CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

Department of Economics



Diploma Thesis

Establishment of a Mutual Fund for a Chosen Investment Company

Kristýna Koděrová

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Department of Economics
Faculty of Economics and Management

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Establishment of a Mutual Fund for a Chosen Investment Company

Objectives of thesis

The aim of the thesis is to establish a virtual fund for a chosen investment company in the Czech Republic. The main points of the thesis are artificial establishment of the fund according to the Czech law and its successful running in the future. A simulation of the virtual fund should find new opportunities to be more thriving for a chosen investment company.

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Česká národní banka. ČNB [online]. Available from WWW:

<http://www.cnb.cz/cs/index.html>

HASLEM, John A. Mutual funds: portfolio structures, analysis, management, and stewardship. Hoboken, NJ: Wiley, c2009, p. cm. ISBN 978-047-0499-092.

GERBER, Melinda. How to create and manage a mutual fund or exchange-traded fund: a professional's guide. Hoboken, N.J.: John Wiley, c2008, xv, 351 p. Wiley finance series. ISBN 04-701-2055-X.

MARK ST. GILES, Mark St. Ekaterina Alexeeva. Managing Collective Investment Funds. 2nd ed. Chichester: John Wiley, 2003. ISBN 978-047-0856-963.

The Diploma Thesis Supervisor

Procházka Petr, Ing., MSc, Ph.D.

Last date for the submission

March 2014

prof. Ing. Miroslav Svatoš, CSc.

Head of the Department

prof. Ing. Jan Hron, DrSc., dr. h. c.

Dean

Prague October 3. 2013

DECLARATION
I hereby declare that I have worked on my Diploma Thesis titled "Establishment of a Mutual Fund for a Chosen Investment Company" solely and I have used the literature and sources listed in bibliography.
In Prague, 28th March 2014
Kristýna Koděrová

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Establishment of a Mutual Fund for a Chosen Investment Company

Založení podílového fondu pro vybranou investiční společnost

Summary

The diploma thesis is focused on collective investment and establishment of a mutual fund.

The objective of the thesis is to propose a mutual fund for a chosen investment company in

the Czech Republic. The diploma thesis is focused mainly on the Czech legal conditions

for establishment of a new mutual fund, selection of investment strategy, portfolio

formation process and selection of proper companies to the portfolio. The partial aims of

the diploma thesis are to select a strategy for a new mutual fund which diversifies the offer

of mutual funds of a chosen investment company for potential investors and to set up a

portfolio where chosen companies fulfil selected criteria that should ensure the profit and

reduce a risk. Afterwards, a proposed mutual fund is evaluated by simulation of portfolio

performance.

Souhrn

Diplomová práce se zabývá kolektivním investováním a založením podílového fondu.

Cílem práce je navrhnout podílový fond pro vybranou investiční společnost v České

Republice. Diplomová práce se zaměřuje na české právní podmínky potřebné pro založení

nového podílového fondu, výběr investiční strategie, vytvoření portfolia a výběr vhodných

firem do portfolia. Dílčími cíly diplomové práce je výběr strategie pro nový podílový fond,

který rozšíří nabídku podílových fondů vybrané investiční společnosti pro potenciálního

investora a vytvořit portfolio, kde vybrané společnosti splní určená kriteria, která by měla

zaručit výdělek a snížit riziko. Následovně je navrhovaný podílový fond ohodnocen

pomocí simulace výkonnosti portfolia.

Keywords: Mutual Fund; Investment Company; Collective Investment;

Act N. 240/2013 Coll.; Investment Strategy; Portfolio; Sharpe Ratio; Investor

Klíčová slova: podílový fond; investiční společnost; kolektivní investování;

zákon č. 240/2013 Sb.; investiční strategie; portfolio; Sharpeho poměr; investor

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1 INTRODUCTION

Collective investment is nowadays one of the popular ways how to manage financial assets. This form of investment can provide higher appreciation of money than regular banking products but, on the other hand, it is also riskier than investing only in saving account. Mutual funds are most often used type of investments for public.

There are a lot of theories and academic literature for investors how to choose a proper investment and especially mutual fund of investment company but it is also very important to look at the issue from the other side, from a potential founder of a mutual fund point of view. The diploma thesis provides a basic knowledge how to establish a new mutual fund in the Czech Republic where the emphasis is put especially on portfolio formation.

For establishment of a new mutual fund in the Czech Republic, it is firstly necessary to fulfil all legal conditions on the basis of the Czech law. Thereafter, an investment strategy of a mutual fund has to be properly chosen both according to the theoretical knowledge of investment strategies and also according to the interest of potential investors in the market. Afterwards, it is necessary to select companies to invest in. Both the historical investment indicators and predictions can help a portfolio manager to find the proper companies.

Nowadays, investment in emerging markets is very popular geographical investment strategy as well as investment in modern technologies or pharmaceutical sector as a target industry group and agriculture industry as farming, fishing and also food production is slightly unheeded. The reason of this lower interest of agriculture industry is especially caused by very high risk of this sector because the profit of these agricultural companies is for example dependent on harvest which can be negatively influenced by internal factors as unfavourable weather. Despite the high risk, the investment in agricultural companies, and especially food production companies, can be profitable.

2 OBJECTIVES OF THESIS AND METHODOLOGY

Objectives of Thesis

The main objective of the diploma thesis is to propose and establish a mutual fund for a chosen investment company in the Czech Republic.

The diploma thesis is focused mainly on the Czech legal conditions for establishment of a new mutual fund, selection of investment strategy, portfolio formation process and selection of proper companies to the portfolio. Afterwards, a proposed mutual fund is evaluated by simulation of portfolio performance.

The partial aims of the diploma thesis are to select a strategy for a new mutual fund which diversifies the offer of mutual funds of a chosen investment company for potential investors and to set up a portfolio where chosen companies fulfil selected criteria that should ensure the profit and reduce a risk.

The final aim of the diploma thesis is to test a performance of a new mutual fund by using historical data and provide relevant recommendations and suggestions to a chosen investment company.

Methodology

Data for the theoretical part of the diploma thesis were gathered from the available professional sources focused on the topic of collective investment, portfolio formation process and theory, and investment strategy. Academic books, relevant articles and web pages were used as a proper source of information for the thesis. For a processing of literature overview, the appropriate methods as synthesis, induction, deduction and comparison were used.

The practical part, based on synthesis and induction in problem resolution, uses implemented investment strategy and portfolio theory, comparative and qualitative analyses for verification of theory in practice.

Investment valuation ratios and Altman Z- score were chosen as appropriate methods for selection companies to the portfolio. Sharpe ratio and average annual return method were chosen for simulated testing of historical performance of a mutual fund.

AKRO investiční společnost, a. s. enabled access to work with Bloomberg Professional service software for the portfolio formation.

Calculations were processed in Microsoft Excel.

3 LITERATURE OVERVIEW

3.1 Collective Investment

Collective investment is one of the methods of investing financial means. Collective investment is based on mutual interest of individual investors to assess their free money as efficiently as possible with the effort to minimize the investment risk by sufficient diversified collective portfolio. Even though collective investment in the world has a long tradition (first signs of collective investments were recorded in the second half of the 18th century in the Netherlands), the Czech Republic started to gradually develop collective investment in the 90s of the 20th century. It can be a good choice for those investors who do not want to make their own decisions to which specific securities invest their money. The most common type of collective investment funds is open-end mutual fund in the Czech Republic. [1]

3.1.1 Definition of Collective Investment

The Act No.240/2013 Coll., as amended defines a collective investment scheme in the Czech Republic from August 2013. In this Act a collective investment is a business which collects finances by underwriting investment fund shares or by issuance of mutual fund's units of the investment company; an investing on the principle of risk spreading and further management of these assets. The investments of the fund must be in accordance with the law.

The basic idea behind collective investment funds is that by amalgamating the financial means of numerous investors it is possible to manage more effectively their investments in terms of diversification, cost reduction and also risk minimization. Furthermore, the ordinary investors through collective investment funds can reach markets which would otherwise be accessible only for institutional investors. Thanks to collective investment, households can invest and hopefully enjoy an increase in the value of their money. [2, 3] cited in [4]

According to the Act No.240/2013 Coll., as amended investment funds are devided into two main parts where investment funds are collective investment funds and funds of

qualified investors; and collective investment funds are the standard funds and special funds. The other investment funds in the Czech Republic are also foreign investment funds, it means that a legal person has its registered headquarters in a different country, not in the Czech Republic, and the legislation of the fund in this country is comparable with the Czech legislation. [3]

3.1.2 Investment Companies

Investment companies are legal persons whose activity consists of creating and managing of mutual funds. Investment companies can also manage investment funds under a treaty on management. The activities of investment companies are listed in detail in the Act on Collective Investment. The Act also sets out the conditions which are necessary to fulfill for the establishment of an investment company. The investment company has the same authorities as a joint- stock company. The supreme body is the general meeting. Another body is the Board of Directors, as statutory authority and the Supervisory Board as the supervisory authority. The persons participating in the statutory and supervisory bodies have to comply to higher requirements to work in these positions. These persons must be professionally competent, without a criminal record and they cannot hold any position which is incompatible with the functions in the bodies of the investment company which lists the Czech law. The reason for stricter conditions is the protection of investor's interests. The supervision of the proper performance of investment activities of companies holds the Czech National Bank and if it obtains the application made by an investment company, after completing all the requirements, it authorizes the formation of a mutual fund and registers it. On the websites of the Czech National Bank a list of collective investment funds is published. In view of the fact that a mutual fund has no legal personality it must be always managed by an investment company, but a company can manage more than only one mutual fund. [3, 5] cited in [4]

3.1.3 Collective Investment Funds in the Czech Republic

Firstly it is necessary to define collective investment funds according to the Czech legislation. Collective investment fund is according to the Act No.240/2013 Coll., as amended is:

- a legal person with the registered headquaters in the Czech Republic which is authorized to collect financial means from the public by issuing of shares and implement joint investment of collected money under the specified investment strategy based on the principle of risk diversification in favor of the owners of those shares, and manage the property, and
- a mutual fund, whose purpose is to collect financial means from public by issuing mutual funds units and collective investment of money on the basis of specified investment strategy based on the principle of risk diversification in favor of the owners of those units and other management of the property.

Thus collective investment fund can be only a mutual fund or a joint stock company. [3]

3.1.4 Mutual Fund

A mutual fund is consisting of assets. Ownership of the assets in the mutual fund belongs jointly to all shareholders, in proportion of value of units owned by them. But any of the shareholders can not apply for a separation of the assets from a mutual fund, mutual fund allocation or cancellation of a mutual fund. A mutual fund has no legal entity, it means that it must be administrated by the investment company. [3] Investing through a mutual fund takes place after that the investor purchases mutual fund's units from the investment company. The investment company issues the mutual fund's units for an amount which is equal to the current value announced at the subscription day. In the Statute there is defined a precise day when the value of the funds units are calculated for the purpose of valuing units for existing investors and new subscriptions/ redemptions of units. Extra charges to the current value of the mutual fund's units may apply when subscribing or redeeming units. There is also the possibility of issuance of units for an amount which is equal to the nominal value, but only for a maximum of 3 months from the beginning of the issuance of the units.

According to the law about the redemption of fund's units it is possible to divide funds into two categories- closed- end funds and open- end funds. [3, 5] cited in [4]

3.1.4.1 Difference between Open- end and Closed- end Fund

There are some several differences between open-end fund and closed-end fund. Open-end fund's shares are offered to the common investor continuously. An investor purchases the units from the mutual fund of the company and then they are sold back (redeemed) to the same fund. An investor buys the mutual fund's units at the ask price and then it can reedem shares at the bid price. Shares have to be sold with a prospectus. An open-end fund can borrow or lend money, purchase put or call options, but senior securities cannot be issued. It is a no-loan fund if the ask price and bid are similar and the ask price cannot be higher than the bid price more than 8. 5 % under the National Association of Securities Dealers rules.

On the other hand a closed-end fund has a fixed number of shares outstanding. A purchase and sale of shares is realized by other investors and through a broker or dealer. An investor buys at the ask price plus a commission and sell at the ask price minus a commission. New issued units have to be sold with a prospectus. Both types of funds can lend or borrow money, purchase put or call option, but only closed-end fund can issue senior securities. There are two variants where the ask price may be, the first variant is above the bid price or the second variant is below the bid price- net asset value per share. [6] cited in [4]

3.1.4.2 Creation, Establishment and Termination of a Mutual Fund

For creation of a new mutual fund an investment company has to find a qualified person who will manage the fund and it is also necessary to write up a statute of the fund with all conditions according to the Czech law. Each investment fund has to have its own depository. Afterwards the Czech National Bank gives the permission to establish a mutual fund if the company puts forward a proposal of a new fund.

A mutual fund is established when it is registered by the Czech National Bank and listed in the list of all funds in the Czech Republic. This document is also administrated by the Czech National Bank. Mutual Fund terminates when it is deleted from this list. The

application for registration of a new mutual fund to the list of all mutual funds is filed by person who will manange the fund. A request for cancellation of the mutual fund from a list is filed by a liquidator or by a person demonstrating a legitimate interest. [3]

3.1.4.3 Mutual Fund's Unit

A unit is a special type of security from which results rights for the owner-unitholder. The investor is entitled to a proportionate share of the fund's assets, while also takes part in an income from these investments. Proceeds from investment income may be paid either continuously or reinvested by fund. The type and method of payment of proceeds is always determined in the Statute of the fund. A redemption of units of the mutual fund assets is subject to taxation. According to current legislation there is no necessity to pay tax on capital gains if a shareholder keep the units at least 6 months. Unitholders have no other rights- cannot participate in the General Meeting, participate in the decision- making processes of an investment company or interfere with its investment policy.

