

Theoretical aspects of fundamental analysis

Edvinas Juozapaitis¹, Viktorija Stasytytė²

Abstract Present economic situation in the world, especially in the Europe does not allow investors to hope for expected return from conservative investment instruments - government securities, bonds or deposits. Therefore, such a situation in the market leads to choose riskier investments in shares of the company of both professional and non-professional investors. In order to reduce the investment risk and to increase the possible return, investors often rely on fundamental analysis. This analysis is the homework of the investor before making the investment portfolio: research of the country, industry branch, company. Therefore, in this article the proper application of fundamental analysis is reviewed, while maintaining the logical its sequence in order to evaluate the suitability of various financial measures to be included in investment portfolio.

Index Terms: fundamental analysis, evaluation of shares, financial market, securities, investment.

JEL: D53, G32.

I. INTRODUCTION

The market of securities, as the one of the main components of financial market performs an allocation functions between the investors, who are willing and able to invest monetary funds in order to get the growth of profit, interests and capital and issuers, who are trying to attract capital for development, modernization or achievement of other goals by distributing their share and bonds.

The market of the securities formed in Lithuania quite recently, only in 1993, when the National Securities Exchange was founded. Over more than two decades exchange got stronger, and after the privatization it changed the name to the NASDAQ OMX Vilnius and became attractive enough place for trade of local and foreign investors. However, most of the economic entities for a long time were choosing the conservative investment solutions: securities of the government, savings bonds or bank deposits. However, such investments do not longer meet the expectations of investors as interest rates in Lithuania as well as Europe are at record lows. Such an investment environment, especially relevant today, makes the professional and non-professional investors, seeking for higher returns, to look back at the securities market. In order not to put a foot wrong and properly select the investment direction it is necessary to have adequate knowledge about the shares, which will help to accurately evaluate the prices of the securities and thus reduce the rising risks.

One of the most widely used methods of analysis by investors is the fundamental analysis- a set of financial analysis methods, techniques to determine the “true” value of the financial units. Research conducted by A. C. F. Moube and J. M. Jannach (2003) show, that absolute majority (7 of 10) of investment fund managers by forming an investment portfolio prefer the fundamental analysis. Fundamental analysis is as the main instrument for choosing shares in relatively new exchange, such as NASDAQ OMX Vilnius, because there is not enough historical data to exploit all the advantages of technical analysis.

The main goal of the article is to determine the logical sequence of steps of this analysis by structuring and summarizing the theoretical aspects of fundamental analysis in order to apply it properly for the inclusion of the financial measures to the investment portfolio.

The goals of the article:

1. to determine the essence of fundamental securities analysis;
2. review the peculiarities of the general economic analysis;
3. to determine and summarize the state analysis steps of the main branches of the industry;
4. to describe the performance peculiarities of the company activity.

The object of the research is the fundamental analysis of the securities market. Three methods are applied to the research: the analysis of the related scientific literature, synthesis, comparison and generalization. The methodological peculiarities of the fundamental analysis of the securities are examined and evaluated in the article.

II. THE CONCEPT OF THE FUNDAMENTAL ANALYSIS

Fundamental analysis as the analysis method of the securities, first time was introduced and popularized in the book *Security Analysis* written by Benjamin Graham and David Dodd. According to the authors, fundamental analysis includes selection methods of the securities, which include the wide extensive use of publicly available information for evaluating the former company efficiency and trying to foresee its future perspectives. Exactly eighty years after the first introduction of fundamental analysis method, it is still the most popular one among the investors, such as B.Graham student billionaire Warren Bufffet, “keys to make the rational investment decisions” (Bernstein 1975: 59).

