the scenario:

1 2 3 4



Scenario 4
I accept a significant fluctuation in the value of the investment if it allows achieving high appreciation in the medium-term and long-term horizons*.

5 | How will you react in any of the horizons to a decrease in your investment, e.g. of

I will sell immediately the entire investment, so I realise the loss and then I will put the funds into safer instruments. I will not do anything. I will take advantage of lower prices and buy more investment instruments.

6 | What part of your total assets¹ is represented by investments²?

up to 60% over 60%³

1 assets – liquid assets, investments (value of all investment instruments) and real estate not encumbered by a lien
2 investment – the sum of the value of all already owned investment instruments and the value of the potentially (after the provision of the investment service) acquired investment instruments
3 in the context of this response option, the amount of your monthly earnings, the amount of your total assets and the amount of your regularly paid commitments have been determined

Source: Česká spořitelna, a. s., 2018

Picture 4 - Riskiness of solution of the goal in Česká spořitelna, part 2

MFV 102012027

7 | What part of your monthly earnings net of monthly financial commitments⁴ does the regular investment represent?⁵

I do not consider regular investment
 up to 60%
 over 60%⁶

⁴ monthly financial commitments – rent, utilities, insurance policies, loan repayments, lease payments, maintenance payments, etc.
⁵ regular investment – the sum of the value of all regularly executed instructions for the purchase of investment instruments and the value of all potentially (after the provision of the investment service) regularly executed instructions for the purchase of investment instruments
⁶ in the context of this response option, the amount of your monthly earnings, the amount of your total assets and the amount of

In	Date	
for Česká spořitelna, a. s.		Signature
Client		Signature

Characteristics of the knowledge profiles

Knowledge profile 1
 In the interview about your relationship to finance and investments, we have tried to ascertain whether you already have some experience with them, how long and to what extent you have been dealing with them and what investment instruments you know. We evaluated your answers and determined not only your knowledge profile, but also the range of investment instruments which are adequate for you and which we can offer to you. Together we came to the conclusion that you are an investor who is just becoming familiar with the investment instruments.

Your knowledge profile: client with little knowledge of investment instruments

Knowledge profile 2
 In the interview about your relationship to finance and investments, we have tried to ascertain whether you already have some experience with them, how long and to what extent you have been dealing with them and what investment instruments you know. We evaluated your answers and determined not only your knowledge profile, but also the range of investment instruments which are adequate for you and which we can offer to you. Together we came to the conclusion that you are an investor who has only basic knowledge of investment instruments, in particular those for which the return on the amount invested is ensured.

Your knowledge profile: client with basic knowledge of investment instruments

Knowledge profile 3
 In the interview about your relationship to finance and investments, we have tried to ascertain whether you already have some experience with them, how long and to what extent you have been dealing with them and what investment instruments you know. We evaluated your answers and determined not only your knowledge profile, but also the range of investment instruments which are adequate for you and which we can offer to you. Together we came to the conclusion that you are an investor with good knowledge of more complex financial instruments in which the return on the amount invested is not ensured or whose value can slightly fluctuate in time.

Your knowledge profile: client with good knowledge of investment instruments

Knowledge profile 4
 In the interview about your relationship to finance and investments, we have tried to ascertain whether you already have some experience with them, how long and to what extent you have been dealing with them and what investment instruments you know. We evaluated your answers and determined not only your knowledge profile, but also the range of investment instruments which are adequate for you and which we can offer to you. Together we came to the conclusion that your knowledge of investment products is really excellent and that you understand transactions with mostly even more complex financial instruments.

Your knowledge profile: client with excellent knowledge of investment instruments

^{*} Please note: The graphs illustrate the unfavourable, neutral and favourable estimated development of an investment of CZK 100,000.00 in investment horizons of one, three and five years. The displayed calculations are for informative purposes only and are based on historical development, current market conditions, and currently known outlooks of economic development in relation to the investment horizons. The actual return on your investment will depend on the real development of capital markets. These estimates do not include costs for procuring the purchase of an investment and the resulting amounts do not include inflation or take into account the client's tax obligations, which may also have an impact on the final value of an investment. With regard to an intended investment, we point out that previous performance does not guarantee future performance, and that the value of an investment and income from it may rise and fall, and no return on an invested amount is guaranteed.

www.investicnicentrum.cz
The Erste Private Banking service is provided by Česká spořitelna, a. s.

Source: Česká spořitelna, a. s., 2018

4.1.10 Implementation of legal demands into regulation base of OCP

Provision of investment services is regulated by act n. 256/2004 Sb., o podnikání na kapitálovém trhu, in its later version (ZPKT), executive regulations of ČNB (Czech National Bank), and relevant European legislation. The act, executive regulations and relevant European legislation define scope of provision of these services. Own implementation into internal regulation base is always on the concrete OCP. In what range and depth individual areas defined by law are researched, judged and evaluated in order to provision of investment service to a client is on concrete subject. The same way OCP sets its rules for assigning concrete investment instruments, more precisely complex investment portfolios for given client's category.

Individual OCPs adjust sophistication, complexity and depth of the suitability test for provision of investment service Investment consulting to their client's base and target client within all regulation demands.

The quality of business/distribution network of given OCP also plays an important role. OCP is obliged to follow Regulation n. 319/2017 Sb., "o odborné způsobilosti pro distribuci na kapitálovém trhu" when providing investment services. The regulation besides other things adjusts range of professional knowledge and abilities, minimal range of demands on factual, qualification, organization and personal requirements, demands on course, form or range and method of evaluation and minimal standard of professional exam. Clearly defined demands on professional qualification of its staff, which provides investment services to clients, are required.

Česká spořitelna, a.s. as a traditional universal bank serves a wide group of retail clients. As obvious from the Picture n.1: Knowledge-based client profile and from the Picture n.2 and n.3: Riskiness of solution of the goal part 1 and part 2, implementation of legal demands on provision of investment service Investment consulting and Accepting and handing instructions over, the main thing was simplicity and comprehensibility. The range of inquired and evaluated information about client in the adequacy and suitability test fully complies with legal demands and even then, they are very simply and clearly formulated.

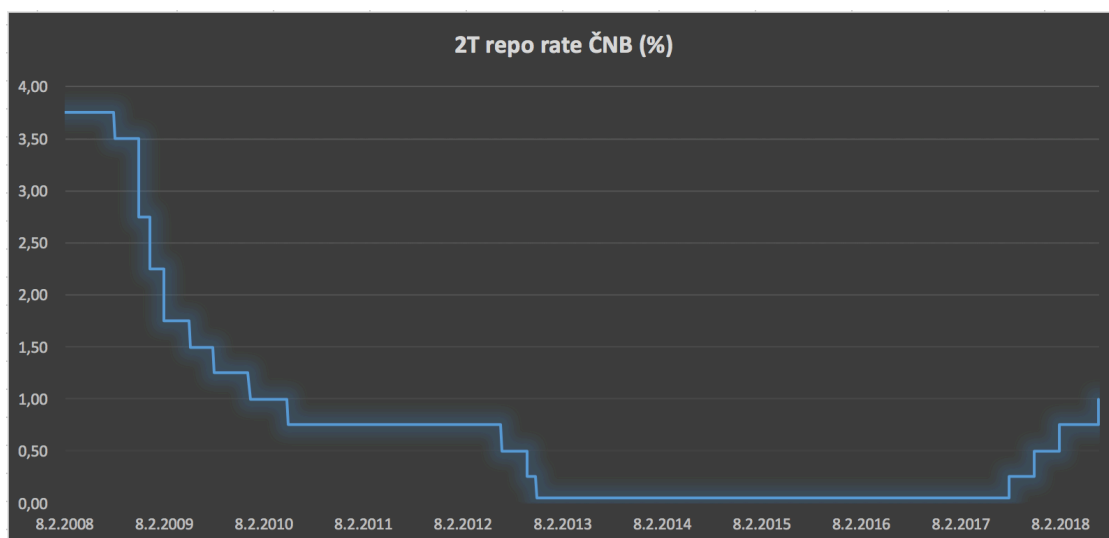
Different approach of implementation into regulation base of the OCP was chosen by the company WOOD & Company Financial Services a.s. The target client of this company is very sophisticated wealthy investor who is oriented service through digital platforms. For

provision of investment service Investment consulting this OCP chose very detailed and in-depth client's research, his knowledge, experience and mainly investment goals and financial background and his relationship to risk.