A unitholder of a mutual fund has a right to resell the mutual fund's units back to the investment company. But it is necessary to mention that an investment company can temporarily stop the redemption of units. If necessary, the suspension can be up to a total time of three months. The Board of Directors of an investment company must make decision about a suspension of redemption of mutual fund's unit and it has to be written an official record which is then handed to the Czech National Bank. A commitment of the bank is to authorize the suspension and it can also cancel the decision to suspend the redemption of units if there is the possibility that the investor's interests are endangered. In this case for the payment of units an investment company used financial menas which are in a depository. Each mutual fund has own account in a depository. Mutual fund's units can be also transferred to another person. [2] cited in [4]

3.1.5 Statute of a Fund

Each collective investment company has to publish statutes for each fund, keep records about key information, keep to articles of association and publish an annual and semi- annual report.

The principal document governing the activities of an investment company and an investment fund is the statute of the fund. It contains important information about a fund and every investor should be familiar with this document if he or she is considering invest in a fund. This is the reason why a statute should be written in simple language and be accesible to the public according to the law. For example the document explains the risks associated with investing in the fund and the method of management of the assets accumulated in the fund.

A statute of a mutual fund has a character of contractual conditions between an investment company and investor. It defines the basic rights and obligations between them. The investor has to have the opportunity to peruse a statute of a mutual fund before investing into the fund. In case that the investor does not peruse the statute, it is binding. An investment company accepts a statute of the respective fund in accordance with its regulations and a statute has to be also approved by the Czech National Bank. [2] cited in [4]

3.1.6 Depository

Each investment company and investment fund must have its depository. A depository of a collective investment fund registers assets of a fund of a collective investment and controls whether a fund of collective investment manages the assets in accordance with Czech law and the relevant fund's statute.

A depositary is inherently one of the regulatory authorities of collective investment funds. Its function is to supervise the activities of investment companies and investment funds. A depositary may be a domestic or foreign bank with a branch office in the Czech Republic, which has a banking license allowing it to offer depositary services. Conditions for the fulfillment of obligations between the depository and investment company or investment fund are set out in the depository contract. It is concluded for an indefinite

period. The notice period is six months. The main duty of a depositary is to check whether the assets of investment company and investment fund are utilized according to the law. In case of misconduct, the depositary shall immediately notify both the relevant investment company or investment fund, but also the Czech National Bank. The goal of a depositary is to restrict the possibility of damage to the property of investor because of the illegal or irresponsible practise of an investment company or investment fund. A depositary has also an access to the assets of the investor and the investment company or investment fund. It increases the possibility of protecting the assets of the unitholders, which is the main aim of a depositary. For the proper operation of the depository it is also important that there is effective communication with the investment company and the investment fund which has a legal duty to inform the depository about the activities of the fund. The depository also provides an independent check with regard to the assets in the fund. The control body of a depositary is the Czech National Bank. It supervises the activities of depositary banks and in a case of some misconduct it is entitled to impose penalties and fines. [2] cited in [4]

3.2 Basic Steps to Establish a Mutual Fund

As a summary, if a person wants to establish a mutual fund in the Czech Republic there are some basic steps which have to be accomplished. Of course it is neccesary to have an investment company or to find another company which will manage the fund by Czech law. The basic steps of procedure are following:

- Creating the investment plan: selection of basic investment strategy;
- Finding an optimal investment structure with a view to maximize revenues and optimize the tax burden;
- Preparation of an application for an authorization of the fund from the Czech National Bank, preparation of Statute, possible Assembly provision of shareholders within the Statute, preparation of agreement with the depositary;
- Applying for an authorization of mutual fund in to the Czech National Bank;

- Getting a permission for mutual fund management from the ČNB;
- Opening activity: investing in selected type of asset, asset management, purchase and sale of assets, collection of proceeds from asset, bookkeeping, compliance, reporting. [2, 3]

3.3 Investment Strategy

There are a lot of different strategies and their division which an investment company can use for its management. The positive and unfortunately negative result of a fund depends on many internal and external factors, which sometimes could not be influenced by the investment company and its directors or by strategy of a fund. It is very difficult to predict an emergency of the funds. But nowadays of course as in all economic sciences they are some indicators which can help us to evaluate past performance of a fund and predict the future results and through that it is possible to evaluate the management of a fund of the investment company.

3.3.1 Definition of Investment Strategy

The aim of the thesis is to establish a new mutual fund for a chosen Investment Company in the Czech Republic. Firstly it is necessary to define what a strategy is. The definitions are for example: "a plan of action designed to achieve a long-term or overall aim" [7] or "A method or plan chosen to bring about a desired future, such as achievement of a goal or solution to a problem." [8] cited in [4]

The investment strategy can be defined as "An investor's plan of attack to guide their investment decisions based on individual goals, risk tolerance and future needs for capital. The components of most investment strategies include asset allocation, buy and sell guidelines, and risk guidelines." [9]

If an investor wants to indirectly invest his or her financial assets to an investment company he or she should study the investment strategy of the company's fund and try to find the one which is close to the investor's style of investment. As it was already mentioned in the chapter above it is necessary to peruse thoroughly a statute of the fund to understand well how the investment company administrates a fund. In a statute of a fund strategies are defined. [9] cited in [4]

3.3.2 Investment Triangle

The basic factors of the investment strategy are profitability, risk and liquidity. These three factors are known as an investment triangle. The basic rules of an investment triangle are that between risk and return are in direct correllation. With increasing return the risk is increasing and with increasing of the risk of an investment return is increasing. Between liquidity and return is an inverse relationship. The more liquid investment, the lower the return is. Between liquidity and risk is also an inverse proportion- the higher the risk, the lower the liquidity is. Investors always move inside the triangle and can never reach a perfect investment that would simultaneously maximize revenue, be completely safe or to be possible to immediately change the revenue into the cash. [10] cited in [4]

REVENUE

RISK

Picture 1- Investment Triangle

Source: Own elaboration based on BECKER, Philipp M. *Investing in microfinance integrating new asset classes into an asset allocation framework applying scenario methodology*. [10]

LIQUIDITY

3.3.3 Types of Investment

Firstly, the company has to define what type of investment it is interested in. The most often used types are equities, bonds, money market and other instruments as for example non-financial investment (commodities, real estate market etc.)

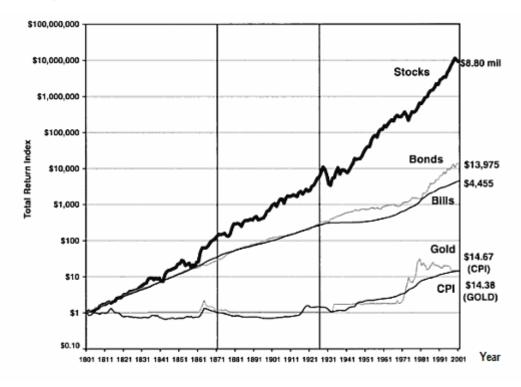
The investment companies can also invest in more than only one type of investment. They can combine for example equities with bonds for a portfolio or an investment company can purchase commodities such as maize or silver with shares on the stock market, e. g. through exchange traded commodity funds (ETF's). These funds are known as mixed funds. The main objective of such asset diversification is to decrease risk. A mixed fund maintains significant flexibility to invest only where market conditions are favourable. [11] cited in [4]

3.3.3.1 Equities

The "equity market" is also known as a market for shares and it is a part of the capital market which was already defined in the first chapter. The equity concept is that the shares exist to provide: capital, a means for sharing risks, security of ownership, transferability and negotiability, liquidity and diversification. Investors can easily and also efficiently invest to many of different companies, not only to invest to any one company and by this reduce the risk connected with this issuer. Equties can be traded on a stock market.

It is possible to say that the equity market, along with the other capital markets, provides a very efficient way how to channel saving into the most productive part of the economy- growing business. Shares traded on a stock exchange are liquid and buying and selling of them is normally feasible at any time. But what is also necessary to mention is that equities are very often regarded as the riskiest asset of all the assets classes (equities, bonds, money market, etc.), especially if one has a short- term perspective. But this is not true at all when we look over a long- term horizon. Graph 1 below shows for the period between 1802- 2001 the total nominal return indexes of different assets. From the graph it is noticeable that equitites- stocks are the most profitable asset over the long- term, the return is on average better than to invest to other types of asset. Thus the equities are

intended for investors with a long- term rather than short- term investment horizon. [11, 12] cited in [4]



Graph 1- Total Nominal Return Indexes of Different Assets- 1802- 2001

Source: ELTON, Edwin, GRUBER, Martin, BROWN, Stephen, GOETZMANN, William. *Modern portfolio theory and investment analysis*. [11]

But there are also many risks for an investment company owning equities. Volatility risk, political risk, currency risk, company risk, transactional risk and liquidity risk are the main potential risks to invest in equities. [12] cited in in [4]

3.3.3.2 Bonds

Bonds are debt securities. In a simplified way if a person purchases a bond, he or she is lending money to for example company, financial institution, municipalitity or a government. The institution which offers bonds is called an issuer. Bonds are fixed instruments and they are issued to raise a capital. The investor's profit is that the issuer has to pay some extra charge for the privilege that it can use money from investor. The extra charge is returned in a form of interest payments- sometimes called coupons. Bonds are fixed instruments because if an investor holds the bonds until maturity that is a predetermined day when an issuer has to repay the amount borrowed.

It is also important to define what is the main difference between bonds and equities- bonds are debt and stocks are equity. If a company purchases equity- stock it becomes an owner of a company, it has a share of the company. On the other hand if a company is interested to invest its own financial means to purchase bonds it becomes a creditor to the issuer. The main advantage is in the case of the bankruptcy of an issuer a creditor has a higher claim on assets than shareholder by law. The disadvantage is if the profits of issuer are higher than for example predicted then a bondholder obtains still only the predetermined interest payment.

Bonds are good choice for the investors who are interested in a short-time horizont and seeking a profit with low risk.

3.3.3.3 Money Market

The money market is a part of the global financial system. A definition of the money market is that it is "a market for both borrowing and lending money for short-time periods between banks and other financial organizations" [13] as for example investment companies. Investment into a money market fund is a short-term investment where to provide current income it is the main aim for the investor. Money market funds invest the collective investment of a huge number of investors in the money markets. It is a relatively safe form of investment because of investing in government and other public securities, bank deposits etc. and the term is not longer than one year. As for the benefits of money market funds it is possible to mention some examples: the investments are very liquid, the capital of the investor is very safe and there is no commission payment. But of course money market funds have also the disadvantages as for exaple there is no quaranty of fixed returns. [14] cited in [4]

In the European Union, money market funds are divided into two main types according to the Committee of European Securities Regulators. The first type is defined as short- term money market funds which means that these funds operate with a very short weighted average maturity and also weighted average life of their investments. On the other hand, the second type- money market fund operates with a longer weighted average

maturity and weighted average life. All the differences are written in a CESR's Guidelines on a common definition of European money market funds from the year 2010 and the Czech Capital Market Association based on this document and also document of EFAMA (European Fund and Asset Management Association) published methodology about a classification of funds for the members of AKAT. [15] cited in [4]

3.3.3.4 Non- Financial Investment

It is also important to mention non- financial instruments, such as the real estate market, gold market or commodities. The average cost of land is still increasing worldwide, so the investment to the real estate market can be profitable, but nowadays because of the recent financial crisis many prices of houses and building has gone down, but of course it depends on many factors as a locality etc.

For many years investment in gold was profitable. Over the last 12 years the value of gold was rising, but nowadays its value has gone down. The predictions for next years are very different among the economists, so it is not possible to say if investment in gold will be profitable or not. Gold can be a part of a portfolio to diversify it, but there is no certainity of profit.

Commodities are raw materials which are used for the creation of products for the consumers. Agricultural commodities are for example wheat, barley, maize or animals such as cattle or chicken. They are very important, because every person needs basic nutrition products. On the other hand commodities are also energy products such as oil, gas and minerals. Also already mentioned gold above is a commodity. Some commodities can be stored only for limited time periods, for example cocoa, sugar or coffee, and they are known as "soft" commodities. Commodities are a distinct asset class where the returns are mainly independent of stock and bond returns. Investment into commodities it can help diversify a portfolio of stocks and bonds lowering potential risk whilst potentially increasing returns. [16] cited in [4]

3.3.4 Geographical Strategy of Funds

The other strategy investors are interested in is to choose where the company is investing in geographically speaking. Almost all of the funds are focused on some specific area such as domestic or foreign region, or emerging markets etc. Nowadays, investment in emerging markets is a very popular geographical strategy.

3.3.4.1 Emerging Markets

Emerging markets, also called as "developing markets" or "rapidly industrializing nations" are rapidly growing economies with fast industrialization. It means emerging markets are countries which are in a phase of transition between being a developing to developed country. Nowadays there are a lot of emerging markets, but they are very quickly and often changed. There are various indicators and many different methods which can be used to classify a market as an emerging market. The indicators which are commonly used to evaluate a market are for example a growth of the gross national product, poverty measurement, etc. The FTSE (Financial Times Stock Exchange) index determined according to their development level these countries as advanced emerging markets in 2012: Brazil, the Czech Republic, Hungary, Mexico, Poland, Malaysia, South Africa, Turkey and Taiwan. The secondary emerging countries which were determined according FTSE index were Chile, China, Columbia, Egypt, India, Indonesia, Morocco, Pakistan, Peru, the Philippines, Russia, Thailand and the UAE in 2012. The most popular means investors use for evaluating emerging countries are for example MSCI (Morgan Stanley Capital International) framework, Grant Thorton's emerging markets opportunity index or the already mentioned FTSE index. [17] cited in [4]

The main reasons why to invest in emerging markets are that there is a relatively low correlation between the performance of developed stock markets and emerging countries, which on average have a huge amount of mineral wealth. The legal, political and economic environment has a tendency of a fast improvement and because of this there is a strong inflow of foreign capital. All these aspects cause increasing economic and consumer confidence in the market. A widespread forecast is that China, India, Brazil and Russia-BRIC countrises will enter into the top ten largest economies in the world. Basically the advantage of funds in investing in emerging markets is for broad geographic

diversification, which reduces the risk of a sharp decline in performance of the fund. The fact that the portfolio includes different and distant areas of the world, a decrease in the market in one part of the world might be compensated by better performance in the remaining markets. Investors can take advantage of the growth potential of emerging markets and not to take the risk of investing based on a single market.