According to D. Cibulskienė and M. Butkus (2009), fundamental analysis is the interpretation of the most important economic indicators and evaluation of country’s

^{1,2}Edvinas Juozapaitis and Viktorija Stasytytė are with the Faculty of Business Management, Department of FinancialEngineering, Vilnius Gediminas Technical University, Saulėtekio ave. 11, Vilnius, Lithuania

activity factors. S. Valentinavičius (2010) complements the conception of fundamental analysis stating that the latter examines the movement of the prices, depending on macro-economic factors: event or conditions of political or economic origin, trade balance, interest rates and inflation size, various other economic indicators. G. Kancerevyčius (2009) describes fundamental analysis slightly differently. According to him, fundamental analysis is such an analysis of the company, financial instrument or whole economic development, that when trying to determine which facts are long-term, i.e. doing a long-term fundamental influence to the development, progress of the examined object, changes of price or value. A. Lileikienė & A. Dervinienė (2010) by emphasizing the influence of the factors agrees with G. Kancerevyčius (2009). These authors also exclude the fact that in order to perform fundamental analysis, the company's profit, dividends, the market, the quality of company management, company market part and branch of the industry, and it eventually comes down to all the economic analysis. R. Norvaišienė (2005) with already mentioned authors agree that fundamental analysis is focused on long term and fundamental indicators, she considers that the most important assumption of this analysis is that the price of the security in the market is determined by its true value, which is caused by macroeconomic, microeconomic and specific factors of own issuer

D. Cibulskienė & M. Butkus (2009), S. Valentinavičius (2010), G. Kancerevyčius (2009), A. Lileikienė & A. Dervinienė (2010), R. Norvaišienė (2005), J. Kartašova & D. Venclauskienė (2014) & Richard C. Grimm (2012) state in their works, that fundamental analysis must be performed in three stages, i.e. to make three different analysis: *general economic analysis, analysis of industry branch state and analysis of company activity*.

According to J. Kartašova & D. Venclauskienė (2014), analysts and investors mainly use two alternative fundamental analysis methods: "top-down approach" and "bottom-up approach" (Table I).

Both Lithuanian and foreign scientific literature authors acknowledge, that the most often used in practice and most popular fundamental analysis method is "top-down". Investors prefer it because of the fact, that according to logical principle, in order to perform a comprehensive analysis of the company activity firstly it is necessary to analyze macro economy of the country, on which directly depends the indicators of company efficiency performing in it. Meanwhile, using other methods of fundamental analysis the consistency and accuracy of fundamental analysis reduces. Nevertheless, G. Cibulskienė & Ž. Grigaliūnienė (2006) emphasize fundamental analysis more as company analysis. According to authors, fundamental analysis does not examine the condition of capital market, but includes only those indicators, that are related to the same company, i.e. sales income, dividends, profit and etc. D. Ulys (2007) agrees to such claims. Author considers that by performing the fundamental analysis it is necessary to evaluate the company efficiency in more detailed way, which will require to examine the activity results of several years, to

perform their forecast, evaluate the effectiveness of company management, competitiveness in the market.

TABLE I
FORECASTING APPROACHES USED IN FUNDAMENTAL
ANALYSIS (KARTAŠOVA, VENCLAUSKIENĖ 2014)

Analysis method	Method sequence
„top- down approach“	First of all, investors analyze and predict the overall economic condition of the country, then the situation of the industry branches and finally the activity of the company. The analysis of the industrial branches is based on general economic analysis, and the analysis of the company activity is based on both industrial branches and general economic analysis.
„bottom-up approach“	Investors start by analyzing and predicting the activity of the companies, then take the analysis of industrial branches and general country's economic state.
Mixed	The country's economic situation is analyzed using the "top-down approach" and then the activities of separate companies are analyzed using "bottom-up approach".

III. THE PECULIARITIES OF GENERAL ECONOMIC ANALYSIS

Fundamental analysis "bottom-up" is started by examining general economic conditions. It is important for investor to not only understand main economic environment processes, but also to evaluate the current condition of economy, predict its future development trends. Economic analysis is performed by detailed examination of each economic sector or by rather informal way (Norvaišienė 2006: 46).

According to Kancerevyčius G. (2009), economic conditions have a significant impact to the financial markets and markets in turn also influence investors and their decisions. According to the studies, 30 to 50 percent of changes of separate share price are caused by various macroeconomic phenomena which also cause about 90 percent of well diversified profitability of securities portfolio. After concluding the market analysis properly, the company sales analysis can be performed, using which the planned company's net income and paid dividends can be calculated.

To take the first step of fundamental analysis and carry out a general economic analysis in order to obtain a holistic picture and form its impact results for possible further analysis areas it is necessary to evaluate three main indicator groups, which are highlighted by G. Kancerevyčiaus (2009) as well as D. Cibulskienė & M. Butkus (2009): country's economic condition and economic policy, country's political situation and social condition (Table II).