4.2 Actual trends at the collective investment market in CZ

Significant factor affecting trends at the collective investment market is development of interest rates. Graph n.1 shows development of basic interest rate of ČNB (Czech National Bank) 2-week repo rate. According to the development since financial crisis in 2008 interest rates significantly decreased and at the end of 2012 rates dropped to nearly zero value (basic 2T repo rate 0,05 %). Low-interest environment lasted for long five years until the half of 2017.

Graph 1 - Development of basic interest rate of ČNB



Source: Data ČNB, own processing, 2018

Development of interest rates and their height primarily influence profit potential of products of collective investment – money market funds, bond funds of very short-term investments and bond funds. Profit potential of these funds significantly lowered in previous years which affected trends in collective investment sector.

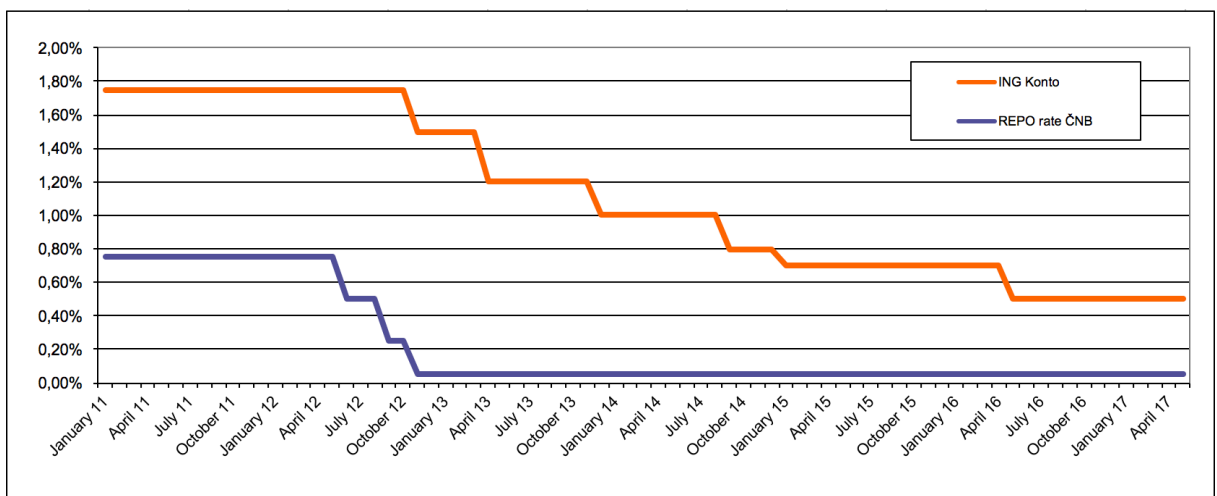
Another factor which affects the development of collective investment market is current increasing of interest rates. Fund portfolios carrying interest risk are negatively affected by this. Because of daily market appreciation of portfolios, the growth of interest rates shows into prices of bond instruments and it's by their decrease. The growth of interest rates is

negative for these funds in short term and that's why these funds show negative appreciation in last months.

4.2.1 Significant growth of amount of assets in products of collective investment

The environment of low interest rates in last years also affects interest rates on deposit bank products. In the Graph n.2 there is a comparison of development of 2T repo rate of ČNB and interest of Spořicí účet ING Konto.

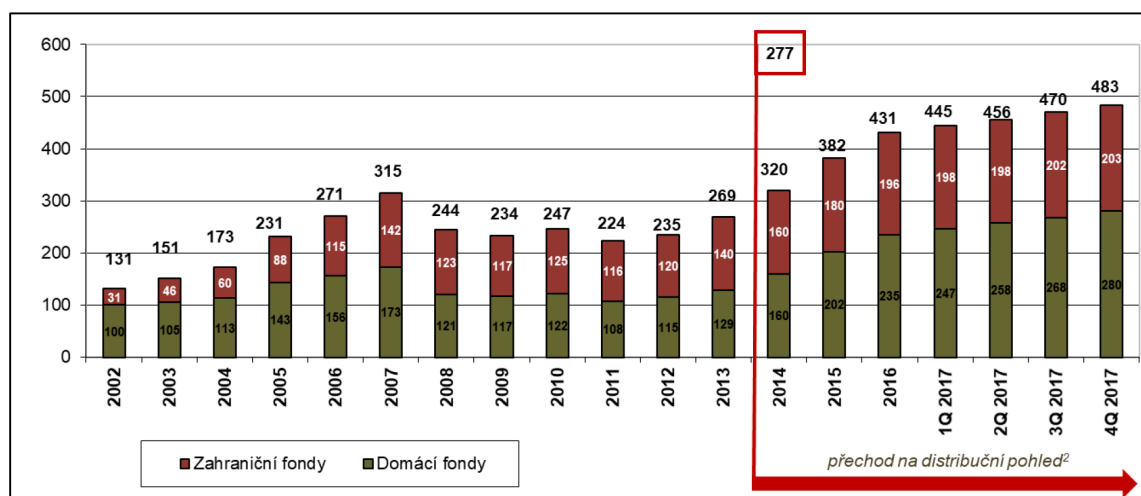
Graph 2 - Development of interest rates



Source: ING Bank, a. s. own processing, 2018

Thanks to low profits of deposit bank products retail clients look for other possibilities of appreciation of their money. Logical choice are the products of collective investment. This trend of significant growth of amount of assets in products of collective investment illustrates Graph n.3. Interannual (2016-2017) the amount of assets increased by 12,41 % (by 53,38 billion CZE) to 483,5 billion CZE (to 31.12. 2017).

Graph 3 - Development of assets in products of collective investment (billions CZE)



Source: Annual conference of AKAT ČR, 26. 2. 2018, www.akatcr.cz, 2018

4.2.2 Progressive outflow of investments from funds of money market and bond funds

These funds are very conservative where investor expects the protection of invested means in the first place. Decrease of real value of their investment reflects into increased outflow of means from these funds as Table n.2 shows.