On the other hand, risks may be significantly higher in emerging global markets than in developed countries. Especially in countries with characteristics of authoritarian government, political instability and high taxation, the risk are very high. Compared to developed countries, stock markets in these countries may be less stable and also less liquid. Investment in these markets can be costly and information about investing may be incomplete and unreliable. Investors should have the experience of investing in shares and should be prepared for the short-term losses associated with higher volatility of a fund- it means more frequent and deeper positive and negative fluctuations in the fund. [18] cited in [4]

3.3.4.2 The U. S. Market

The U. S. capital market has a leading role worldwide. Stock exchanges in other countries monitor developments in the USA and they are fundamentally influenced by them. U. S. stocks have the highest liquidity and the most important investors trade there, most of them still bring new investment techniques.

The United States market for stocks has a tradition going back more than 200 years and nowadays it is one of the most important financial pillars in world economy. The main stock exchanges are the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX) and the National Association of Securities Dealers Automated Quotation (NASDAQ). [19] cited in [4]

The most famous and oldest stock exchange is the traditional NYSE (New York Stock Exchange). It is one of the oldest institutions of its kind - the first session was organized in 1792. The development of the exchange as a whole is characterized by a prestigious index, the Dow Jones Industrial Average 30. This stock exchange is considered as the largest, the most liquid and the most famous stock exchange in the world. Currently there are over three thousand registered U. S. and foreign companies traded there. The stock exchange has over four hundred members from institutional and individual investors.

There are traded stocks of the largest and the most valuable U. S. companies, but also shares of the most prestigious foreign companies. [20] cited in [4]

The National Association of Securities Dealers Automated Quotation (NASDAQ) is a global electronic marketplace where investors can purchase or sell securities. The main vision of NASDAQ is that the system is computerized so it means very speedy and also transparent.

The American Stock Exchange is the third largest stock exchange in the United States by trading volume. The AMEX is situated in New York and it manages about 10 % of all securities which are traded in the U. S. [21] cited in [4]

3.3.4.3 Domestic and Developed Foreign Market

Investment in a domestic market has of course many advantages, for example no language barriers and easier access to information. Investors also know better the law and regulations connected with investment in their native country. The main disadvantage for investors is that they are investing only in one country which is not nowadays often very profitable. The economic situation of the country influences wheter stocks rise or fall. A common recommendation is that the domestic market is good for investment for a retirement accountant or if the investor is interested in short- term trading, because of easy and faster access to the stock than investing in a foreign market.

Developed foreign stocks have sometimes better potential profit than domestic stocks which is of course the main reason why people invest abroad. But as was already mentioned, access to information for investors is easier in one's domestic market. It is possible to say that foreign investors do not usually get the same information as domestic ones. When an investor wants to trade in a foreign market he or she should spend much more time to understand the market and all the other aspects connected with investment.

The compromise between domestic and foreign market can be for an investor in the Czech Republic to invest in countries of the European Union. The main advantage is that the legislation about collective investment in these countries is similar or comparable for all of them according to the European Union law. Some of these countries are already developed, especially countries in Western Europe, but on the other hand some countries are still less developed as Poland and also the Czech Republic according to FTSE (Financial Times Stock Exchange) index for year 2013. [21] cited in [4]

3.3.5 Industrial Strategy of Funds

From the other point of view an investment company can be interested in different industries to invest. There are a lot of various industries all over the world, so it is not possible to mention all of them. In the current time the most interested industries are especially the pharmaceutical industry and the technological industry. Both of them are nowadays very rapidly developing industries which influence all of us. The research in the pharmaceutical industry develops new medicinal drugs and through this many diseased people can survive or live longer than without these medicaments. Technological industry development provides for example easier transfer of information, new and better technologies for security etc. Many investors see in these two industries a huge potential both for the investment and for the whole society, so they are really interested to invest in the technological or pharmaceutical industry.

It is possible to say that the technological industry is one of the largest single units of the market. The technological companies invest a huge amount of money into an innovation and invention so they need money. They offer for example their shares in the stock market where the investors can purchase them. So it should be profitable for both of them, but there is also a possibility that the company will not be successful either in its development and research or there will be some different external factors such as a better and faster competitor and the value of the investor's shares will decrease. So a general reccomandation is for example to understand a firm's strategy and visions to the future.

It is also necessary to mention food and agricultural industry. In recent years, agricultural commodities have become increasingly popular choices as investment, the reasons are especially growth of a population and also the scarcity of land. Because of increasing trend of growth population in future and also because of decreasing of agriculture land, there is an expectation that the demand for agricultural commodities will rise. But investment in agricultural commodities is very risky. Agricultural sector is really dependent on weather and other natural disasters. The good choice can be to invest in food production sector which is connected with agriculture, but in general the risk is lower than in agriculture alone. [23] cited in [4]; [24]

3.3.6 Themes- Socially Responsible Investment

Some of the investors are also interested in "origin" of shares or bonds, etc. they want to invest in. The reason is that they are for example very ecological thinking people or they believe in certain religion and they really want to avoid to purchase for example shares of the company which is unethical or environmentally unfriendly. The trend to be interested in these themes is nowadays increasing.

The current problem is that many companies state that they are ethical, environmentally friendly but the real true is little bit different. That is the reason why is it really necessary to understand investment strategy of a chosen company. [25]

3.3.7 Investment Styles

The theory about investment styles defines a lot of different possibilities how managers can manage a fund. The main objective of a manager is to find an investment style which will be profitable. High number of investors thinks that if they will invest in equity funds in one selected geographical territory and in the same market but in different investment company, the performance of each fund should be similar. But basically speaking each fund has for example little bit different style of investment and the performance results of each fund can be very different. Some of the most often used styles are defined below:

3.3.7.1 Active x Passive Portfolio Management

The aim is of the pasively managed fund is to copy as accurately as possible the chosen index or segment- generally speaking to copy a selected benchmark. The changes in the portfolio are usually given only by a change in the benchmarking index. This management eliminates for example the cost for the research of the market trends. The costs connected with a passively managed fund are usually much lower compared to actively managed funds for investment companies.

Fund manager seeks to achieve a better performance than the benchmark when administrating a fund actively. But it of course requires certain costs and also knowledge of the manager of the fund. [11, 26]

3.3.7.2 Small x Large Businesses

If the the investor chooses to actively managed funds, the other decision which is neccesary to do is to choose a size of the fund. The basic possibilities are to invest in rather large, middle or small companies. As large size companies there are considered firms with a market capitalization greater than 5 billion USD in the U. S. As a small company it is defined a company with a capitalization of less than 1 billion USD and of course middle companies are defined as company with capitalization between 1 billion to 5 billion USD. It is clear that large enterprises have a more stable source of revenues than small businesses, and therefore they are less risky but they offer lower growth potential. "New economy" businesses are, with some exceptions as Microsoft, Yahoo or Cisco, in the category of small businesses. [11, 26] cited in [4]

3.3.7.3 Value x Growth Funds

The other very important question which an investor should ask is if he or she is interested to invest in company that is already at the height of it's powers or try to find the businesses from which they soon may become the most profitable ones. The first approach is called value, the second one is growth. It is not basically possible to say that one approach is riskier than the second one. Growth strategy demands an access to a deeper knowledge of the fundamental situation of the company, its management capabilities and potential of the market in which the company operates. The value strategy is usually more advantageous in the boom times, because companies with a good market position in the growth of the economy report further revenue growth. On the contrary growth approach is more advantageous in the recession time when the only companies with a good management and good strategy may growth. [11, 26] cited in [4]

It is sure that the investment styles mentioned above are certain extremes. Portfolio management is always a compromise between these extremes. This is especially true for the two approaches- growth versus value strategy. The distinction between growth and value enterprises is not definite - value fund may eventually prove to be rather growth and vice versa. [4]

3.3.7.4 Market Timing and Buy & Hold Strategy

Many investors are interested about market timing strategy. They try to predict if the value of the shares they want to buy already reached its maximum or minimum and they are also interested in prediction a "mood" of the market. The disadvantage is that the investor can easily sells when the value is "down" and vice versa buys "on top". According to many studies anybody of the professional portfolio managers is not able to systematically and reliably determine whether or when the market or a security has reached its peak or bottom.

The opposite method of the market timing is a strategy of buy & hold where regardless of market sentiment the investor holds securities throughout the investment horizon. This method is based on the principle that in the long- time period most shares rising and according to a series of statistics this strategy provides slightly better results than the approach of the market timing. [11, 27] cited in [4]

3.4 Portfolio of a Mutual Fund

If an investment company knows its strategy of a new mutual fund, the next step is to create a portfolio. It means it is neccesary to find companies where the investment company wants to invest in according to the strategy of a fund. To create a successful portfolio, the risk must by limited especially by sufficient diversification of companies. The basic portfolio should contain at least ten companies which are diversified. It is not a good strategy to have in a portfolio only one company and all financial means invest in it, because the risk of fail is very large.

3.4.1 Portfolio Formation Process

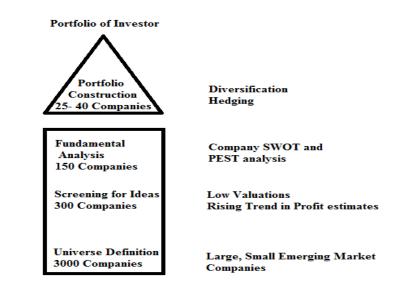
Portfolio formation process differs among the companies. This chapter defines the basic portfolio formation process of AKRO Investment Company in the Czech Republic. But it is possible to say that this portfolio formation process is very general and it is also suitable for different investment companies.

When a portfolio manager of AKRO Investment Company is establishing a portfolio for the mutual funds, the first step for him is to find firms which correspond with the strategy of mutual funds. Basically speaking, AKRO portfolio manager begins with approximately 3000 companies to find the proper ones.

Thereafter, the portfolio manager is focused on screening for selected criteria as low value of shares in the time of buying or rising trend in profit estimates. In this step a portfolio manager selects about 300 companies for further analysis. For the low valuation performance of the company managers use the estimated profit to earning ratio (P/E) and they monitor profit estimates by earnings per share estimation method- EPS trends.

The final step is to select approximately 150 companies where a portfolio manager implements SWOT and PEST analysis. Afterwards, the companies which prove the best results in all selected criteria are chosen to the portfolio. Basically speaking a portfolio of AKRO Investment Company is consists of 25 – 40 companies. The time for the investment- "buy signal" is when the estimation of profit is rising and there is relatively weak share price. All steps are illustrated on the picture 2 below for easier comprehensibility of the process. [28] cited in [4]

Picture 2- Portfolio Formation Procces of AKRO Investment Company



Source: Own elaboration based on data from AKRO Investment Company [28]

The portfolio management of the company avoid firms in financial distress where the shares may be worthless. For predicting this financial distress the company uses Altman Z- score in a proper form (formula for private firms) for each company which was alrready defined in a chapter of literature overview.

They control risk by using risk management written according to the Czech law in the Statute and they also use "rules of thumbs" which do not constitute legal quidelines. These rules are especially result of practice and experience rather than scientific research or theory. The rules of the company are that they have typically between 25- 40 stocks in its portfolio. No stock has more than 10 % of the fund. There is the diversification across the industries and also across the countries, the level of liquidity is adequate and there is the possibility of active curreny hedging also with no open- derivate exposure. This process should result in a portfolio of stocks characterized by good value, strong fundamentals, improving industry background and diversification which also means the common sense criteria.