TABLE II
ECONOMIC INDICATORS USED IN NATIONAL
ECONOMIC ANALYSIS (COMPILED BY THE AUTHOR
USING CIBULSKIENĖ, BUTKUS 2009 AND
KANCEREVIČIUS, 2009)

Indicator group	Indicator
<i>Country's economic condition and economic policy</i>	Gross domestic product (GDP) and its dynamics
	Monetary policy
	Foreign trade balance and its changes
	Inflation in the country
	Unemployment in the country
	Competitiveness
	Fiscal policy
	Economic sensitivity to energy prices
	Exchange rates and interest rates
	Consumer price index
	State budget surplus (deficit)
	The volume of foreign direct investments
<i>Country's political situation</i>	Occurrence of unconstitutional and violent forces, timing and strength in the country of political changes
	The readiness of the government to monitor changes
	The country's relationships with other countries
<i>Social condition</i>	Population changes
	Distribution of property and income
	Country's climate and possibility of catastrophes

All, without exception, mentioned indicators and their changes influence the country's economies and investors' decisions made whether invest or not. But there are several macroeconomic indicators, which are equally important in both developed and still developing countries, which are excluded by almost all authors:

Gross domestic product (GDP) – is most often used indicator to measure country's industrial activity results and compare economies of the countries. The essence of gross domestic product, as the most general economic indicator is described as sum of finite goods and services estimates, which were created by country's population over a period of time (Kancerevičius 2009: 735). Constantly growing value of the indicator, indicated a healthy country's economic condition and improves the attitude of investors to the business environment of the country.

Inflation – an important macroeconomic indicator, which varies depending on the stage of economic cycle. According to V. Snieška (2011) it is described as the depreciation of money, which is expressed in rising prices of goods and services. Inflation means, that general level of prices of the goods and services rises. In addition, it is not a one-time price increase, but rather constant, long-lasting phenomenon. "Inflationary price pressure creates a sense of uncertainty and lack of the confidence in the future. These

factors tend to reduce the company profitability and prices of equities. Inflation causes the growth of work equipment and labor power costs. If it is aimed to maintain high profitability, it can be compensated by selling the products at higher prices. When failing to avoid rising costs, the resistance of the consumers is growing which lead to the decrease of the company's profit and reflecting through price of lower equities" (Cibulskienė & Butkus 2009: 19). Also, high inflation reduces the competitiveness of the country, because the price of exported goods and services will be high.

Interest rate – the lower the real interest rate is, the higher the country's attractiveness to business investments is, because the current value of future money flows will be higher.

Unemployment – the unemployment rate is understood as the part of unemployed, but willing and able to work persons between the total labor powers. The unemployment is closely related with other macroeconomic indicators: the larger number of employees producing more goods and services create bigger GDP. Lower unemployment increases the purchasing power of the population, thereby the business revenues increase. Finally, when unemployment increases, usually the share prices are falling, because investors expect the company's revenue reduce.

Government deficit (surplus) – the budget deficit forms when the expenditures of the government exceed the revenue. In order to balance the budgeted the government must raise taxes or borrow. Both options affect business environment in the country negatively: by rising taxes the investments are withdrawing, the profitability of the companies is reducing, the business environment becomes less attractive, meanwhile by increasing the volume of borrowing government, interest rate also grows and slows down the business investments. Countries, whose budgets are balanced or even in surplus, are evaluated as best for investments. S. Valentinavičius (2010), as well as D. Cibulskienė & M. Butkus (2009) especially emphasize four, in their opinion main factors of general economic analysis: external events, fiscal and monetary policy of the country and business cycles.