Table 2 - Collective investment in CZ – annual change

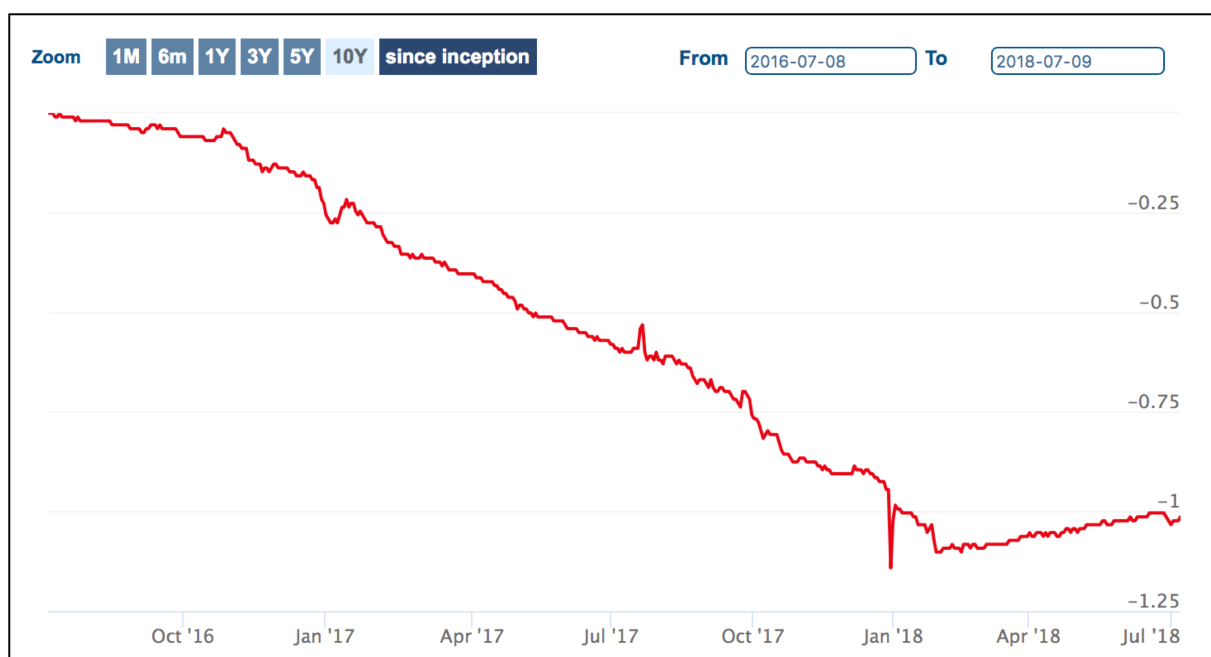
Type od fond	Total to 31.12.2017 (CZE)	Total to 31.12.2016 (CZE)	Change from the beginning of the year 31.12.2016 - 31.12.2017	
Funds of money market	2 605 956 261	3 230 791 091	-19,34%	-654 987 987
Structured funfs	26 879 398 145	27 534 463 373	-2,38%	-665 065 228
Equity funds	99 319 518 171	81 279 756 777	22,19%	18 039 761 394
Bond funds	118 757 557 292	123 878 798 455	-4,13%	-5 121 241 163
Mixed funds	188 634 657 022	155 839 794 217	21,04%	32 794 862 806
Funds of funds	24 405 576 478	20 226 598 009	20,66%	4 178 978 469
Real estate funds	22 898 531 949	18 126 995 705	26,32%	4 771 536 244
Total funds	483 501 195 319	430 117 197 627	12,41%	53 383 997 692

Source: Annual conference of AKAT ČR, 26. 2. 2018, www.akatcr.cz, own processing, 2018

From the long-term point of view growth of rates is a desired factor for profit potential of these funds. Mainly money market funds and bond funds of very short-term investments, thanks to short average maturity of their portfolios, will progressive normalization of interest environment mean quite fast return to positive appreciation.

An example of change of trend in development of appreciation is money market fund Likviditní fond, which is administrated by Erste Asset Management GmbH, subsidiary Czech Republic. As we can see in the Graph n.4 progressive growth of rates from zero levels in half of 2017 to 1 % (28.6. 2018), thanks to very short average time to maturity of portfolio 0,15 year (31.5. 2018), started to reflect in progressive growth of performance of portfolio of Likviditní fond.

Graph 4 - Performance of money market fund Likviditní fond



Source: Investment centre of Česká spořitelna, a. s., 2018

Inertia of collective investment market means significant delay in its viewing by retail clients. From trend of development of amount of assets under administration can be noticed that even though there is a change in market terms which will progressively be seen in performance of conservative fund types (money market funds and bond funds of very short-term investments, bond funds focused on state bonds) there is still a significant outflow of means from these funds, see Table n.2.

4.2.3 Mixed mutual funds

The most growing category of funds (growth by 50,8 billion of CZE from 31.12. 2015 to 31.12. 201 absolutely) are mixed funds. This trend is caused by the requirement of clients on investment product which represents complex investment portfolio, widely diversified

across the whole spectrum of investment assets. Mixed funds decompose market risks (interest, stock, commodity etc.) and at the same time decompose potential of profit. In the environment of low interest rates when potential of profit of conservative interest instruments is significantly restricted stock part adds a profit potential during the possibility to manage final risk of mixed fund. Rate of undergo stock risk is determined by the share of stock component in fund portfolio. This main attribute is key to success in this category of mutual funds.

Table 3 - Development of amount of assets in mixed funds

	Total to 31.12.2015 (CZK)	Total to 31.12.2016 (CZK)	Annual change	Total to 31.12.2016 (CZK)	Total to 31.12.2017 (CZK)	Annual change
Mixed funds	137 833 877 417	155 839 794 217	13,06%	155 839 794 217	188 634 657 022	21,04%

Source: Annual conference of AKAT ČR, 26. 2. 2018, www.akatcr.cz, own processing, 2018

4.2.4 Equity funds

In last year's clients grow their interest in equity funds. It is because of long term growing tend without major corrections at equity markets and therefore attractive profits of these types of funds. Equity markets are distinguished by relatively low fluctuation in last years which helped the growth of popularity of equity mutual funds. This supports growth of amount of assets in these funds, see Table n.4: Development of amount of assets in equity funds.

Table 4 - Development of amount of assets in equity funds

	Total to 31.12.2015 (CZK)	Total to 31.12.2016 (CZK)	Annual change	Total to 31.12.2016 (CZK)	Total to 31.12.2017 (CZK)	Annual change
Equity funds	69 339 902 270	81 279 756 777	17,22%	81 279 756 777	99 319 518 171	22,19%

Source: Annual conference of AKAT ČR, 26. 2. 2018, www.akatcr.cz, own processing, 2018

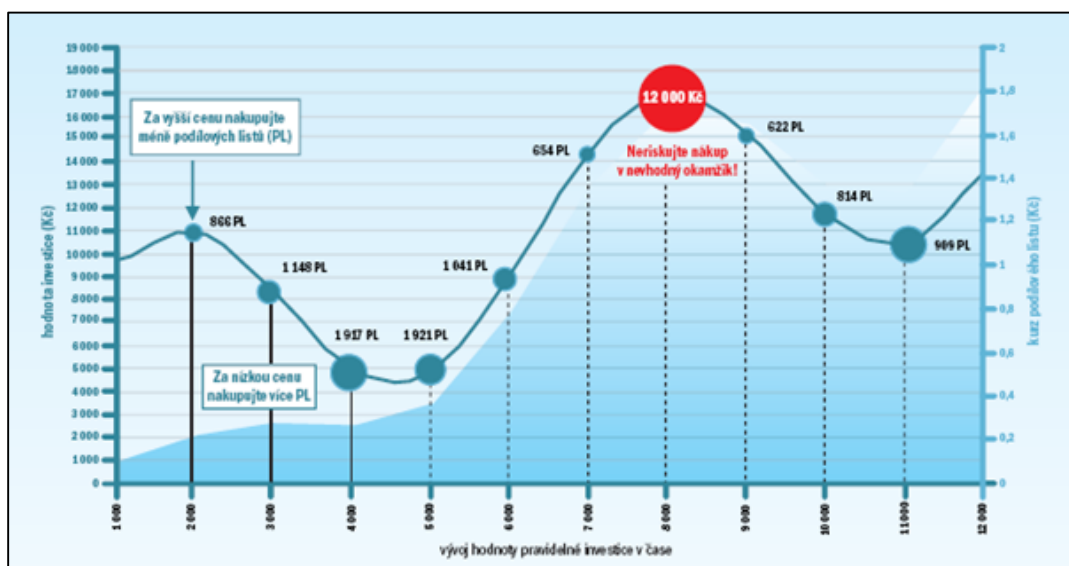
In the beginning of 2018 there was the first significant correction and it is evident that normalization of market environment starts and there is a return of fluctuation at equity markets. Long period of calm growth of equity funds probably attracted clients who will suffer from increased fluctuation and a minor stagnation is expected or even slow decrease of amount of means in this category of mutual funds.

4.3 Regular investment

Regular investment ranks among crucial trends in the area of collective investment. The already mentioned topic of low interest rates limiting interests of deposit bank products in last years increased interest in products of collective investment which documents significant increase of amount of resources in these products.

For clients who have little or none experience with increasing the value of means via investment instruments, the regular investment into mutual funds form is the optimal form. Regularity of investment significantly lowers bad timing of the investment. The purchase cost of profit participation certificates of mutual funds is averaged. The probability of purchase at inopportune time (for high cost) is being lowered especially with volatile (very fluctuating) investment instruments (equity funds, dynamic mixed funds, dynamic bond funds). Since it's very hard to estimate when the price for the purchase is the best usually the most favourable price is the average price, see Picture n. 4: Simulation of development of investment instrument and regular purchase.