As a summary of the investment process the basic rules of AKRO Investment Company are that they look for rising profit estimate and a low valuation, in other words they avoid companies with falling profit estimates and high valuations. They buy shares when valuations fall dramatically and they sell on the other hand when valuations rise

significantly and as it was already mentioned they avoid firms in financial distress where the shares may be worthless. [28] cited in [4]

3.4.2 Investment Valuation Ratios

To find a proper company for a portfolio it is necessary to use some basic investing ratios to select a company which should be also sucesfull in future. Portfolio managers use a lot of different types of investment ratios. The basic and most useful investment ratios and other methods are for example:

3.4.2.1 Earnings per Share

The basic and very simple financial index is earnings per share. Theoretically speaking earnings per share is a profit that a company has made over the last year divided by the number of common outstanding shares or units the company and shareholders have. Earnings per share (EPS) is very often used when investors or portfolio managers want to know the value of a stock. The basic formula is following [29]:

Earnings per Share =
$$\frac{Net\ Income-Dividends\ on\ Preffered\ Stock}{Average\ Outstanding\ Shares\ or\ Units}.$$

3.4.2.2 Price to Earnings Ratio

Price to earnings ratio is one of the most used investment valuation ratio and there are a lot of modified versions of this ratio. Basically speaking this ratio shows the relationship between share price and the expected profit from a share. Price to earnings ratio tells how much a market is willing to pay for investment company profits. The higher the P/E is, the lower the profit is in proportion to the share price of the company. High P/E indicated that the share is overvalued because the market has high expectations regarding to future value of share. Vice versa, very low price to earnings ratio means that the market does not trust the investment company's shares. Values in the range between 8 to 15 are usually identifies

as a correct valuation of shares, but it also depends on the type of the P/E ratio. The fundamental formula is following [30]:

$$Price \ to \ Earnings = \frac{Market \ Value \ per \ Share}{Earning \ per \ Share}$$

3.4.2.3 Dividend Yield Ratio

One of the fundamental information for investors is a dividend yield when they assess the attractiveness of the company. It is one of the basic ratios that investor needs for the assessment of suitability of investment. Dividend yield is a ratio between the annual payment of dividend and current market price of the share. This ratio multiplied by one hundred gives information about the dividend yield in percentages. By investing in shares of the company which pay the dividend the investor can ensure a stable income, usually much more attractive than those offered by conservative methods of saving finance such as savings accounts. But Investor must of course take into account the risk for example in the case of problems of the company. It can lead to suspension of payments. Basic formula in is following [31]:

$$Dividend\ Yield = \frac{Annual\ Dividends\ per\ Share}{Price\ per\ Share}$$

3.4.3 Altman Z-Score

Altman Z- score is a bankruptcy prediction model which was created in 1968 by Edward Altman. The basic formula from the year 1968 is:

$$Z = 0.012 X1 + 0.014 X2 + 0.033 X3 + 0.006 X4 + 0.999 X5$$

Where:

$$X1 = \frac{Current\ Assets - Current\ Liabilities}{Total\ Assets}$$

$$X2 = \frac{Retained\ Earnings}{Total\ Assets}$$

$$X3 = \frac{EBIT}{Total\ Assets}$$

$$X4 = \frac{Market\ Value\ of\ Equity}{Book\ Value\ of\ Debt}$$

$$X5 = \frac{Sales}{Total\ Assets}$$

This model used liquidity, past and present profitability, leverage and sales turnover ratios to calculate a single score. Strictly speaking, the lower the score, the higher the
odds are that a company is headed for bankruptcy. A Z score which is lower than 1.81, in
particular, indicates that the company is heading for bankruptcy- it is not financially
healthy and it is in distress zone. Firms with Z scores higher than 2.99 are unlikely to enter
bankruptcy, it is a safe zone. Scores in between 1.81 and 2.99 lie in a middle- grey area. It
is necessary to mention that this formula can be properly used only for manufacturing
firms or sectors with high capital intensity, such as mining.

For private firms the formula was later on little bit changed into this form:

$$Z = 0.717 X_1 + 0.847 X_2 + 3.107 X_3 + 0.420 X_4 + 0.998 X_5$$

Where X_1, X_2, X_3 and X_5 are same as in the basic formula above and X_4 is equal to:

$$X4 = \frac{Book\ Value\ of\ Equity}{Total\ Liabilities}$$

The safe zone Z score is higher than 2.9, the grey zone is between 1.23 and 2.9. The distress zone Z score is lower than 1.23. [32]

3.4.4 Simulation of Portfolio Performance-Sharpe Ratio

Sharpe ratio is a method how to analyze a performance of the fund. It is used to compare the additional rate of return of portfolio with a standard deviation of portfolio. The higher the ratio is, the higher the yield of the fund is and it also takes into account a level of risk. It is possible to calculate ex- ante or ex- post ratio. For a simulation of this thesis it was used ex- post method. The formula is following [33]:

Sharpe Ratio =
$$\frac{Rp - Rf}{\sigma p}$$

Where for ex- post calculation:

R_p = Realized portfolio return in %

 $R_f = Risk$ free rate

 σp = Portfolio standard deviation.

4 PRACTICAL PART

For a practical part of a diploma thesis- establishment of a mutual fund for a chosen investment company, AKRO investiční společnost, a. s. was selected. Firstly it is necessary to define some basic facts about the company and its mutual funds and then to propose a new mutual fund for this company which will supplement the current funds and diversify the offer of the company for the investors of a collective investment.

4.1 Basic Facts about AKRO Investment Company

AKRO investiční společnost, a. s. is an independent fund management company located in Prague in the Czech Republic. It was established in 1993 as Raiffeisen Alfa investiční společnost, a. s. and later on in 1996 it was renamed to the current name. AKRO Investment Company manages nowadays four open- end mutual funds for the public with total net assets of 606.7 million CZK in the beginning of the year 2014. The company was established for an indefinite period. The objects of business of AKRO investment company is the creation and management of mutual funds in accordance with Czech law- Act No. 189/2004 Coll., on collective investment as amended; management of investment funds based on a contract for management of funds; provision of services related to collective investments for other investment companies in accordance with the provisions of Act No. 189/2004 Coll., on collective investment, as amended. The appropriate bodies of the company are the General Meeting, the Board of Directors and the Supervisory Board. The General Meeting is of course the supreme body of the company. The Board of Directors is a statutory body which manages the company and act on behalf of the company. The Supervisory Board oversees the performance of the board of directors and company's business. Members of the Supervisory Board are entitled to consult all documents and records relating to the activities of the company and to check whether accounting records are properly kept in accordance with the financial status and whether business activity is carried out in accordance with the articles of association, the General Meeting instructions and relevant legislation. All activities of the company are supervised by the Czech National Bank according to the Czech law about the collective investment act. AKRO Investment Company is also a member of AKAT ČR which is the Czech Capital Market Association of the Czech Republic and it associates leading collective investment and asset management companies. The investment company also received, as a one of the first investment companies in the Czech Republic, a quality management system certificate ISO 9001:2008. The certification was carried out by Lloyds Register Quality Assurance. [34] cited in [4]

As one of the very important and beneficial issues of the company is, in the opinion of the Chairman of the Board of Directors and the Company's Director, that the AKRO Investment Company is independent fund management firm. AKRO, as one of the few independent investment companies, does not face conflicts of interest, since it is not belong to any of the financial conglomerate. Ing. Jiří Trávníček, the director of the company said: "Our specialists negotiate with third parties highly favourable rates for service fee of funds and trading fees (for example exchange of the Czech crown and purchase of shares). The advantage of our independence is not only to minimize costs, that is the possibility of negotiations on the amount of fees, but also the rejection of low quality service for trading. As it was already mentioned, the high fees reduce the return on your investment. For an illustration our negotiated transaction fees are almost 5 times smaller than those that banks pay themselves!

Our independence also means that we do not have and neither does seek banking or corporate financial relationships with the companies in which we invest. In addition, AKRO does not havy any purchasing department which would purchase the securities for AKRO and this could lead to a conflict of interest in buying the same shares in the funds in which the clients of AKRO already invested their money." [35] cited in [4]

4.2 Mutual Funds of a Company

AKRO Investment Company offers four open- end funds for investors: AKRO Equity Fund of New Economies, AKRO Equity Fund of Global Equities, AKRO Equity Fund of Progressive Companies and AKRO Balanced Fund. Each of these funds has a different investment strategy.

AKRO Equity Fund of New Economies is a main fund of the company. The fund is interested in investment on equities of companies in emerging markets as China and especially Hong Kong. The portfolio manager does not choose any of special industry strategies, the current company portfolio is for example comprised from 20 % by bank industry and real estate industry holds 13 % of the total net assets of the fund. Generally the fund is interested in financial, technical, pharmaceutical and real estate industry. The investment style is a growth fund, not value fund which invests into both large and small companies. The level of risk according to the Czech law is determined as high ones but the potential profits are also high. From the scale of risk from 1 to 7, the fund has a level 6, the second highest number. The time horizon of the fund is 5 and more years, so it is interested especially for investors with the idea of long time horizon. [35]

AKRO Equity Fund of Global Equities is also equity fund which is of course clear from its name. The fund is not interested in emerging markets but in diversified global stock markets. The level of risk according to the Czech law is determined as high ones but the potential profits are also high. From the scale of risk from 1 to 7, the fund has also a level 6, the second highest number. The time horizon of the fund is also 5 and more years, so it is a goof fund especially for investors with the idea of long time horizon, not with a short time horizon of investment. [36]

AKRO Equity Fund of Progressive Companies is a mutual fund which may be recommended for an investor who is interested in the long term horizon to participate in the dynamic growth of the value of the shares of medium size companies and in the total growth in global capital markets. The fund is also recommended for an investor who is willing to accept a higher than average investment risk arising from the concentration of investments in the same types of investment instruments. The level of risk according to the Czech legislation scale is also 6. [37]

The last mutual fund of the company- **AKRO Balanced Fund** may be recommended for an investor who is interested in the medium to high risk in the long term investment horizon (5 and more years). The mutual fund as a special securities fund invests primarily in securities where the majority of investment goes into instruments linked to equity markets, securities with fixed revenues and money market instruments. A mutual fund

invests both in domestic and global markets and also both in developed and emerging markets. [38]

Table 1 below shows net asset value of the funds also with the performance of the funds in the year 2013. The total net asset value of AKRO Investment Company in the end of 2013 was 606.7 million CZK with 176.5 million CZK of net asset value of AKRO Equity Fund of New Economies, AKRO Equity Fund of Global Equities net asset value was 272.5 million CZK, AKRO Equity Fund of Progressive Companies net asset value was 119.3 million CZK and the net asset value of AKRO Balanced Fund was only 38.4 million CZK.

The highest performance in the year 2013 compared to year 2012 had AKRO Equity Fund of Progressive Companies with 18.1 % increasing. The performance of AKRO Equity Fund of Global Equties increased by 13.2 %, AKRO Equity Fund of New Economies increased by 8 % and AKRO Balanced Fund performance increased only by 7.6 % in the year 2013 compared to year 2012. [39]

Table 1- Net Asset Value and Performance of the Funds in 2013

	KRO funds in the npared to 2012	end of 2013
Name of Fund	Net Asset Value 2013 (million CZK)	Performance 2013 (%)
AKRO Equity Fund of New Economies	176.5	+8.0
AKRO Equity Fund of Global Equities	272.5	+13.2
AKRO Equity Fund of Progressive Companies	119.3	+18.1
AKRO Balanced Fund	38.4	+7.6
Total Net Asset Value	606.7	Х

Source: Own elaboration based on data from AKRO Investment Company [39]

Graph 2 shows the historical development of the net asset value per mutual fund's unit in CZK of AKRO Equity Fund of Global Equities, AKRO Equity Fund Of Progressive Companies and AKRO Balanced Fund from January 2010 to February 2014. The highest net asset value per unit has all the time AKRO Equity Fund of Progressive Companies, only from the end of the year 2013 unit of AKRO Balanced Fund has higher net asset value. From the graph it is possible to see that the curve is for all three funds almost same, only with different net asset value for each fund. [40]

Graph 2- Historical Development of the Net Asset Value per Unit in CZK of AKRO Funds

Source: Web pages of AKRO Investment Company [40]

But in the graph 2, AKRO Equity Fund of New Economies is missing, the reason is that the net asset value per unit of this fund is considerably lower than the net asset values per unit of the other funds so it would not be possible to see on the graph the difference of historical development of the fund compared to other funds. Historical development of the net asset value per unit in CZK of AKRO fund of New Economies is shown in graph 3 from 2006 to 2013. The fund has peaked 3.38 CZK net asset value per one unit in July 2007. The highest decline was in October 2008- the net asset value per unit was 1.16 CZK. It was caused by the global financial crisis.

The comparison of these two graphs is very similar. The curve of the trend is almost the same, only with different net asset values for each fund. [41]

52% CZK 3.2 32% 2.7 12% -8% 1.7 -48% 28.2.2009 20.6.2009 0.10,2009 6.2.2010 29.5.2010 18.9.2010 Year

Graph 3- Historical Development of the Net Asset Value per Unit in CZK of AKRO Fund of New Economies

Source: Web pages of AKRO Investment Company [41]

As a conclusion of AKRO funds it is possible to say that all of them are determined for investors which are interested in long term horizon- at least five and more years. Basically they are not interested in any special industry and the level of risk according to the Czech legislation is for all of them very high with of course high potential of profits. The AKRO funds are defined as mutual funds for the general public and especially for beginning investors with no professional knowledge about investment.

4.3 Establishment of a New Mutual Fund for AKRO Investment Company

The main objective of the diploma thesis is to propose a new mutual fund for a chosen investment company- AKRO Investment Company. A new proposed fund should help the company to diversify current funds and offer to the current and also future investors new possibility of collective investment in the Czech Republic.

4.3.1 Fulfillment of Legal Conditions

All neccesary legal conditions for establishment a new mutual fund were already defined in the third chapter- literature overview according to the Czech law.

For establishment a new mutual fund for AKRO Investment Company it is neccesary to write up a statute of the fund. The next very important think is to know who will be a manager of the fund, because AKRO Investment Company is already working investment company with four mutual funds, the potential portfolio manager and investment director for a new fund can be same as for the current mutual funds- Jeremy Monk.

Jeremy Monk, MBA, ASIP, BSc(Hons), DIC is a professional portfolio manager with a very long experience in collective investment. He worked in the Abu Dhabi Investment Authority in London, he was also senior vice- president, head of EAFE Equities in Lombard Odier International Portfolio Management Ltd from 1998 up to 2003. From 2004 he is working as investment director and portfolio manager in AKRO Investment Company in the Czech Republic. [42]

It is also neccesary to establish a name of the fund. Thanks to the strategy which is defined below the chosen name for a new mutual fund is AKRO FFF Equity Fund. The abbreviation FFF determines the industry classification- farming, fishing & plantations and food products industry.