External events, according to D. Cibulskienė & M. Butkus (2009) can be sudden, unpredictable and can favourably or adversely affect the country's economy and the prices of securities. According to authors, international crisis, such as wars, revolutions, crop failure and starvation, currency devaluation, not expected election results, financial defaults, trade agreements, tariff barriers and other can be attributed to the external events. S. Valentinavičius (2010) attributes technological change, often accompanied by worldwide demand and supply change

Fiscal policy – it is "the formation principles and practise of budget revenue, which is implemented by changing the level of government's taxes and expenditure" (Davulis 2009: 286). This author also highlights, that government which implements fiscal policy, changes the size of aggregate demand and through it and volume of GDP and level of unemployment. D. Cibulskienė & M. Butkus (2009) adds, that fiscal policy is very important for both market

participants, because it influences the whole economic activity and determines the profitability of individual farms. In the long term the increase of government expenditures will result in stimulating effect of country economy or its specific segments, meanwhile the increase of taxes will reduce the consumer expenditures and profitability of the business and vice versa. Nevertheless, these authors emphasize, that long period of time, required to approve the tax laws and fiscal policy to affect economy, limits the effectiveness of this policy.

Monetary policy, according to V. Vaškelaitis (2006), is the activity, relative to management of money turnover in the country: increase or reduction of the money demand, which is performed by the country's Central Bank.

D. Cibulskienė & M. Butkus (2009), writes, that the maintenance of sufficient country's growth and state's currency value is the most important goals of credit policy performed by Central bank. They are achieved by application the economic regulatory measures: by changing the level of monetary growth and promoting the interest rates to reflect changes in the economy. According to the authors, monetary policy application affects the expectation of the business, which in turn has an impact on securities prices. This view is shared by S. Valentinavičius (2010), arguing that the rumours reaching investors, the activity of central bank, interest rate change or even the expectation of changes in monetary policy can change the prices and hopes of shares.

Business cycles. Fluctuations of the economy happen all the time, after the higher ups the downturns come, although the trend of the economy activity is rising in the long period. Economist do not doubt in economic cycles, but none of them can specifically identify, in which cycle state the economy is at the present time and when its direction will change. According to the opinion of D. Cibulskienė and M. Butkus (2009) the economy fluctuates due to sudden outbreaks of economy growth followed by falls, recessions or even depressions of a different nature. These irregular but frequent fluctuations of the economic activity are called business cycles. In most of the science sources four main business cycle phases are identified: the bottom, carpet, peak and fall (Mackevičius, 2012; Žėkas & Žigienė, 2009; Cibulskienė & Butkus 2009; Davulis 2009).

R. Mackevičius (2012) describes all cycle phases and identifies the economic phenomena occurring at their time—the higher point of cycle elevation (also called the peak) shows the biggest activity of economy, the lowest point of cycle (also known as recession) reflects the lowest activity condition or the economy, the rise and fall stages reflect the economic growth and decline. The highest and lowest points of economic cycle show the points of change, while the rise and recessions are the main stages.

“Due to future uncertainty business cycles can affect the prices of securities depending on certain conditions. <...> it is usual, that the prices of equity grow before and through the periods of business growth, because the expectations of profit are becoming more strong, and increases the possibility of higher dividends. The prices of equity tend to

TABLE III

INVESTMENT STRATEGIES AT DIFFERENT PHASES OF BUSINESS CYCLE
(COMPILED BY THE AUTHOR USING CIBULSKIENĖ & BUTKUS 2009;
EMSBO-MATTINGLY, ET. AL. 2014)

Business cycle stages	Investment strategy
<i>Growth phase</i>	<ul style="list-style-type: none"> The fastest growth on average lasts about a year and the annual return of the shares during this period reaches up to 25 %. A business cycle pinnacle is not yet reached, the share market is still strong and continues to grow due to bigger profit ad expectations of dividends, but the growth period is ending soon, and the economic declines will begin, so it is not recommended to buy shares. The interest rates are growing and the demand of the credit is high, so it is advised to invest cash in short term securities, because at the presence of monetary limitation policy the short term interest rates usually are higher than long term ones.
<i>The peak</i>	<ul style="list-style-type: none"> Slow growth rate lasts approximately 3 years, and the annual share return in the stage of the peak reaches up to 15 %. After reaching the peak of the current cycle the prices of equities are falling due to reduced profit forecasts, so investors should sell equities of the companies which operate in the cyclical industry branches. The highest possible level of profitability can be achieved by investing in short term bonds.
<i>The fall stage</i>	<ul style="list-style-type: none"> The fall stage lasts about one and a half years, and annual share return does not exceed 5 %. Recessive conditions are notable and economic perspectives become uncertain, so investors should not buy equities, and due to reducing interest rate sell the short term and buy medium term bonds.
<i>Crisis</i>	<ul style="list-style-type: none"> Minimum duration is about 9 months; the average annual share return is 10%. The end of the recession is already seen, so the prices of the equity begin to rise and investors should buy shares of industry branch companies which are valued unfavourably, while waiting for the profit and dividend growth. After the credit conditions become lighter and drop of the interest rate it is recommended to sell the securities of fixed income.