Picture 5 - Simulation of development of investment instrument and regular purchase



Source: Česká spořitelna, a. s., 2018

Indisputable advantage of regular investment into products of collective investment is its availability. Most OCPs make investment into mutual funds available in range of several hundreds of crowns. Typical investment is a monthly one.

According to professional association AKAT ČR the topic of regular investment ranks to preferred and recommended forms for its members. Its availability and simplicity allows to increase numbers of new investors who easily get to know the collective investment market better through the regular investment.

Clear confirmation of regular investment trend as a form for increasing the value of resources are medial campaigns of important members of the market, brokers, see Picture n. 5: Medial campaign of ČSOB, a. s.

Picture 6 - Medial campaign of ČSOB, a. s



The image shows a promotional banner for ČSOB. At the top, four green checkmarks are arranged horizontally, each above a benefit: 'Invest from CZK 500 per month', 'Money available within 4 days without a fee', 'Can also be arranged online', and 'We'll help you to choose the best fund for you'. Below this, on the left, is a photograph of a man and a woman on a golf course; the man is holding a basket of golf balls. To the right of the photo, the text reads: 'Začněte pravidelně investovat aspoň 1 000 Kč měsíčně a **my vám každý rok přidáme k investici bonus 500 Kč.** Sjednejte si schůzku ještě dnes.' At the bottom right, there is a small red PDF icon followed by the text 'Pravidla akce Pravidelná investice s bonusem'.

Source: Medial campaign of ČSOB, a. s, 2018

ING Bank also uses the topic of regular investment. The bank came in June 2018 with a new communication concept with a motto „Try to get maximum of your savings “and shows how people can enjoy their lives with right financial decisions. Introducing ING mutual funds which can be easily opened and managed on-line and with a zero fee at basic offer.

First broker who started to intensively dedicate their time to collective investment in the Czech Republic is Česká spořitelna, a.s. (The Czech Savings Bank). According to company's communication Česká spořitelna has dedicated it's time to this topic since 2008. In 2017 clients of Česká spořitelna via regular investments invested into mutual funds more than 8,15 billions of CZE. The pace of inflow of money into funds via regular investments hasn't slowed in 2018 either, since the start of the year there have been invested (to 31.5. 2018) 3,46 billions of CZE (in 2017 3,3 billion of CZE for the same period) into mutual

funds via regular investments. More than 283 thousands of clients invest regularly in Česká spořitelna (to 31.3. 2018).

4.4 Analysis of chosen products of collective investment

This part of thesis is described from the psychological aspect of investors' behaviour which is some of the main basis for the analytical part. The collective investment market is significantly affected by the development of capital markets. They affect real profits of products of collective investment. And real profits are principal parameter in client's perception. The strongest factor for client's decision-making in purchasing set mutual fund is historical performance. From psychological point of view, it is logical, it's about increasing value of financial resources collected by the client form other than investment activity. American economist Harry Markowitz says that investor always prefers higher profit to lower on effort the same level of risk and lower risk to higher on effort the level of expected profit. From psychological point of view historical performance of mutual fund is one of the main factors which influence investment decision-making.

Profit potential of collective investment products is significantly affected by the development of interest rates. According to Graph n.1 Development of basic interest rate of ČNB from the end of 2012 the level of basic interest rate was almost zero (basic 2T repo rate 0,05 %) and it is until half of 2017. The level of interest rates has crucial importance for profit potential primarily for more conservative products of collective investment – money market funds, very short-term bond funds and bond funds. Profit potential of these funds significantly lowered in past years which led to the change of clients' preferences and increase of clients' interest in other categories of collective investment products. According to Table n.5 Development of amount of assets in mixed funds the most dynamic growing category are mixed funds in which the amount of managed assets has increased almost four times since 2013.

Table 5 - Development of amount of assets in mixed funds

	Total to 31.12.2013 (CZK)	Total to 31.12.2014 (CZK)	Annual change	Total to 31.12.2014 (CZK)	Total to 31.12.2017 (CZK)	Annual change
Mixed funds	51 472 395 338	103 643 295 590	101,36%	103 643 295 590	137 833 877 417	32,99%

	Total to 31.12.2015 (CZK)	Total to 31.12.2014 (CZK)	Annual change	Total to 31.12.2014 (CZK)	Total to 31.12.2017 (CZK)	Annual change
Mixed funds	137 833 877 417	155 839 794 217	13,06%	155 839 794 217	188 634 657 022	21,04%%

Source: Annual conference of AKAT ČR, 26. 2. 2018, www.akatcr.cz, own processing, 2018

The reason why this trend – the increase of clients’ interest in mixed funds – is rising is the effort of clients to reach higher evaluation than which is reachable by the conservative category of mutual funds but also deposit bank products

4.4.1 Mixed mutual funds

Mixed funds provide wide diversification of investment portfolio into more classes of assets through one investment to client which is their significant advantage. The strategy of these funds then allows to effectively manage their total riskiness in context of their profit potential. Ratio of representation of individual classes of assets is decisive for risk profile of mutual fund. There is available a wide number of mixed mutual funds with different risk profile at the market, from very conservative with low representation of risk assets (ratio of shares typically 10 to 15 %, e.g. opened mutual fund Konzervativní mix, managed by Erste Asset Management GmbH, subsidiary ČR) to very dynamic mixed funds with significant representation of risk assets (ratio of shares 50 %, e.g. opened mutual fund Dynamický Mix, managed by Erste Asset Management GmbH, subsidiary ČR).

Diversification of investment portfolio has its rules and comes from basic theoretic bases. Strategical allocation of assets (SAA) is crucial which represents determination of long term allocation of resources among three basic assets classes – shares, bonds and instruments of money market. Resulting diversification of portfolio isn’t only function of how many of shares, bonds or other assets are in portfolio but rather what their mutual correlation is. Empiric studies proved that SAA, their diversification, is the most important determinant of profit of portfolio and its riskiness and it’s up to 90 %. Combination of various assets classes with various development during various market circumstances protects the client from significant losses. Strategical allocation of assets practices a theory which was introduced in 1950s by American economist Harry Markowitz and which was developed by other specialists (William Sharpe, Gary Brinson, Paul Kaplan etc.). Modern theory of portfolio (MTP) is actually mathematical-statistical formulation of diversification concept, working with assumption that investors are risk averse.

Influence of mutual relation (correlation) among individual assets classes on final risk profile and profit potential can be documented on modelling of mixed portfolio. As long as 10 % share component is added into bond portfolio, represented by Czech state bonds, then the final risk of this portfolio isn't going to increase, minor increase of profit potential is going to happen though. Calculation proceeds from investment configurator of Česká spořitelna which serves as optimization of investment portfolios and setting of risk and profit expectations in investment portfolio. In Table n. 6: Bond portfolio is risk and profit profile of bond portfolio, Table n. 7: Mixed portfolio (90 % state bonds / 10 % shares of developer markets) displays profit potential and risk profile of mixed portfolio.