Let us assume that all legal conditions for establishment a new mutual fund for AKRO Investment Company were fulfilled and the Czech National Bank signed AKRO FFF Equity Fund into the list of all mutual funds in the Czech Republic. Afterwads the fund can start to operate. It is also necessary to mention that within one year from the

beginning of the fund AKRO Investment Company has to gathered 50 000 000 CZK from the investors, otherwise the Czech National Bank can suspend a fund. [3]

4.3.2 Strategy of a New Fund- AKRO FFF Equity Fund

Strategy of AKRO FFF Equity Fund investment type is focused only on equities. A fund has industry sector specialization, according to Industry Classification Benchmark a target group is agricultural sector - farming, fishing & plantations, food products. The reason is that any of AKRO funds is not focused on agriculture and industries connected with it. It is very important industry, however there is a lot of potential risks, especially if we are interested in primary food producers. They are dependent on weather. On the other hand if a harvest of some season is really low because of bad climate conditions or other natural disasters they are very often supported by own state or by the European Union when they are members.

Geographically speaking the fund is focused on Western Europe – developed countries. The reason is that the main fund of AKRO Investment Company- AKRO Equity Fund of New Economies is focused on emerging markets as China. To diversify offer of a company for investors, developed countries in Wester Europe were chosen.

The fund should be administrated with a strategy focused on value approach. It means to select companies which are already well- known and they already have a "value".

The fund was created with an idea of medium and long- term investment horizon which means at least 4 years and more.

The level of risk according to the Czech legislation synthetic indicator is relatively high but with high potential of profits. The reason of high level of risk is especially because of chosen investment type strategy focused on equity market and also because of chosen industry connected with agriculture where the profits are not every year stable because of climate conditions etc.

4.3.3 Portfolio Formation Process of AKRO FFF Equity Fund

The strategy of AKRO FFF Equity Fund was already defined in the chapter above. The next very important step in the process of establishment a new mutual fund is to create an investment portfolio. The basic portfolio formation strategy of AKRO Investment Company was already defined and some steps are also used for formation of AKRO FFF Equity Fund portfolio.

To find proper companies for AKRO FFF Equity Fund portfolio Bloomberg Professional service software was used thanks to the AKRO Investment Company. This computer software is intended for global financial professionals.

The first step was to select proper criteria to find right companies. Both strategy of the fund and all these criteria had to be fulfiled to accept the company for the part of the portfolio. For a formation of portfolio of the fund only company with active trading status can be selected. The strategy of the fund is focused according to ICB (Industry Classification Benchmark) on farming, fishing & plantations and food products industry and on countries in Western Europe. The current market capitalization of the company must be higher than 5 million USD. As another criterion Altman's Z- score was chosen and the value must be higher than 1.8. The current P/E ratio must be lower than 13. Another criterion which was chosen and which is also very important indicator is BEst P/E BF12M. This indicator is Bloomberg's estimation for the forward P/E, Bloomberg software uses estimated earnings per share for the next 12 months. This indicator should be as low as possible from the already selected criteria. The other Bloomberg estimation which should be monitored is Best Div Yld BF 12M- estimation of dividend yield for the next 12 months. The portfolio for AKRO FFF Equity Fund should contain only the companies which fulfil all these criteria. All these criteria are again defined below in point as a simplified summary:

- active trading status;
- security attribute: to show only primary security of company;
- sector (according to Industry Classification Benchmark): farming, fishing;
 & plantations, food products;
- geographical distribution: Western Europe;
- current market capitalization: higher than 5 million USD;

- Altman's Z- score: higher than 1.8;
- current price earnings ratio: lower than 13;
- to show BEst P/E BF12M if available;
- to show Best Div Yld BF 12M if available.

All these criteria were set in the Bloomberg Professional software. Picture 3 shows all these criteria and also number of companies when the process started and in the end also number of companies which fulfilled all requirements. The Bloomberg software started with 684 103 security firms and after selection of all criteria it ended with 34 potential firms to invest for AKRO FFF Equity Fund, but some of these firms do not include BEst P/E BF12M or Best Div Yld BF 12M indicator.

Picture 3- Output from Bloomberg Professional- Selected Criteria for Formation of a Portfolio

Selected Screening Criteria	Matches
Security Universe	684103
51) # Trading Status: Active	169419
52) Security Attributes: Show Primary Security of company only	67644
53) * Sector (ICB): Farming Fishing & Plantations, Food Products	2989
54) # Country of Domicile: Western Europe	206
55) # Current Market Cap [USD] > 5 Million	161 🛈 🌘
56) # Altman's Z-Score > 1.8	101 🛈 🏮
57) Current Price Earnings Ratio (P/E) < 13	34 ◑ ●
Display Only Fields	34
58) Country Full Name	34 ◑ ●
59) ICB Subsector Name	34 🛈 🌘
60) BF12M BEst P/E Ratio	34 ◑ ●
61) BF12M BEst Div Yld	34 ◑ ●
62) Click here to add screening criteria	

Source: Bloomberg Professional software, 2014

It was defined that the portfolio of AKRO FFF Equity Fund should contain at least 10 companies. So next step was to select the most proper companies to invest in. From these 34 potential companies it was neccesary to select only 10 companies by using other methods to find the most proper ones. For next selection the qualitative methods as SWOT and PEST analysis and also own experience and other available information about the companies were used. Suplement 1 shows all 34 potential companies with the selected data. Table 2 shows chosen companies from all 34 firms, the 10 selected companies for AKRO FFF Equity Fund formation of a new portfolio are following:

Table 2- Selected Companies for AKRO FFF Equity Fund Portfolio and Chosen Indicators in Beginning of the Year 2014

Selected Companies	for AKRO FFF Equ	uity Fund Portfolio ar	nd chosen indic	ators in	beginni	ng of the y	vear 2014
Name of Company	Country	Industry	Market Cap (USD)	AZS	P/E	BEst P/E BF12M	BEst Div Yld BF12M (%)
HAIKUI SEAFOOD A	Germany	Farming & Fishing	67899072	10.29	1.52	4.51	Х
FINSBURY FOOD GR	United Kingdom	Food Products	59703904	3.94	4.16	7.64	1.79
AGRANA BETEIL	Austria	Food Products	1700035328	2.72	10.96	9.51	3.97
BELL AG - REG	Switzerland	Food Products	1103574272	3.98	12.61	11.06	2.73
TATE & LYLE	United Kingdom	Food Products	4825210368	4.04	11.73	11.54	4.50
BONDUELLE SCA	France	Food Products	953636864	2.35	12.08	11.72	2.03
ORIOR AG	Switzerland	Food Products	375513888	4.88	12.73	12.10	3.61
LA DORIA SPA	Italy	Food Products	265549056	2.37	11.89	12.77	2.31
DAIRY CREST GRP	United Kingdom	Food Products	1159811584	3.59	5.21	12.91	4.62
ANGLO-EAST PLNTS	United Kingdom	Farming & Fishing	460657856	4.10	9.87	13.47	Х

Source: Own elaboration based on data from Bloomberg Professional, 2014

4.3.4 Selected Companies for Portfolio

Now it is neccesary to briefly introduce the chosen 10 companies and also to state reasons for selection. As you can see in table 2 above all companies except one- Orior AG from Switzerland are from the European Union. Eight from ten companies are food producers, one is a fishing company- Haikui Seafood A and one is a plantation company- Anglo- East Plantations. The companies are as follows in order of lowest BEst P/E BF12M indicator from Bloomberg Professional software, but it does not mean that this order of companies shows the best companies for investment as a whole.

4.3.4.1 Haikui Seafood AG

Haikui Seafood AG is German company headquartered in Frankfurt Am Main which processes fishes and seafood for Chinese and international markets in China. They process different products of frozen and canned fish and seafood as prawns, crabs, various

fish species. They are one of the leading producers of seafood products in China. In the beginning of the year 2014 the market capitalization was 67,899,072 USD, Altman's Z-score was 10.29. Price to Earnings ratio was 1.52. According to the Bloomberg estimation of P/E for next 12 months the value is 4.51. It is the lowest value from all the selected companies. The value of estimated dividend yield in percentages for next 12 months was not available in Bloomber Professional software. Picture 4 shows basic facts about the company, it is possible to see the basic facts about price chart, earnings, dividends, corporate information and also the management of the company. [43]

Picture 4- Output from Bloomberg Professional- Basic Facts about Haikui Seafood AG



Source: Bloomberg Professional software, 2014

The net profit of the company was from 2010 to 2012 increasing as it is possible to see in graph 4. In 2010 the net profit was 23.4 million Eur, in 2011 26.7 million Eur and in 2012 the net profit was 32.2 million Eur. But the net profit margin was on the other hand slightly decreasing from 18.5 % in 2010 to 16.5 % in 2012. The data for year 2013 are not available yet. But the estimation is that both net profit and net margin profit will be lower

than last 3 years because of poor fishing season in 2013 as well as new unfavourable conditions for wild catch resulted. These problems mainly affected crabs and shrimps which are higher priced products enjoying superior margins. [44]

Graph 4- Net Profit (mil EUR) of Haikui Seafood AG 2010- 2012

Source: Web pages of Haikui Seafood [43]

According to the research now it is a time to buy these shares because of the problems of last months the share price went rapidly down, from 20 Eur per share in June 2013 to 14.09 Eur per share in the beginning of the year 2014. But of course there is relatively high risk that the recovery of the company will take some time, but on the other hand the company is in its sector very large and well recognized as well as nowadays the trend of eating of fishes and seafood is also still increasing. [44]

4.3.4.2 Finsbury Food Group PLC

Finsbury Food Group PLC is British company with more than 2 000 of employees. It is a leading manufactured company of cakes, breads and also gluten free bakery goods in England. The market capitalization in the beginning of 2014 is 59,703,904 Eur. Altman's Z- score was 3.94, Price to Earnings ratio was 4.16 and the estimated P/E ratio according to Bloomberg Professional software is 7.64 for next 12 months. The estimation of dividend yield by Bloomberg for next year is 1.79 %. Picture 5 shows basic facts about the company. [45]

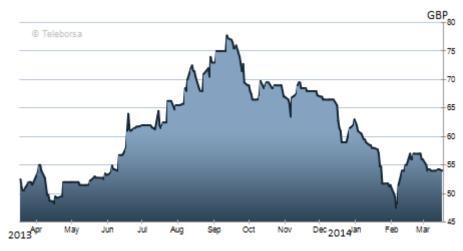
Picture 5- Output from Bloomberg Professional- Basic Facts about Finsbury Food Group PLC





Source: Bloomberg Professional software, 2014

Graph 5- The Value per Share of Finsbury Food Group in GBP from April 2013 to March 2014



Source: Web pages of London Stock Exchange [46]

Graph 5 shows the performance of shares of Finsbury Food Group in GBP from April 2013 to March 2014. From the year 2013 the value of share went rapidly up

compared to 5 year historical development. But as it is possible to see from the beginning of 2014 the value decreased, especially in the end of January and beginning of the February where the value of share was 46.8 GBP. So this was a good time to buy shares of this company.

This company was chosen to the portfolio of AKRO FFF Equity Fund especially because of very interesting products and the company is well known and popular in the Great Britain. It is possible to buy shares of the company through the London Stock Exchange. [46]

4.3.4.3 Agrana Beteiligungs AG

Agrana Beteiligungs AG is Austrian food production company focused on preparations of fruit for the dairy industr and especially on sugar and starch industry. The company operates many factories especially in Austria, but also in Hungary, Germany and also in the Czech Republic. The market capitalization in the beginning of the year 2014 was 1,700,035,328 USD. Altman's Z- score was 2.72, P/ E ratio was 10.96 and the estimated P/ E ratio for next 12 months according to Bloomberg software is 9.51. The estimated dividend yield for next 12 months is 3.97 %. Picture 6 shows basic facts about the company.

Picture 6- Output from Bloomberg Professional- Basic Facts about Agrana Beteiligungs AG



Source: Bloomberg Professional software, 2014

Agrana AG wants to become the world quality leader in refining agricultural raw materials into sugar, starch and also processed fruits. It is a very ambicious firm. The expectations for next years are that it will expand with the processing of fruits, because of sugar regime changes in the European Union and thanks to focusing on fruit processing the company should be less affected by these EU changes.

The share price was in the beginning of the 2014 86.27 Eur, the share price in the end of the February 2014 was 87.7 Eur. The better time to buy these shares was of course in the beginnin of the year 2014.

This firm was especially chosen to the portfolio because of huge potential and also as a one reason- personal reason is that it operates also in the Czech Republic. [47]

4.3.4.4 Bell AG

Bell AG is a Swiss company, it is one of the leading meat procesors in Europe. The company processes and prepares meat, sausages, poultry, fish, seafood and other products. It employes more than 6 600 workers among the European states. The market

capitalization in the beginning of the year 2014 was 1,103,574,272 USD. Altman's Z- score was 3.98 and P/E ratio was 12.61. The estimated P/E ratio for next 12 month is 11.06 according to Bloomberg and the estimated dividend yield also for next 12 monts is 2.73 %. Picture 7 shows basic facts about the company.

Picture 7- Output from Bloomberg Professional- Basic Facts about Bell AG



Source: Bloomberg Professional software, 2014

Bell is listed on the Swiss stock exchange and graph 6 shows the development of the value of shares of Bell AG in Swiss currency from 2010 to the end of January 2014. The graph also shows both the historical lowest value per share- 1,480 CHF and the historical highest value per share- 2,498 CHF. It is sure that the current value of the share is almost the highest value, so generally it is not a good time to buy these shares right now. But as it was already mentioned in the theory the performance of the shares is not the only one indicator if the investment will be profitable or not in future. [48]



Graph 6- The Value per Share of Bell AG in CHF from 2010 to January 2014

4.3.4.5 Tate & Lyle PLC

Tate & Lyle PLC company is a global provider of distinctive, high quality ingredients and solutions to the food, beverage and other industries. The company uses innovative technologies for processing raw materials into distinctive, high quality ingredients for customers. These ingredients which add for example taste or nutrition to products are sold in the whole world. The headquater is in the United Kingdom in London. The company has more than 4, 300 employess. The market capitalization of the company in the beginning of the year 2014 was 4,825,210,368 USD. Altman's Z- score was 4.04 and P/E ratio was 11.73. The estimated P/E ration for next 12 months is 11.54 and the estimated dividend yield for next 12 months is 4.5 % according to the Bloomberg Professional software. Picture 8 shows basic facts about the company.