reduce in the time of business decline and also can predict the business peak., i.e. when the economic conditions are

still looking favourable. The reason of the decrease of share prices is related to forecasts of lower profit, and this can lead to dividend reduction and lower accountable value growth of company property. Concerned about their income investors sell the equities in order to get capital for reinvestment of fixed income securities to maintain or increase the return on asset.” (Cibulskienė & Butkus 2009: 20). The behaviour of the investors depend on the specific business cycle phase, because it affects the price of financial assets. In each phase investors act differently and rely on favourable to that stage investment strategies (Table III). For investors it is very important to accurately determine on which phase of the cycle the state is and to choose proper investment strategy: buy financial instruments in the time of crisis, when they are at least expensive, and sell, when they look the most attractive and bringing profit.

IV. THE PECULIARITIES OF THE ANALYSIS OF INDUSTRY BRANCH CONDITION

After the investor conducts the general economic analysis and becomes sure, that the investment time is appropriate, G. Kancerevyčius (2009) advises to switch to the second fundamental analysis indicator, which have the biggest impact to profitability of shares- the search of effective industry branch. The industry branches reflect the fluctuations of whole economy, but in different levels, so the industry analysis allows to choose the most perspective branch for investments.

R. Norvaišienė (2006) claims that in the same industry branch operating companies have an analogous production characteristics, also are conditioned by the same social economic factors, but can differ in their size, production methods and the assortment of produces production. According to author’s opinion the industry branch should be analysed in two different phases: firstly, determine the competitiveness of specific branch and then find out the companies operating inside the branch, which have special perspectives of development.

G. Kancerevyčius (2009) writes, that in order to determine the share price changes of industry branch companies it is necessary to calculate indexes separate for each of them. These indexes are different form the indexes of the whole market, so by comparing them it can be determined, which share prices of the industry branches are correlate with the whole market, and of which branch the profitability is higher than the whole market’s. According to the author, the forecast of industry branch profitability as the profitability of whole market can be performed by calculating the predicted coefficients of profit to one share (EPS) and Price/Earnings (P/E).

By analyzing the industry branch it is very important to determine the stage of its cycle and to evaluate possible growth potential. Authors specify the different number of main life stages and their names. G. Kancerevyčius (2009) and E. V. Karniouchina et. al. (2013) identify three main stages of development cycle: looking around, development and stabilization and R. Norvaišienė (2006) & S.

Valentinavičius (2010) identify four stages and name them differently. However, the cycle stages indicated by all authors can be identified as described investment solutions in each of them are very similar.

According to G. Kancerevyčius (2009) in the stage of looking around the demand grows suddenly. Most companies fail because of fierce competitiveness, but the sales and profit increase very much of the survived ones. The investment risk of these newly emerged unknown companies is very high, but planned profitability is also big. In this stage the biggest potential profits and risk are possible. The development stage is most suitable for investment- the companies in the branch are stable and large, they are no longer at the unexpected fail, often paid dividends. Such companies attract many investors, who easily notice their future potential. When the industry branch reaches stabilization stage, its rate of growth reduces, although the sales of the company can still increase. The market becomes full, growth reduces, so the companies can pay a relatively large, steadily growing dividends.

By the opinion of S. Valentinavičius (2010) there are four main life cycles of the industry: the level of the beginning, when the branch growth is especially big, the stabilizing level, when the industry branch grows faster than whole economy; mature level, when the growth of industry branch is equal to economy growth and fall level, when the growth of industry is slower than the growth of the economy or growth does not exist at all.

R. Norvaišienė (2006) also describes four development cycle stages of industry branch- risky for investment because of unexamined industry branch; growth- the most attractive for investments, because the growth of industry branch is big and the uncertainty reduces; mature- the most sensitive for economic changes and less attractive for investment; and stability or decline- the worst for investments.