Table 6 - Bond portfolio

	Optimaliz. podíl v portfoliu [%]	Výnos p.a.	Riziko p.a.	Downside
Peněžní trh	0	0,60%	0,30%	-0,10%
Dluhopisy - Krátkodobé státní ČR (1-3 let)	0	0,60%	1,00%	-1,73%
Dluhopisy - Střednědobé státní ČR (3-5 let)	0	0,80%	1,70%	-3,16%
Dluhopisy - České státní dluhopisy	100	1,30%	2,70%	-4,99%
Dluhopisy - Inv. grade EU	0	3,50%	3,50%	-4,66%
Dluhopisy - High yield EU	0	6,80%	11,00%	-18,83%
Dluhopisy - Emerging markets	0	6,50%	13,00%	-23,79%
Akcie - vyspělé trhy	0	5,50%	12,00%	-22,46%
Akcie - rozvíjející se trhy	0	8,00%	14,70%	-26,25%
Akcie - rozvíjející se trhy CEE	0	10,90%	21,00%	-38,03%
Akcie - ČR	0	8,00%	14,70%	-26,25%
Alternativy	0	6,20%	6,53%	-9,01%
Reality	0	6,00%	11,00%	-19,63%
Celkem	100		2,70%	-4,99%

	Optimaliz.
Výnos p.a.	1,30%
Riziko p.a.	2,70%
Downside 1 ROK (VaR) (s 95% pravěpodobnosti)	-3,14%

Source: Česká spořitelna, a. s., Optimizer tool Česká spořitelna, 2018

Table 7 - Mixed portfolio (90 % state bonds / 10 % shares of developer markets)

	Optimaliz. podíl v portfoliu [%]	Výnos p.a.	Riziko p.a.	Downside
Peněžní trh	0	0,60%	0,30%	-0,10%
Dluhopisy - Krátkodobé státní ČR (1-3 let)	0	0,60%	1,00%	-1,73%
Dluhopisy - Střednědobé státní ČR (3-5 let)	0	0,80%	1,70%	-3,16%
Dluhopisy - České státní dluhopisy	90	1,30%	2,70%	-4,99%
Dluhopisy - Inv. grade EU	0	3,50%	3,50%	-4,66%
Dluhopisy - High yield EU	0	6,80%	11,00%	-18,83%
Dluhopisy - Emerging markets	0	6,50%	13,00%	-23,79%
Akcie - vyspělé trhy	10	5,50%	12,00%	-22,46%
Akcie - rozvíjející se trhy	0	8,00%	14,70%	-26,25%
Akcie - rozvíjející se trhy CEE	0	10,90%	21,00%	-38,03%
Akcie - ČR	0	8,00%	14,70%	-26,25%
Alternativy	0	6,20%	6,53%	-9,01%
Reality	0	6,00%	11,00%	-19,63%
Celkem	100		3,63%	-6,74%

	Optimaliz.
Výnos p.a.	1,72%
Riziko p.a.	2,65%
Downside 1 ROK (VaR) (s 95% pravěpodobnosti)	-2,64%

Source: Česká spořitelna, a. s., Optimizer tool, 2018

In the calculation values of expected profit p.a. (expert estimate), expected risk p.a. (historical annual volatility) and correlation matrix calculated for individual assets classes are assigned to individual assets classes.

4.5 Analysis of chosen mixed mutual funds: Vyvážený Mix FF and YOU INVEST Balanced

This passage of analytical part of the work deals with comparison of two mixed funds with the same riskiness, risk weight, and different investment strategy. The minimal recommended 4 year and longer investment horizon is the same for both funds and both are intended for a retail investor. Both funds are managed by investment company ErsteAsset Management GmbH, subsidiary Czech Republic. Both funds are denominated in Czech crown, where investments in foreign currencies inside the fund are actively monetarily secured into CZK. Bond part of portfolio is with regard to group investment policy of manager Erste Asset Management GmbH, subsidiary Czech Republic managed similarly for both funds and the same model of tactical allocation GTAA (Global Tactical Asset Allocation) is being used.

Risk weight of both funds is the same in the long term. Measuring of risk weight of products is methodically taken care of in accordance to directive of European Parliament and Council n. 2009/65/ES which defines seven-level scale of risk where level 1 is the lowest risk and level 7 is the highest risk. The risk weight of analysed funds is determined by intern methods of Česká spořitelna, a.s. (The Czech Savings Bank) and on the basis of synthetic indicator of riskiness SRRI (Synthetic Risk and Reward Indicator). Limits for placement into individual risk groups are mentioned in Table n. 8

Table 8 - Borders of risk groups classification

Risk weigh	Zone of volatility SRRI (σ)	
	Equal or higher	Smaller than
1	0,00%	0,50%
2	0,50%	2,00%
3	2,00%	5,00%
4	5,00%	10,00%
5	10,00%	15,00%
6	15,00%	25,00%
7	25,00%	

Source: own processing, 2018

Changes of interval borders of risk groups classification can be done only after the approval by market regulator.

Basic quantity SRRI is selective standard deviation σ of weekly revenues of historical revenues r_t on the period of last 5 years.

It gives total riskiness of the investment and it bases on historical development and fluctuation of value of investment.

Calculations are derived from weekly historical revenues for last 5 years. When calculating investment instruments with short history the standard combination of known historical values and model historical values is being used. Model values are constructed according to

investment strategy of investment instrument – mutual fund on the basis of revenue development of suitable representative. To create a five year, number the revenue numbers must be chained. A suitable representative for mutual funds is its benchmark.

Methodology of Česká spořitelna, a.s. during calculations bases on number of weekly values time intervals. The number of observation is $T = 260$ (5×52).

Standard deviation σ is calculated on yearly basis according to the formula:

$$\sigma_A = \sqrt{\frac{52}{T-1} \sum_{t=1}^T (r_t - \bar{r})^2}$$

where:

σ_A is standard deviation which measures weekly revenue variability

r_t is weekly revenue on time interval t

\bar{r} is arithmetic average of r_t values

T is number of intervals

The Committee of European Securities Regulators CESR in its methodology states for reverse calculation more complicated formula:

$$VaR = -\left(rf_{1/m} - \frac{\sigma_{1/m}^2}{2} \right) T + 2,33 \sigma_{1/m} \sqrt{T}$$

from where the annualized standard deviation is calculated σ_A :

T is 260 for usage of weekly measurements or 60 for monthly

m is number of used intervals in year ($m = 52$ for weekly measurements, 12 for monthly)

rf is risk-free revenue according to interval m during measurements.

The risk weight of both funds is currently on level 3 according to the risk scale. It is because of defined strategy of both funds when the ratio of risk assets – stock component of funds ‘portfolio – is at level of 30 % of portfolio in long term and a long period of relatively low volatility, fluctuation of capital markets, has a significant influence on this value. It is to be expected that the 30 % risk stock component ratio in portfolio including the higher volatility, which is returning to the stock markets in this year, is going to reflect in an increase of the risk weight to the level 4 for both funds. The change in risk weight is going to concern both analysed funds even though it doesn’t necessarily have to take place in the same period.

4.5.1 Different investment strategies, investment styles

Analysed mixed funds use different investment strategies, investment styles to reach their investment goals which are defined in statutes of these funds. Mixed mutual fund Vyvážený Mix FF uses benchmark investment strategy, on the opposite mixed fund YOU INVEST Balanced uses investment strategy Active return with a possibility to lower the risk assets ratio to zero.

4.5.2 Mixed mutual fund Vyvážený Mix FF, ISIN: CZ0008472339

Mixed fund Vyvážený Mix FF represents complex investment portfolio. It diversifies resources into more kinds of assets, from most part into bond instruments (state bonds, corporate bonds on an investment level) and instruments of money market. This conservative part of portfolio adds stability to the fund and lowers fluctuation of its value. Stock instruments add profit potential to the mutual fund. Their ratio is around a neutral value of 30 % in long term. This ratio of risk stock component can give a very interesting potential of a higher evaluation to the fund’s portfolio. A great advantage of mutual funds in general is their liquidity – availability of money usually within a week. The price for procurement of profit participation certificates purchase is 1,5 %, the price for procurement of profit participation certificates sale is 0 %.

The goal of investment strategy is to provide shareholders a long-term evaluation of profit participation certificates mainly by investments to securities of money market funds, bond funds of collective investment and equity funds of collective investment. Credit and interest risk is managed actively. The ratio of stock component in the portfolio of mutual fund is actively managed and so is its regional and sector composition. The neutral weight of stock component ratio in mutual fund’s assets is 30 %. Mutual fund bears the currency risk following from investments into local currencies. This risk is in case of stock component

actively managed by available security instruments. The fund also invests into bonds, treasury bills, bank deposits, even bonds with an inserted derivative. Bonds are preferred state, corporate, municipal and other bonds whose issuers were assigned an investment rating.