Picture 8- Output from Bloomberg Professional- Basic Facts about Tate & Lyle PLC



Source: Bloomber Professional software, 2014

As it was already mentioned Tate & Lyle PLC is a huge global company which operates around the world. It is also a company with a high potential in future, but the problem is, as it was already mentioned for Agrana Beteiligungs AG company, sugar regime changes in the European Union. That is also the reason why the price of shares went rapidly down in the beginning of 2014 as it is possible to see in graph 7. On the other hand the company does not process only with sucralose so the estimations for future are positive and the value of share should increase. It is also a very good time to buy these shares because of low valuation. [49]

Graph 7- Tate & Lyle PLC Historical Value per Share in GBP (2009- February 2014) with Low Valuation Indication



4.3.4.6 Bonduelle SCA

Bonduelle SCA is a French company which is producing canned, frozen and also fresh vegetables especially for Europe. It is a world leader in ready-to-use vegetables operated in 18 countries and distributed the products to more than 100 countries. They employe more than 6, 700 workers. The market capitalization in the beginning of the year 2014 was 953,636,864 USD. Altman's Z- score was 2.35 and P/E ratio was 12.08. For the next 12 months (for year 2014) the estimated value of P/E is 11.72 and the estimated value for dividend yield is 2.03 %. Picture 9 shows basic facts about the company.

Picture 9- Output from Bloomberg Professional- Basic Facts about Bonduelle SCA



Source: Bloomberg Professional software, 2014

The value per share in the beginning of the year 2014 was 19.40 Eur. And the trend in January was still increasing up to almost 21 Eur per share. The historical performance of the value of shares is in average slightly increasing compared to 4 last years. All the data are seen in graph 8.

Bonduelle is a traditional and well- known company across the world as well as in the Czech Republic and its sortiment has a high quality which people are willing to pay. [50]

20 18 18 18

Graph 8- The Value per Share of Bonduelle SCA in EUR from July 2011 to January 2014

Source: Web page of Bloomberg Businessweek [50]

Oct

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2014 Year

4.3.4.7 Orior AG

Jul 2011 Oct

Orior AG is a Swiss company providing convenience food for the retail and the catering trades. It has a leading role in the Swiss market in the field of premium convenience food. The main products are the charcuterie specialities, fresh pasta products, pâtés and terrines, poultry, pork and also vegetarian products. The company employs more than 1 000 workers. The market capitalization in the beginning of the year 2014 was 375,513,888 USD and Altman's Z- score was 4.88, Price to Earnings ratio was 12.73. The estimations for next 12 months are 12.10 for P/E ration and 3.61 % for dividend yield according to Bloomberg software. Picture 10 shows basic facts about the company.

Picture 10- Output from Bloomberg Professional- Basic Facts about Orior AG





Source: Bloomberg Professional software, 2014

Orior AG is one of the independent Swiss food groups with a very srong corporate culture that combines both tradition and innovation. The company also occupies a leading position in selected niche markets. This sortiment of products is also very popular among the people in general. It is also a company with different sortiment of goods which helps to diversify the portfolio. [51]

4.3.4.8 La Doria SPA

La Doria SPA is an Italian company with only 500 employees which processed especially vegetables and fruits. It cans tomatoes, sauces, pasta, carrots, potatoes, corn, legumes and fruit juices. La Dorial cans its products under the private labels of the retailers to which it sells. The products are sold mainly in Europe and the Middle East. The market capitalization of the company was in the beginning of the year 2014 265,549,056 USD. Altman's Z- score was 2.37 and Price to Earnings ratio was 11.89 compared to estimated Price to Earnings ratio for next 12 months as 12.77 by Bloomberg. The estimated dividend yield for next 12 months is 2.31 %. Picture 11 shows basic facts about the company.

Picture 11- Output from Bloomberg Professional- Basic Facts about La Doria SPA



Source: Bloomberg Professional software, 2014

La Doria has a leading market position in its largest markets as in Italy and the United Kingdom. Its advantage is that it labels the cans under the private labels of the retailers to which it sells. This is nowadays very popular, almost all supermarkets as Tesco etc. has its own mark. The strategic objective up to year 2015 is to further develop growth in international markets and also to consolidate leadership positions in the domestic market. [52]

4.3.4.9 Dairy Crest Group PLC

Dairy Crest Group PLC is British dairy company with more than 5 200 employees. It manufactures and distributes cheeses, butters and spreads, milk and cream to the retail grocery sector. The market capitalization in the beginning of the year 2014 was 1,159,811,584 USD. Altman's Z- score was 3.59 and P/E ratio was 5.21. The estimated P/E ratio for next 12 years is 12.91 and the estimated dividend yield for next 12 years is

4.62 % according to Bloomberg Proffesional software. Picture 12 shows basic facts about the company.

DCG LN GBp ↑ AT 510.50 L510.00/511.00L 3336 x1174 Page 1/4 Description DCG LN Equity 98) Report 4) Revenue & EPS 2) Issue Info DAIRY CREST GROUP PLC 6) Food Manufacturing (CCB) Dairy Crest Group plc manufactures and distributes dairy products. The Group provides spreads, cheeses, liquid products, and other fresh dairy products to the retail grocery sector. Dairy Crest's food services division sells dairy products to catering outlets, small businesses, households, and food manufacturers. Brands include Clover, Cathedral City, and Frijj. [BBGID BBG000BFLDN61 7) Price Chart (GP) 8) Earn (ERN) 9) Est (EE) 12) Corporate Info (C) 05/22/14 www.dairycrest.co.uk Date P/E 5.21 Esher, United Kingdom 12.92 Empls 5,283 (03/31/13) Est P/E 03/14T12M EPS (GBP) 0.98 14) Management (MGMT) Est EPS Mark Allen 0.40 Est PEG CEO/Exec Dir N.A. Px/Chg 1D (GBp) 510.50/-.1% EU SSR Illiquid Tom Atherton 11) Dividend (DVD) 52 Wk H (01/07/14)560.50 Finance Director/Exec Dir 4.55% 52 Wk L (04/10/13)409.50 Ind Gross Yield) Martyn Wilks YTD Change/% -29.50/-5.46% 5Y Net Growth -3.05% Managing Director/Exec Dir Mkt Cap (GBP) 697.9M Cash 01/08/14 5.90 12M Total Ret (TRA) 26.16% Shrs Out/Float Beta vs UKX 136.7M/136.4M 0.67 No short interest information 20) Depositary Receipts Round Lot available from exchange. Active Receipts

Picture 12- Output from Bloomberg Professional- Basic Facts about Dairy Crest Group PLC

Source: Bloomberg Professional software, 2014

The strategy of the company for future is to build market leading position with its products. They are focusing on cost reduction and also efficiency improvement but with keeping a product high quality standard. They want to reduce commodity risk to improve quality of earnings and generate growth through business acquisitions and disposals.

The dairy products are very popular among the people and they are healthy in general, especially for children. This company diversifies the portfolio with these types of products.

4.3.4.10 Anglo- Eastern Plantations

Anglo- Eastern Plantations is British company which operates in Malaysia and Indonesia. The company produces palm oil, rubber and cocoa. According to industry classification benchmark (ICB) the company is categorized as farming & fishing sector.

The market capitalization of the company was 460,657,856 USD in the beginning of the year 2014. Altman's Z- Score was 4.10 and Price to Earnings ratio was 9.87. The estimated P/E ratio for the next 12 months is 13.47 according to Bloomberg. The estimated value of dividend yield is not available from the Bloomberg Professional software. Picture 13 shows basic facts about the company.

Picture 13- Output from Bloomberg Professional- Basic Facts about Anglo- Eastern Plantations





Source: Bloomberg Professional software, 2014

The company is very interested thanks to its products, especially thanks to palm oil, which become more and more popular among the world. This company helps to diversify the portfolio structure. [54]

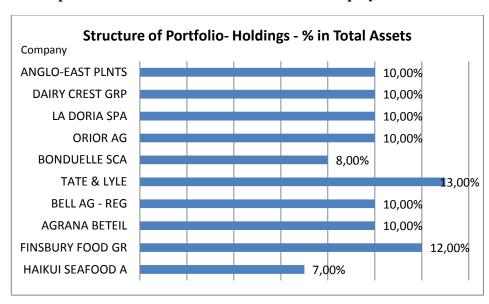
4.3.5 Structure of Portfolio

The companies for a new portfolio are already selected. Now it is neccesary to define the structure of portfolio. There are many theories how to structure a portfolio and it

also depends on investment strategy. The main idea is to create a diversified portfolio to reduce a risk.

By splitting the investment between the stocks from at least 10 companies, it is possible to reduce the potential risk to the portfolio. For a portfolio of AKRO FFF Equity Fund the standard position size of a company is around 10% of portfolio assets, though there may be one or two larger positions, but not higher than 15 % of total portfolio assets. Some of the companies are lower position than 10 % because of for example lower estimation of profit or high price of stocks (overvalued stocks) compared to other companies.

Graph 9 shows a structure of portfolio focused on percentage share in total held assets. The highest percentage share in total assets have two companies- Tate & Lyle PLC with 13 % and Finsbury Food Group PLC with 12 %. Then each of 6 firms have 10 % share in total assets- Anglo- East Plantations, Dairy Crest GRP, La Doria SPA, Orior AG, Bell AG- REG and Agrana Beteil. Bonduelle SCA has 8 % share of total assets and Haikui Seafood has only 7 % share of total assets of portfolio.



Graph 9- Structure of Portfolio for AKRO FFF Equity Fund

Source: Own elaboration based on own processed data

The portfolio consists of 4 companies from the United Kingdom-, 2 companies from Switzerland and 1 company from Germany, France and Italy. Graph 10 shows the geographical portfolio composition in percentages.

Geographical Portfolio Composition (%)

United Kingdom Switzerland Austria Germany France Italy

France 10%

United Kingdom

40%

Austria

10% Switzerland

20%

Graph 10- Geographical Portfolio Composition in % of AKRO FFF Equity Fund

Source: Own elaboration based on own processed data

Industry portfolio composition is not diversified a lot, 80 % of total industry composition is formed from food production companies and only 20 % from different industry sector- farming & fishing (graph 11). But a more detailed analysis shows that the companies in food production sector in the portfolio are diversified. Finsbury Food Group PLC is a leading manufactured company of cakes, breads and also gluten free bakery goods. Agrana Beteiligungs AG is a company focused on preparations of fruit for the dairy industry and especially on sugar and starch industry. Bell AG is a leading meat procesor in Europe, the company processes and prepares meat, sausages, poultry, fish, seafood and other products. Tate & Lyle PLC company is a global provider of distinctive, high quality ingredients and solutions to the food, beverage and other industries. Bonduelle SCA is a French company which is producing canned, frozen and also fresh vegetables especially for Europe. It is a world leader in ready-to-use vegetables. Orior AG is a company providing convenience food for the retail and the catering trades. La Doria SPA is a company which processed especially vegetables and fruits. It cans tomatoes, sauces, pasta,

carrots, potatoes, corn, legumes and fruit juices and Dairy Crest Group PLC is a dairy company. It manufactures and distributes cheeses, butters and spreads, milk and cream to the retail grocery sector. A potential risk is thus properly diversified from industry point of view.

Industry Portfolio Composition (%)

Food Products

Farming & Fishing
20%

Food Products
80%

Graph 11- Industry Portfolio Composition in % of AKRO FFF Equity Fund

Source: Own elaboration based on own processed data

4.3.6 Simulation of Portfolio Performance

It is also necessary to test if a proposed mutual fund can be really profitable for both AKRO Investment Company and new potential investors. For the testing, average annual return and Sharpe ratio with using historical data of the selected companies from the portfolio were selected as proper methods to evaluate the performance of the potential new fund.

4.3.6.1 Average Annual Return

The simplest indicator is the average annual return of shares of companies for last three years- 2011- 2013. Table 3 shows the percentage average annual return of companies between 2011 and 2013. Only one company- Haikui Seafood had a negative result: - 52. 14 %, the reason is that the company had a poor fishing season especially in 2013 as well as new unfavourable conditions for wild catch were aplied. The highest performance had two

firms- La Doria SpA with 152 % and Dairy Crest GRP with 118 % growth in average annual performance of shares from 2011 to 2013. Other companies had the results from 2 % up to 32.80 %.

Table 3- Average Annual Return of Shares of Companies between 2011- 2013 in %

Average Annual Return of Si Companies between 2011-2	
HAIKUI SEAFOOD	-52.14%
FINSBURY FOOD GR	31.72%
AGRANA BETEIL	11.35%
BELL AG - REG	5.18%
TATE & LYLE	10.32%
BONDUELLE SCA	32.80%
ORIOR AG	2.00%
LA DORIA SPA	152.00%
DAIRY CREST GRP	118.00%
ANGLO-EAST PLNTS	4.61%

Source: Own elaboration based on data from web pages of companies

From these average annual returns of shares of companies for last three years-2011-2013 it is possible to simulate the value of historical average annual return of AKRO FFF Equity Fund in percentages between years 2011-2013. For calculation the data of each company from table 3 are used, multiplied by the percentage ratio of each company holds in portfolio- graph 8.

The result of historical simulation of AKRO FFF Equity Fund average annual return between years 2011- 2013 is 33.44 %. It is possible to say that this result is very positive and confirm that both strategy and portfolio structure were chosen clearly, but of course as it was already mentioned the historical positive performance does not guarantee the same performance for next years.

4.3.6.2 Sharpe Ratio

Sharpe ratio is another method how to analyze a performance of the fund. It is used to compare the additional rate of return of portfolio with a standard deviation of portfolio. The higher the ratio is, the higher the yield of the fund is and it also takes into account a level of risk. It is possible to calculate ex- ante or ex- post ratio. For a simulation of AKRO FFF Equity fund performance it was used ex- post method.

Sharpe Ratio =
$$\frac{Rp - Rf}{\sigma p}$$

Where for ex- post calculation:

R_p = Realized portfolio return in %

 $R_f = Risk$ free rate

 σp = Portfolio standard deviation

 R_p = 33.44 % is the fund's performance over the last three years (p. a.), R_f = 0.25 % is the risk-free rate for European Countries according to the European Central Bank (p. a.), σp = 18.9 % is the annualized standard deviation of fund performance calculated from the standard deviations of companies from portfolio.

The result for three- year period (2011- 2013) for AKRO FFF Equity fund is:

Sharpe
$$Ratio = 1.75$$

The result of Sharpe ratio is very high compared to standard equity portfolio. The value of Sharpe ratio is usually around 0. 5. The greater a portfolio's Sharpe ratio is, the better its risk-adjusted performance has been, but if the result is really high the possible reason is a wrong interpretation of Sharpe Ratio. Both risk of depreciation and appreciation of investment are measured by standard deviation. But the positive growth of the value of shares is for the investor positive, but according to Sharpe ratio it is also calculated as a negative aspect.

It is also possible to compare Sharpe ratio of AKRO FFF Equity Fund and AKRO Equity Fund of New Economies. As it was already mentioned Sharpe ratio of AKRO FFF Equity Fund is equal to 1.75 in the 3- year period from 2011 to 2013. Sharpe ratio of

AKRO Equity Fund of New Economies is for the same period equal to -0.56. Theoretically speaking a negative Sharpe ratio indicates that a risk-less asset would perform better than the security being analyzed. But there is a different reason, the fund had an average negative performance in the last three years.

5 RESULTS AND RECOMMENDATIONS

The main objective of the diploma thesis was to propose a new mutual fund for a chosen investment company- AKRO Investment Company. A new proposed fund should help the company to diversify current funds and offer to the current and also future investors new possibility of collective investment in the Czech Republic.

Thanks to the strategy which is defined below the chosen name for a new mutual fund is AKRO FFF Equity Fund. The abbreviation FFF determines the industry classification- farming, fishing & plantations and food products industry.

All necessary legal conditions for establishment a new mutual fund were defined. For establishment a new mutual fund for AKRO Investment Company, it is necessary to write up a statute of the fund. The other very important thing is to know who will be a manager of the fund. As AKRO Investment Company is already a working investment company with four mutual funds, the potential portfolio manager and investment director for a new fund can be the same as for the current mutual funds- Jeremy Monk, MBA, ASIP, BSc (Hons), DIC who is a professional portfolio manager with a very long experience in collective investment.

Strategy of AKRO FFF Equity Fund investment type is focused only on equities. A fund has industry sector specialization, according to Industry Classification Benchmark a target group is agricultural sector - farming, fishing & plantations, food products. The reason is that any of AKRO funds is not focused on agriculture and industries connected with it. It is very important industry. However, there are a lot of potential risks, especially if we are interested in primary food producers. They are dependent on weather. On the other hand, if a harvest of some season is really low because of bad climate conditions or other natural disasters, they are very often supported by own state or by the European Union when they are members.

Geographically speaking, the fund is focused on Western Europe – developed countries. The reason for that is the fact that the main fund of AKRO Investment Company- AKRO Equity Fund of New Economies is focused on emerging markets as China. To diversify offer of a company for investors, developed countries in Wester Europe were chosen.

The fund should be administrated with a strategy focused on value approach. It means to select companies which are already well- known and they already have a "value".

The fund was created with an idea of medium and long- term investment horizon which means at least 4 years and more.

The level of risk according to the Czech legislation synthetic indicator is relatively high but with high potential of profits. The reason of high level of risk is especially because of chosen investment type strategy focused on equity market and also because of chosen industry connected with agriculture where the profits are not stable every year because of for example climate conditions.

The next very important step in the process of establishment of a new mutual fund was to create an investment portfolio. To find proper companies for AKRO FFF Equity Fund portfolio, Bloomberg Professional service software was used thanks to the AKRO Investment Company. This computer software is intended for global financial professionals.

The first step was to select proper criteria to find right companies. Both strategy of the fund and all these criteria had to be fulfilled to accept the company for the part of the portfolio. For a formation of portfolio of the fund only company with active trading status can be selected. The strategy of the fund is focused according to ICB (Industry Classification Benchmark) on farming, fishing & plantations and food products industry and on countries in Western Europe. The current market capitalization of the company must be higher than 5 million USD. As another criterion Altman's Z- score was chosen and the value must be higher than 1.8. The current P/E ratio must be lower than 13. Another criterion which was chosen and which is also very important indicator is BEst P/E BF12M. This indicator is Bloomberg's estimation for the forward P/ E. Bloomberg software uses estimated earnings per share for the next 12 months. This indicator should be as low as possible from the already selected criteria. The other Bloomberg estimation which should be monitored is Best Div Yld BF 12M- estimation of dividend yield for the next 12 months. The portfolio for AKRO FFF Equity Fund should contain only the companies which fulfil all these criteria.

All these criteria were set in the Bloomberg Professional software. The Bloomberg software started with 684 103 security firms and after selection of all criteria, it ended with

34 potential firms to invest for AKRO FFF Equity Fund, but some of these firms do not include BEst P/E BF12M or Best Div Yld BF 12M indicator.

It was defined that the portfolio of AKRO FFF Equity Fund should contain at least 10 companies. From these 34 potential companies it was neccesary to select only 10 companies by using other methods to find the most proper ones. For further selection, the qualitative methods as SWOT and PEST analysis and also own experience and other available information about the companies were used. The selected companies are following: Haikui Seafoof A, Finsbury Food GR, Agrana Beteil, Bell AG- Reg, Tate & Lyle, Bonduelle SCA, Orior AG, La Doria Spa, Dairy Crest GRP and Anglo- Eastern Plantations.

The main strategy of portfolio formation was to create a diversified portfolio to reduce a risk. By splitting the investment between the stocks from at least 10 companies, it is possible to reduce the potential risk to the portfolio. For a portfolio of AKRO FFF Equity Fund the standard position size of a company is around 10% of portfolio assets, though there may be one or two larger positions, but not higher than 15 % of total portfolio assets. Some of the companies are lower position than 10 % because of for example lower estimation of profit or high price of stocks (overvalued stocks) compared to other companies. Two companies have share in total assets higher than 10 %- Tate & Lyle PLC with 13 % and Finsbury Food Group PLC with 12 %. Then, each of 6 firms have 10 % share in total assets- Anglo- East Plantations, Dairy Crest GRP, La Doria SPA, Orior AG, Bell AG- REG and Agrana Beteil. Bonduelle SCA has 8 % share of total assets and Haikui Seafood has only 7 % share of total assets of portfolio.

Industry portfolio composition is not diversified a lot, 80 % of total industry composition is formed from food production companies and only 20 % from different industry sector- farming & fishing. But a more detailed analysis shows that the companies in food production sector in the portfolio are diversified. Finsbury Food Group PLC is a leading manufactured company of cakes, breads and also gluten free bakery goods. Agrana Beteiligungs AG is a company focused on preparations of fruit for the dairy industry and especially on sugar and starch industry. Bell AG is a leading meat procesor in Europe. Tate & Lyle PLC company is a global provider of distinctive, high quality ingredients and solutions to the food, beverage and other industries. Bonduelle SCA is a French company which is producing canned, frozen and also fresh vegetables especially for Europe. It is a

world leader in ready-to-use vegetables. Orior AG is a company providing convenience food for the retail and the catering trades. La Doria SPA is a company which processed especially vegetables and fruits and Dairy Crest Group PLC is a dairy company. A potential risk is thus properly diversified from industry point of view.

It was also necessary to test if a proposed mutual fund can be really profitable for both AKRO Investment Company and new potential investors. For the testing, average annual return and Sharpe ratio with using historical data of the selected companies from the portfolio were selected as proper methods to evaluate the performance of the potential new fund. From the average annual returns of shares of companies for last three years-2011- 2013 it was possible to simulate the value of historical average annual return of AKRO FFF Equity Fund in percentages between years 2011- 2013. The result of historical simulation of AKRO FFF Equity Fund average annual return between years 2011- 2013 is 33.44 %. It is possible to say that this result is very positive and confirm that both strategy and portfolio structure were chosen clearly but of course, as it was already mentioned, the historical positive performance does not guarantee the same performance for next years.

Sharpe ratio for three-year period (2011- 2013) for AKRO FFF Equity fund is 1.75. The result of Sharpe ratio is very high compared to standard equity portfolio. The value of Sharpe ratio is usually around 0. 5. The greater a portfolio's Sharpe ratio is, the better its risk-adjusted performance has been. It is also possible to compare Sharpe ratio of AKRO FFF Equity Fund and AKRO Equity Fund of New Economies. Sharpe ratio of AKRO Equity Fund of New Economies is for the same period equal to -0.56. Theoretically speaking a negative Sharpe ratio indicates that a risk-less asset would perform better than the security being analyzed. But there is a different reason- the fund had an average negative performance in the last three years.

As a conclusion, a simulation of performance of the proposed mutual fund- AKRO FFF Equity Fund for AKRO Investment Company proved high average annual historical returns with very positive value of Sharpe ratio. The proposed AKRO FFF Equity Fund can be recommended as a very interesting and potentially profitable new mutual fund with different investment strategy compared to current AKRO mutual fund for AKRO Investment Company.

6 CONCLUSION

As a conclusion, the main objective of the diploma thesis was to propose a new mutual fund for a chosen investment company- AKRO Investment Company. A new proposed mutual fund should help the company to diversify current funds and offer to the current and also future investors new possibility of collective investment in the Czech Republic.

AKRO FFF Equity Fund was proposed as a mutual fund investing only in equities. A fund has industry sector specialization- farming, fishing & plantations and food production. Geographically speaking, the fund is focused on Western Europe – developed countries. The fund should be administrated with a strategy focused on value approach. The fund was created with an idea of medium and long- term investment horizon which means at least 4 years and more.

According to the selected investment strategy and also according to chosen investment indicators as P/E ratio, Altman's Z- score etc., the portfolio was established from 10 companies with the standard position size of a company around 10% from the total assets in portfolio.

Simulation of performance of the proposed mutual fund- AKRO FFF Equity Fund for AKRO Investment Company proved high average annual historical returns with very positive value of Sharpe ratio. The proposed AKRO FFF Equity Fund can be recommended as a very interesting and potentially profitable new mutual fund with different investment strategy compared to current AKRO mutual fund for AKRO Investment Company.

7 BIBLIOGRAPHY

- [1] Kolektivní investování. *ČNB* [online]. 2011 [cit. 2014-03-02]. Availble at: http://www.cnbprovsechny.cnb.cz/cs/osobni_finance/investice/moznosti_investova ni/kolektivni_investovani.html
- [2] LIŠKA. Václav. GAZDA. Jan. HANZLÍK. Martin. *Kapitálové trhy a kolektivní investování*. 1st ed. Praha: Professional Publishing. 2004. 525 p. ISBN 80-864-1963-0.
- [3] Zákon o investičních společnostech a investičních fondech. In: 240/2013 Coll. 2013.
- [4] Koděrová, Kristýna. Evaluation of Investment Strategy in a Given Investment Fund. Prague: Czech University of Life Sciences, Faculty of Economics and Management, Department of Economics. 2014. 72 p. Diploma Thesis Supervisor: Ing. Petr Procházka, MSc, Ph.D.
- [5] REJNUŠ. Oldřich. *Finanční trhy*. 3rd ed. Ostrava: Key Publishing. 2011. 689 p. ISBN 978-80-7418-128-3.
- [6] FINANCE. Boston Institute of. *The Boston Institute of Finance Mutual Fund Advisor Course Series 6 and Series 63 Test Prep.* Hoboken: John Wiley & Sons. 2005. 224 p. ISBN 978-047-1732-211.
- [7] Strategy. *Oxford Dictionaries* [online]. 2012 [cit. 2014-03-05]. Available at: http://www.oxforddictionaries.com/definition/english/strategy
- [8] Strategy. *Business Dictionary.com* [online]. 2013 [cit. 2014-03-05]. Available at: http://www.businessdictionary.com/definition/strategy.html
- [9] Investment Strategy. *Investopedia* [online]. 2012 [cit. 2014-03-05]. Available at: http://www.investopedia.com/terms/i/investmentstrategy.asp
- [10] BECKER. Philipp M. *Investing in microfinance integrating new asset classes into an asset allocation framework applying scenario methodology*. Wiesbaden: Gabler. 2010. 186 p. ISBN 978-383-4989-260.
- [11] ELTON. Edwin. GRUBER. Martin. BROWN. Stephen. GOETZMANN. William. *Modern portfolio theory and investment analysis*. 9th ed. New York: John Wiley & Sons. 2014. 752 p. ISBN 978-111-8469-941.
- [12] MOBIUS. Mark. *Equities: an introduction to the core concepts*. Singapore: J. Wiley. 2007. 250 p. ISBN 978-047-0821-442