Graph 5 - Graph of profit participation certificate rate development of fund Vyvážený Mix FF from 2.6. 2014 to 6.8. 2018



Source: Česká spořitelna, a. s., web portal ČS, 2018

The risk weight of mutual fund can vary in time depending on historical development of fluctuation of its value. Spread of individual zones of SRRI are huge enough so the change of risk weight of this strategic allocation of fund's portfolio which typically has around 30 % of stock component wouldn't happen very often. Classification of mutual fund into relevant risk group isn't completely reliable indicator of future development. The risk weight of product expresses relation between the chance of increase of investment's value and the risk of decrease of investment's value and it is continuously calculated.

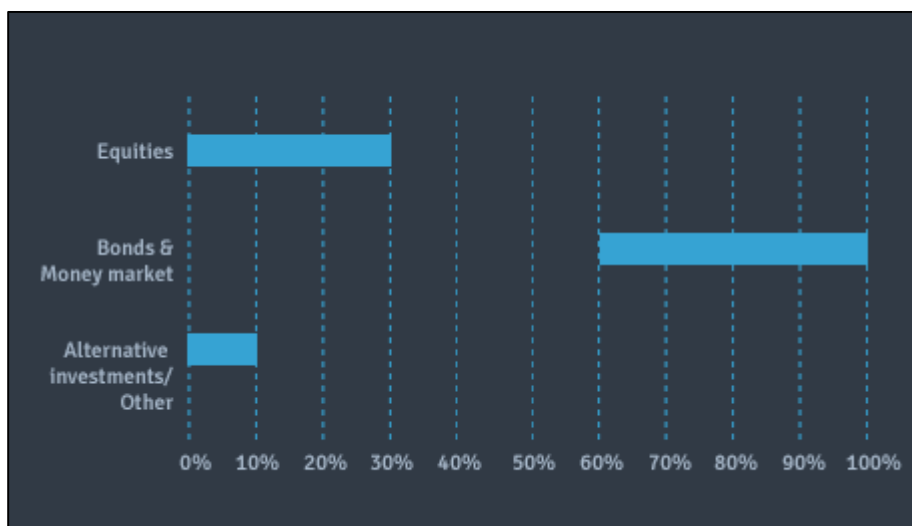
Benchmark investment style, benchmark investment strategy is characterized by maintaining the neutral assets allocation in long term by the fund. In case of Vyvážený Mix FF fund the statute defines ratio of 30 % of stock instruments in the portfolio. It differs very rarely from this allocation independently of market development. The risk assets ratio

doesn't change significantly even during decreases at stock markets and it stays on the neutral value of 30 %.

4.5.3 Mixed mutual fund YOU INVEST Balanced, ISIN: CZ0008474335

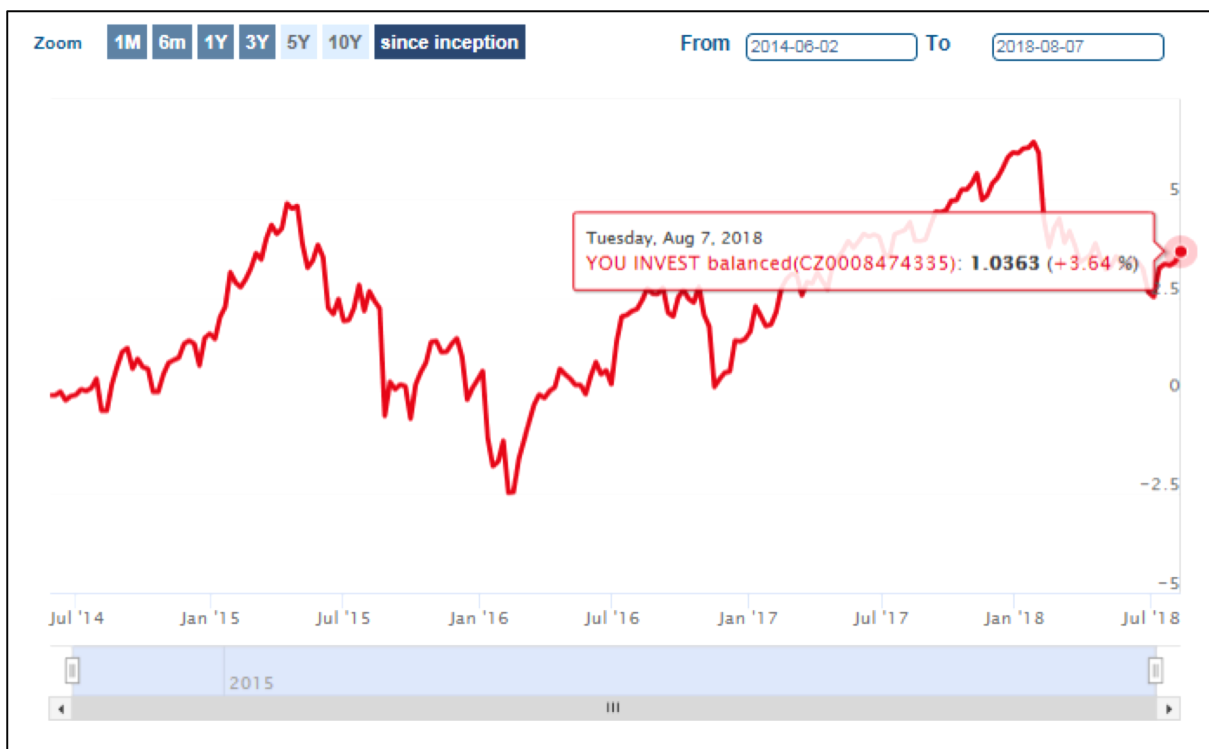
YOU INVEST Balanced is a mixed mutual fund for retail investors and offers them a balanced mix of investments from various classes of assets and so a balanced ratio of potential profit and undergone market risk. Active return managing strategy is being used which as a goal wants to achieve a positive evaluation in set time horizon regardless of market development. Contrary to benchmark strategy which keeps neutral ratio of risk assets and their total allocation all the time active return strategy is very flexible. It allows to lower the ratio of risk assets, e.g. stock component, and flexibly adjust it in a set spread. Investment policy of mixed fund YOU INVEST Balanced defined by its statute allows according to market development to adjust ratio of risk assets between 0 to 60 % with a neutral weight of 30 %. It also defines ratio of stock component and other alternative risk assets, e.g. high yield bonds. The price for procurement of profit participation certificates purchase is 1,5 %, the price for procurement of profit participation certificates sale is 0 %. A great advantage of mutual funds in general is their liquidity – availability of money usually within a week.

Picture 7 - Zones for individual assets classes of YOU INVEST Balanced fund



Source: Erste Asset Management GmbH, Czech Republic, 2018

Graph 6 - Graph of profit participation certificate rate development of fund YOU INVEST Balanced from 2.6. 2014 to 7.8. 2018



Source: Česká spořitelna, a. s., web portal ČS, 2018

Same as any other mutual fund here as well the risk weight can change in time depending on historical development of fluctuation of its value. For Active return investment strategy, too the spread of individual zones of SRRI for determination of risk weight are big enough so the change of the weight in frame of fund's investment strategy with neutral value of 30 % of risk stock component ratio in fund's portfolio wouldn't happen so often.