- [13] Money Market. *Cambridge Dictionaries Online* [online]. 2013 [cit. 2014-03-05]. Available at: http://dictionary.cambridge.org/dictionary/business-english/money-market
- [14] SWART. Nico. *Personal financial management*. 2nd ed. Lansdowne: Juta. 2002. ISBN 978-070-2155-147.
- [15] CESR's Guidelines on a common definition of European money market funds. *European Securities and Markets Authority*[online]. 2010 [cit. 2014-03-05]. Available at: http://www.esma.europa.eu/system/files/10_049.pdf
- [16] Commodity Basics: What Are Commodities and Why Invest in Them?. *PIMCO* [online]. 2006 [cit. 2014-03-05]. Available at: http://www.pimco.com/en/education/pages/commoditiesbasics.aspx
- [17] CAVUSGIL. Pervez. N.. GHAURI. Ayse. AKCAL. *Doing business in emerging markets*. 2nd ed. London: SAGE. 2013. 394 p. ISBN 18-492-0154-4
- [18] Global Emerging Markets Equity Fund. *ATLANTIK* [online]. 2013 [cit. 2014-03-05]. Available at: http://www.atlantik.cz/fondy/clanek/global-emerging-markets-equity-fund
- [19] HAFER. R a Scott E HEIN. *The stock market*. Westport. Conn.: Greenwood Press. 2007. 140 p. ISBN 978-031-3338-243.
- [20] Představujeme NYSE největší burzu světa. *Finance.cz* [online]. 2008 [cit. 2014-03-05]. Available at: http://www.finance.cz/zpravy/finance/197807-predstavujemenyse-nejvetsi-burzu-sveta/
- [21] American Stock Exchange: AMEX. *Investopedia* [online]. 2011 [cit. 2014-03-05]. Available at: http://www.investopedia.com/terms/a/amex.asp
- [22] Investing in Domestic vs Foreign Markets in a Volatile Economy. *Money Matters* 360 [online]. 2008 [cit. 2014-03-05]. Available at: http://www.moneymatters360.com/index.php/investing-in-domestic-vs-foreign-markets-in-a-volatile-economy-7-28781/
- [23] A Primer On Investing In The Tech Industry. *Investopedia* [online]. 2012 [cit. 2014-03-05]. Available at: http://www.investopedia.com/articles/stocks/10/primer-on-the-tech-industry.asp
- [24] Invest In Food: Five Ways To Play. *Business Insider* [online]. 2011 [cit. 2014-03-12]. Available at: http://www.businessinsider.com/etfs-to-invest-in-food-five-ways-to-play-2011-8

- The Price of Green: Specialized funds invest in alternative energy and avoid polluters. But a narrow scope can mean big risk. *The Wall Street Journal* [online]. 2009 [cit. 2014-03-05]. Available at: http://online.wsj.com/news/articles/SB100014240529702045185045744186831559 71954
- [26] Jaký investiční styl má váš fond?. *IDnes.cz* [online]. 2005 [cit. 2014-03-05]. Available at: http://finance.idnes.cz/jaky-investicni-styl-ma-vas-fond-doc/inv.aspx?c=A050120_173824_fi_osobni_dku
- [27] Top 10 Investing Strategies. *Mutual Funds.com* [online]. 2013 [cit. 2014-03-05]. Available at: http://mutualfunds.about.com/od/wheretoinvest/a/Top-10-Investing-Strategies.htm
- [28] MONK, Jeremy. A Paradigm for Performance. Prague, 2009.
- [29] CURLEY, Michael T. WALKER, Joseph A. CURLEY, Michael T. *Barron's stockbroker examination: series 7*. 3rd ed. Hauppauge, NY: Barrons, 2007, 443 p. ISBN 07-641-2380-7.
- [30] BRAGG, Steven M. Business ratios and formulas- a comprehensive guide. Hoboken, N.J: Wiley, 2013. ISBN 978-111-8239-827.
- [31] CORREIA, Carlos. FLYNN, David K. ULIANA, Enrico. WORMALD, Michael. *Financial management*. 6th ed. Cape Town: Juta, 2007. ISBN 978-070-2171-574.
- [32] POWELL, H. BAKER, K. GARY, E. *Understanding Financial Management a Practical Guide*. 1st ed. Oxford: Blackwell Pub, 2005. ISBN 978-140-5151-917
- [33] VISHWANATH, Rammana. KRISHNAMURTI, Chandrasekhar. *Investment management a modern guide to security analysis and stock selection*. Berlin: Springer, 2009. ISBN 978-354-0888-024.
- [34] Statut: AKRO akciový fond nových ekonomik. otevřený podílový fond AKRO investiční společnost. a.s. In: *AKRO investiční společnost* [online]. 2013 [cit. 2014-03-05]. Available at: http://www.akro.cz/statuty/s_noek
- [35] TRÁVNÍČEK. Jiří. AKRO: Přední nezávislá investiční společnost České republiky. *AKRO investiční společnost* [online]. 2005 [cit. 2014-03-05]. Available at: http://www.akro.cz/akro_spolecnost.php
- [36] Statut: AKRO globální akciový fond , otevřený podílový fond AKRO investiční společnost. a.s. In: *AKRO investiční společnost* [online]. 2013 [cit. 2014-03-06]. Available at: http://www.akro.cz/statuty/s_glak.pdf

- [37] Statut: AKRO fond progresivních společností, otevřený podílový fond AKRO investiční společnost. a.s. In: *AKRO investiční společnost* [online]. 2013 [cit. 2014-03-06]. Available at: http://www.akro.cz/statuty/s_prsp.pdf
- [38] Statut: AKRO balancovaný fond, otevřený podílový fond AKRO investiční společnost. a.s. In: *AKRO investiční společnost* [online]. 2013 [cit. 2014-03-06]. Available at: http://www.akro.cz/statuty/s_bala.pdf
- [39] MONK, Jeremy. Fourth Quater, 2013 Investment Review. Prague, 2014.
- [40] Vývoj hodnoty vlastního kapitálu na podílový list v Kč. *AKRO investiční společnost, a.s.* [online]. 2014 [cit. 2014-03-15]. Available at: http://www.akro.cz/graphs.php?since%5Bm%5D=1&since%5By%5D=2010&till%5Bm%5D=2&till%5By%5D=2014&fond_g_no%5B%5D=496&fond_g_no%5B%5D=494&fond_g_no%5B%5D=495
- [41] Vývoj hodnoty vlastního kapitálu na podílový list v Kč. *AKRO investiční společnost, a.s.* [online]. 2014 [cit. 2014-03-15]. Available at: http://www.akro.cz/graphs.php?since%5Bm%5D=1&since%5By%5D=2006&till%5Bm%5D=12&till%5By%5D=2013&fond_g_no%5B%5D=80
- [42] MONK, Jeremy. A Paradigm for Performance. Prague, 2009.
- [43] *Haikui Seafood* [online]. 2014 [cit. 2014-03-16]. Available at: http://www.haikuiseafood.com/investor-relations/
- [44] Still navigating through heavy Seas. In: *Equity Story* [online]. 2013 [cit. 2014-03-22]. Available at: http://www.equitystory.com/Download/Research/Haikui_20131206_Informationan alysisBankMe.pdf
- [45] Mission and Strategy. *Finsbury Food Group* [online]. 2014 [cit. 2014-03-22]. Available at: http://www.finsburyfoods.co.uk/about/
- [46] FINSBURY FOOD GROUP PLC ORD 1P. London Stock Exchange [online]. 2014 [cit. 2014-03-22]. Available at: http://www.londonstockexchange.com/exchange/prices-and-markets/stocks/summary/company-summary.html?fourWayKey=GB0009186429GBGBXAIM
- [47] Share Indicators. *Agrana International* [online]. 2014 [cit. 2014-03-22]. Available at: http://www.agrana.com/en/investor/key-data/annual-data/
- [48] Bell AG. *SIX Swiss Exchange* [online]. 2014 [cit. 2014-03-22]. Available at: http://www.six-swiss-exchange.com/shares/security_info_en.html?id=CH0004410418CHF4

- [49] Share Information. *Tate & Lyle* [online]. 2014 [cit. 2014-03-22]. Available at: http://www.tateandlyle.com/investorrelations/shareinformation/pages/shareinformation.aspx
- [50] Stock Charts for Bonduelle SCA. *Bloomberg Businessweek* [online]. 2014 [cit. 2014-03-22]. Available at: http://investing.businessweek.com/research/stocks/charts/charts.asp?ticker=BON:F
- [51] Share information Orior AG. *Orior AG* [online]. 2014 [cit. 2014-03-26]. Available at: http://en.investor.orior.ch/Share-information
- [52] La Doria Spa. *Bloomberg Businessweek* [online]. 2014 [cit. 2014-03-26]. Available at: http://investing.businessweek.com/research/stocks/snapshot/snapshot.asp?ticker=L D:IM
- [53] Share Price Chart. *Dairy Crest* [online]. 2014 [cit. 2014-03-20]. Available at: http://www.dairycrest.co.uk/investors/share-price-chart.aspx
- [54] About Us- Our Business. *Anglo Eastearn Plantations* [online]. 2013 [cit. 2014-02-14]. Available at: http://www.angloeastern.co.uk/

8 SUPPLEMENTS

Supplement 1- Data of Selected Companies Chosen According to the Own Indicators from Bloomberg Professional Software

EQY_FUND_CRNCY	REL_INDEX							
OSD								
Ticker	Short Name	Cntry	ICB Subsector Name Market Cap AZS	Market Cap	AZS	3/d	BEst P/E BF12M	BEst P/E BF12M BEst Div YId BF12M
None (34 securities)								
H8K GR Equity	HAIKUI SEAFOOD A	Gemany	Farming & Fishing		10.288	1.518671	4.509998	
GSF NO Equity	GRIEG SEAFOOD AS Norway	Norway	Farming & Fishing	420175104	2.228	5.779574	6.132327	4.746
AUSS NO Equity	AUSTEVOLL SEAFOO Norway	Norway	Farming & Fishing	1176421120 2.400	2.400	7.398378	6.317178	5.997118
BAKKA NO Equity	BAKKAFROST P/F	Faeroe Island	Farming & Fishing	729267520 4.534	4.534	9.669026	6.466079	6.558621
SALM NO Equity	SALMAR ASA	Norway	Farming & Fishing	1463763072 3.638	3.638	4.888781	7.077612	6.673167
E LSG NO Equity	LEROEY SEAFOOD GNorway	Norway	Farming & Fishing	1642961792 3.588	3.588	5.668656	7.115348	6.684334
		Norway	Farming & Fishing	986198400 3.283	3.283	4.165807	7.207717	6.602525
MHG NO Equity	MARINE HARVEST	Norway	Farming & Fishing	4399306752 2.939	2.939	10.007587	7.640127	9.346434
FIF LN Equity	FINSBURY FOOD GR	United Kingdom Food Products	Food Products	59703904	3.939	4.160946	7.641004	1.788776
	AGRANA BETEIL	Austria	Food Products	1700035328 2.719	2.719	10.959391	9.512869	3.96795
BELL SW Equity	BELL AG - REG	Switzerland	Food Products	1103574272 3.981	3.981	12.612237	11.062249	2.731664
ਤੋਂ TATE LN Equity	TATE & LYLE	United Kingdom	Food Products	4825210368 4.041	4.041	11.729322	11.541692	4.496425
	BONDUELLE SCA	France	Food Products	953636864	2.353	12.078651	11.724937	2.032329
ORON SW Equity	ORIOR AG	Switzerland	Food Products	375513888	4.878	12.729358 12.101842	12.101842	3.607207
	BAYWA AG-VINK.	Gemany	Farming & Fishing	1907128320 3.644	3.644	9.927341 12.125403	12.125403	2.081115
DVO LN Equity	DEVRO PLC	United Kingdom Food Products	Food Products	705827200 4.038	4.038	12.704535 12.583518	12.583518	3.594116
E LD IM Equity	LA DORIA SPA	Italy	Food Products	265549056 2.366	2.366	11.887564 12.766421	12.766421	2.313916
DCG LN Equity	DAIRY CREST GRP	United Kingdom Food Products	Food Products	1159811584 3.591	3.591	5.214285	12.911642	4.615712
SZU GR Equity	SUEDZUCKER AG	Germany	Food Products	5872633344 2.348	2.348	9.531818	12.992968	3.481845
AEP LN Equity	ANGLO-EAST PLNTS	United Kingdom	United Kingdom Farming & Fishing	460657856	4.103	9.866123	13.471145	
APETI FH Equity	APETIT OYJ	Finland	Food Products	184768320	4.656	12.984799	17.302698	5.023696
VLS IM Equity	VALSOIA SPA	Italy	Food Products	164203008	3.635	12.030027	17.769391	2.488967
SIP BB Equity	SIPEF SA	Belgium	Farming & Fishing		3.201	9.975603	19.406046	1.374069
GRYFO BB Equity	GREENYARD FOODS Belgium	Belgium	Food Products	241834144	1.886	2.858005	19.965491	
MAN AV Equity	R JOSEF & C	Austria	Food Products	133632376	3.527	9.274545		
SAP BB Equity	SAPEC	Belgium	Farming & Fishing	90339768	2.399	9.770979		
KRI GA Equity	.K	Greece	Food Products	87080016	4.546	11.07039		
MLK PW Equity	MILKILAND	Netherlands	Food Products	77503848	2.302	4.38154		
UNBL FP Equity		France	Food Products	1801661440 3.045	3.045	11.434997		
FBEL FP Equity	FROMAGERIES BEL	France	Food Products	2716742144 3.480	3.480	12.432433		
RGD LN Equity	REAL GOOD FOOD C United Kingdom Food Products	United Kingdom	Food Products		4.646	8.083333		
MLOLM FP Equity		France	Food Products	23158200	7.267	7.142857		
KANAK GA Equity		Greece	Food Products		5.500	10.216592		
KEPEN GA Equity	FLOUR MILLS KEPE	Greece	Food Products	17737922	2.494	10.394049		

Source: Bloomberg Professional software, 2014