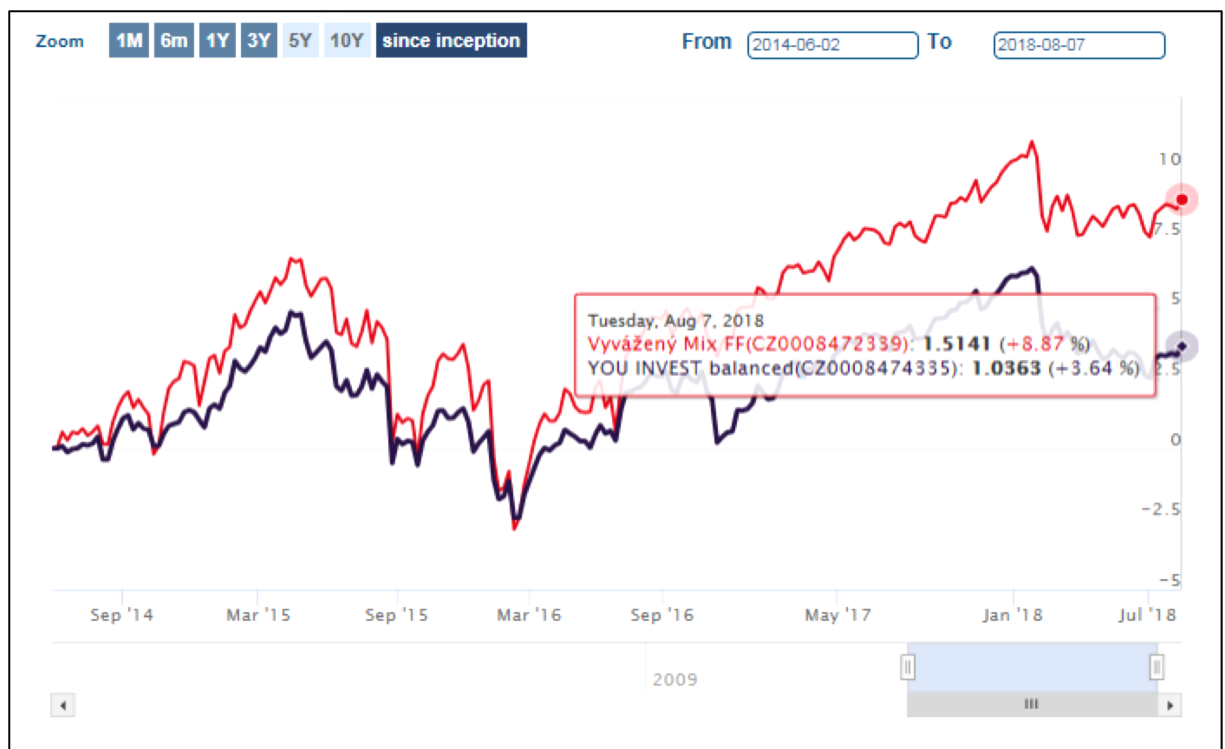
4.5.4 Comparison of funds from the point of view of profits with the same riskiness

An important factor for performance comparison of mutual funds with same recommended investment horizon and primarily same risk profile is total expensiveness. Both analysed funds have the same total expensiveness in long term. Management fee is very similar for both funds, 0,8 % p.a. for YOU INVEST Balanced fund and 1,0 % p.a. for Vyvážený Mix FF fund. Total expensiveness of mutual funds TER (Total Expense Ratio) is stated for last annual accounting period of mutual fund which ended 31.12. 2017 and it is very similar for both mutual funds. Vyvážený Mix FF fund has last known and published expensiveness of 1,69 % and YOU INVEST balanced fund has 1,60 %. These expenses directly reflect into

performance of mutual fund and aren't charged for client. It means performance of both funds with same neutral ratio of risk assets and different investment strategies is burdened with the same expenses and they don't have higher influence on different performance of both funds.

Graph n. 7 shows performance comparison of analysed funds in the same time period. In absolute representation, the difference for observed period (from 2.6. 2014 to 7.8. 2018) is 3,23 % in favour of benchmark fund Vyvážený Mix FF. It brought more than double evaluation for clients.

Graph 7 - Comparison of development of mixed funds from 2.6. 2014 to 7.8. 2018



Source: Česká spořitelna, a. s., web portal ČS, 2018

The explanation is the comment to market environment in observed period. From the beginning of observed period the profit potential of funds was being influenced by the environment of low interest rates and not only in Czech Republic but in the whole developed Europe where interest rates of European Central Bank, same as interest rates in Czech Republic, were at their minimums. There has been a gradual normalization of interest environment in Czech Republic since last year but European Central Bank still holds interest rates very low. The profit potential of both balanced funds is due to primarily possible

growth of stock component of portfolio. Stock markets, which are represented for this analysis by stock index EURO STOXX 50, significantly grew from the bottom in 2009 (for the last 10 years) with two bigger corrections in 2012 and 2016 which is showed in Graph n. 8.

Graph 8 - - Development of stock index EURO STOXX 50 from 3.3. 2009 to 6.8. 2018



Source: Česká spořitelna, a. s., web portal ČS, 2018

Compared period for both funds are from 2.6. 2014 when YOU INVEST Balanced fund was created. Graph n. XXXX: Development of stock index EURO STOXX 50 from 2.6. 2014 to 6.8. 2018 shows the influence of stock market on performance of both funds.

Graph 9 - Development of stock index EURO STOXX 50 from 2.6. 2014 to 6.8. 2018



Source: Česká spořitelna, a. s., web portal ČS, 2018

4.5.5 Same risk profile, different investment strategy

Comparison of development of both funds during decrease of stock market from November 2017 documents difference of investment strategies and impact into funds performances in Graph n 10: Comparison of development of mixed funds from 1.11. 2017 to 6.8. 2018. After correction of stock market in November 2017 and following growth and return to original values there was another major decrease at stock markets. Vyvážený Mix FF with the benchmark investment strategy reacts to decrease and growth at stock markets and it is reflected into development of its profit participation certificate rates depending on development of stock markets thanks to neutral allocation of 30 % of stock component.

Mathematical models used in active return investment strategy of YOU INVEST Balanced fund after two following corrections don't allow to promptly increase ratio of risk stock component to neutral level of 30 %. This investment strategy uses security safety mechanisms which need for increase of ratio a significantly longer period of growth of stock markets and simultaneously a low volatility.

Graph 10 - Comparison of development of mixed funds from 1.11. 2017 to 6.8. 2018

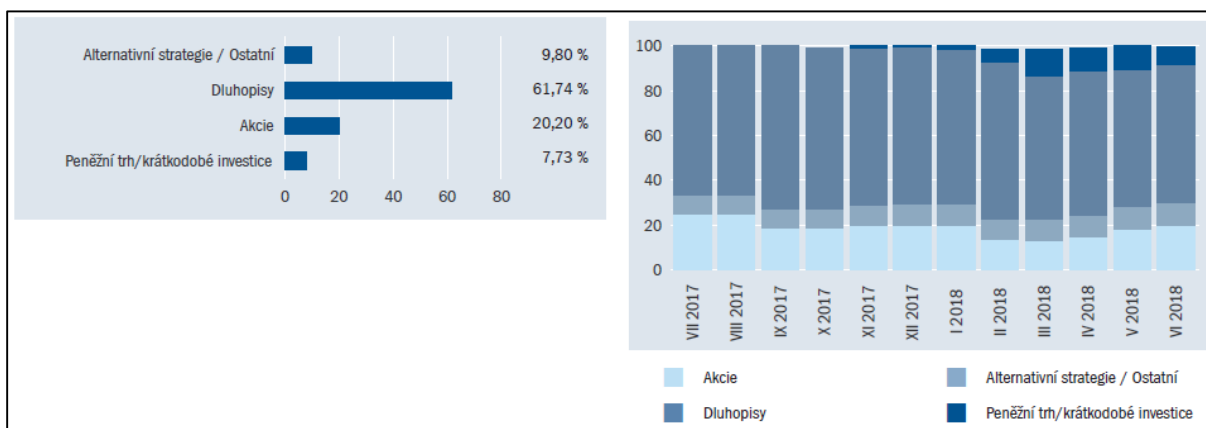


Source: Česká spořitelna, a. s., web portal ČS, 2018

Mathematical model of risk management of active return investment strategy doesn't allow to invest into risk stock instruments until the stabilization of portfolio value happens via conservative component of portfolio, primarily bond instruments. This applies even to the fact that there is a change of trend at stock markets and it's a long term growing one.

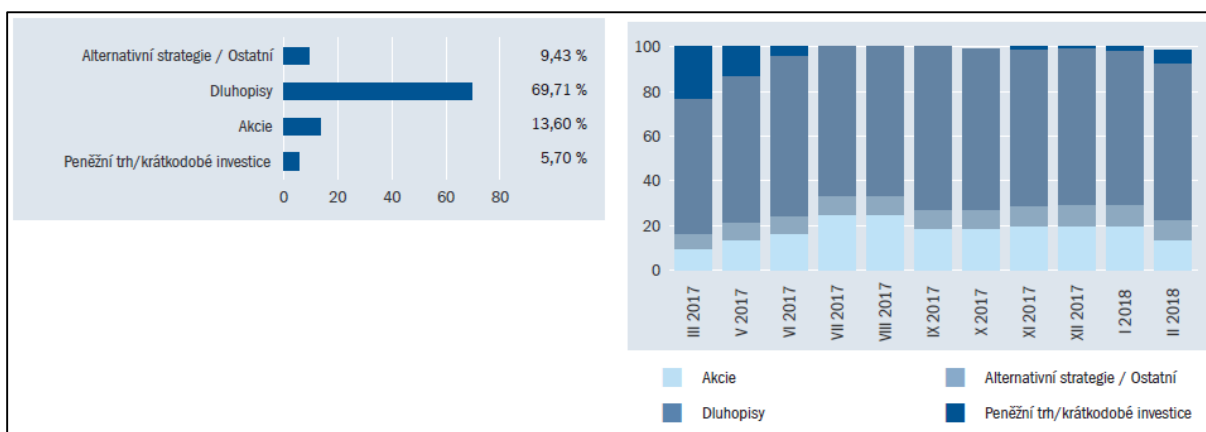
The use of flexible investment strategy active return can be documented on the development of investment of individual assets classes and their share in fund's portfolio. It's visible in time how the representation of these classes changes depending on development of stock markets, and so development of risk assets, which significantly affects total performance of fund's portfolio.

Picture 8 - Allocation of assets and their investment in time to 30.6. 2018



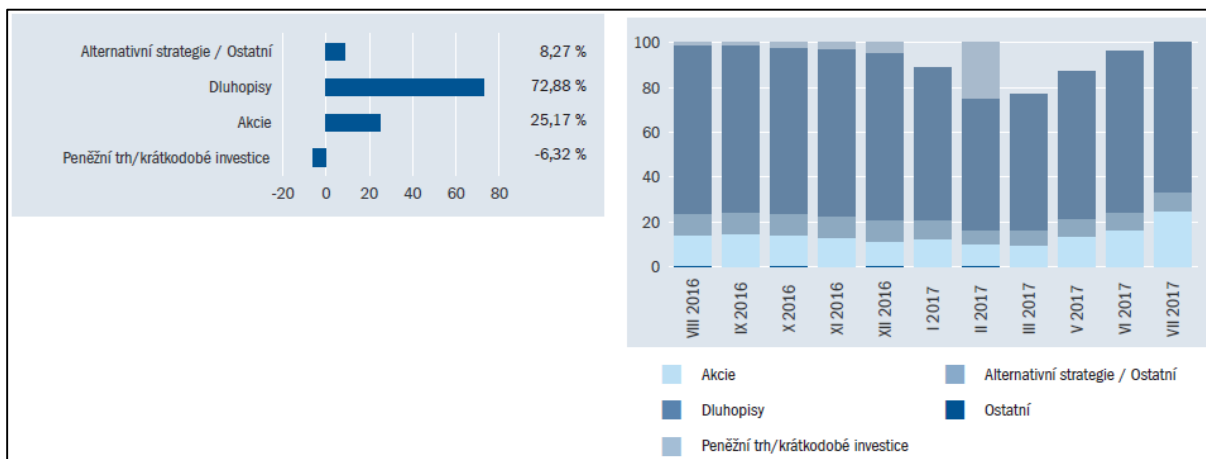
Source: Erste Asset Management GmbH, Czech Republic, YOU INVEST Balanced, Monthly report June 2018

Picture 9 - Allocation of assets and their investment in time to 28.2. 2018



Source: Erste Asset Management GmbH, Czech Republic, YOU INVEST Balanced, Monthly report June 2018

Picture 10 - Allocation of assets and their investment in time to 31.7. 2017



Source: Erste Asset Management GmbH, Czech Republic, YOU INVEST Balanced, Monthly report June 2018

The ratio of stock component in YOU INVEST Balanced fund's portfolio was lowered to half from 25,17 % of ratio in the end of July 2017 to 13,60 % in the end of February 2018. Afterwards the ratio of stock component is increased slowly (30.6. 2018 the ratio is just 20,20 % in fund's portfolio) which results in lagging behind the performance of funds with firm ratio of stock component when stock markets grow. In the current interest environment which isn't favourable for bonds because even a slight growth of interest rates negatively affects their prices and growth of yield to maturity in the short term the key factor for evaluation of profit participation rates is the stock component for both funds.

Both funds are intended for investors who are willing to undergo a higher fluctuation of their investment value which is for balanced investment strategy of analysed mixed funds natural. Both funds have similar risk profile given by the neutral rather firm ratio of risk stock component on the level of 30 % of fund's portfolio. Both funds have their risk weight 3 in long term and their minimal recommended investment horizon is 4 years and longer.

Nevertheless, their suitability or efficiency is given by mostly the market environment and long-term trends.

As the analysis of chosen mixed funds shows benchmark strategy used during fund management of Vyvážený Mix FF fund is more suitable for the period of long term growth of stock markets, alternatively period of stagnation and higher volatility when thanks to firm representation of risk stock component, it allows the fund to flexibly and very interestingly participate in small growths of stock markets.

Investment strategy active return used during mixed fund YOU INVEST Balanced management is more suitable for the period of stock markets decrease. Investment strategy active return allowing to decrease ratio of risk assets as far as to 0 % in fund's portfolio can during bear's market or bear's trend, long term decrease of stock markets, protect investor's resources very well from more significant decrease which is quite fundamental benefit for funds with 30 % ratio of their stock component.

5 Conclusion

The goal of the thesis was to confirm or disprove set hypothesis.

The first part of analytical part confirms the hypothesis that key factor for quality distribution of investment products, or rather products of collective investment, is the depth and robustness of implementation of regulatory demands for provision of individual main investment services. The depth of examination of legally defined areas for identification of adequacy and suitability of investment product or complex investment solution has definitely significant influence on right setting of client's expectation and his satisfaction with set investment solution. The analytical part of the thesis then confirmed the hypothesis that significant responsibility for right client's identification for following investment recommendations and investment consulting is transferred to distributors, which means to brokers and investment middlemen.

The second part of analytical part of the thesis confirmed a trend of long term growth of amount of resources managed by products of collective investment, which means by open-ended mutual funds. Mixed and equity mutual funds then record a significant growth which confirms the hypothesis of investors' shift towards more dynamic investment strategies. The development of interest rate environment is the key factor affecting this trend. The analytical part of the thesis put main trends in the area of collective investment into context. A direct connection and bond between long-lasting environment of low interest rates and the higher interest of investors in more dynamic investment strategies was confirmed. Low interest rates have primary and key influence on interest rates of deposit bank products and on profits of conservative investment instruments which are instruments of money market and conservative segments of bond market, primarily state bonds. The analysis clearly shows a direct connection between the growth of amount of resources managed by products of collective investments and a need of investors to find more attractive evaluation for their free financial resources. The shift towards more dynamical investment strategies documented by significant growth of resources in investment products with more dynamical investment strategy confirms a willingness of investors to undergo higher market risks to reach higher profit than it is possible to reach via conservative investment strategies or deposit bank products.

The analysis of two conservative mixed mutual funds managed by the company Erste Asset Management GmbH, subsidiary Czech Republic, confirmed that long-lasting environment of extremely low interest rates with following slow normalization of interest environment and long-term growth of stock markets since 2009 even with higher volatility is more favourable for use of benchmark investment strategy for management of mixed mutual fund. Both investment styles, investment strategies, produced a positive evaluation in observed four-year period. Benchmark style of fund management doubled the performance of investment style active return and it was with the same risk profile of both funds. The analysis then confirms different suitability of both investment styles for different market conditions.

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