By conducting the analysis of industry branch condition it is also necessary to know, how much the examined industry branch is related to cyclic movement of the economy. So, the industry branch must be evaluated according its activity in the general context of economy. G. Kancerevyčius (2009) & R. Norvaišienė (2006) are classify business branches: the companies of growing business branch are most attractive to investors, because their profitability is bigger than profitability of general industry average and the growth do not depend on economic cycle. Such business branches can be of communications, medical, computer and software production. Protective (stable) branches are weakly affected by the economic fall and inclusions, and the industry branches of utilities and food are included in it. Mostly cyclic industry branches change with the cycle, they thrive, when the economy grows and dying in the time of recession, for example, the branches of car, construction, household equipment production. The opposite to cycle industry branches move to opposite directions to economic changes: the industry of gold production. The interest rates that are sensitive for changes include sectors of financial services, real estate, construction, insurance.

G. Kancerevyčius (2009) also mentions that by analyzing the industry branch it is appropriate to define, what competitiveness forces (according to Porter) affect a specific branch. It can be a threat of new competitors emerging, the threat of substitutes, the bargaining possibilities of buyers and suppliers and competitions between already existing competitors. These forces lead to the ability of a specific industry branch companies to earn costs exceeding the investment profitability, so investors should evaluate them and take them into account.

V. THE CHARACTERISTICS OF COMPANY ACTIVITY ANALYSIS

After evaluating the time suitability for investments, finding the most perspective industry branch, it remains to find the most perspective company in that branch (Kancerevyčius 2009). A. V. Rutkauskas & P. Stankevičius (2006) claim, that fundamental analysis is based on careful research of economic condition (state) of security issuer. Such an economic condition of the issuer evaluation can be performed by financial statements and calculating main company financial analysis indicators. These indicators according to many authors (Aleknevičienė 2011; Juozaitienė 2007; Kancerevyčius 2009; Mackevičius et. al. 2011) in unison are divided into such groups: of profitability, solvency, effectiveness, stability and market indicators. Various authors exclude different indicators from these group, which, in their opinion, should be used for further step of fundamental analysis- company activity analysis. However, among the many authors' (Achelis 2013; Cibulskienė & Butkus 2009; Cibulskienė & Grigaliūnienė 2006; Griciūtė et. al. 2007; Kancerevyčius 2009) purposed indicators dominant ones are shown in the Fig. 1.

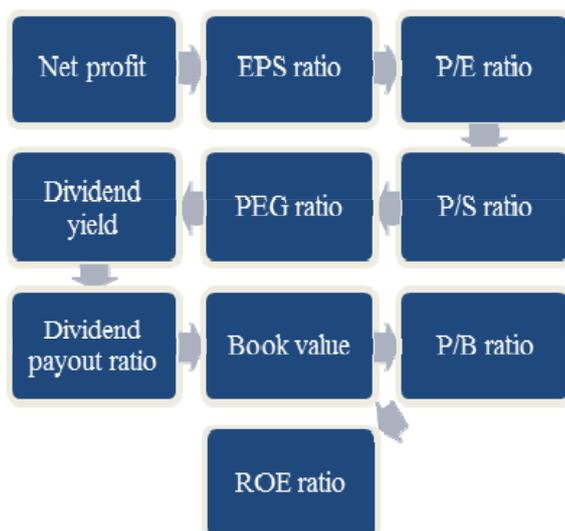


Fig. 1. The company's financial condition assessment indicators (compiled by the authors)

D. Cibulskienė & Ž. Grigaliūnienė (2006) writes that by firstly conducting the fundamental analysis at the level of company it must be evaluated, what size of net profit was earned by the company over the analyzed period of time. The value of this indicator is very important for investors, as the size of earned profit determines the decision of meeting of shareholders, what size and whether at all to pay the dividends to shareholders. The indicator if company's earned net profit also allowed to predict the development possibilities and potential of capital gain. However, small company's earned profit, or even loss does not mean, that the latter is not attractive to the investment, because it often happens to new companies which are preparing for big development. Therefore, it is very important to determine, what factors had influence on company's profit, which would help to indicate whether the planned investment will give the expected return. As it is very difficult to establish to what number of shareholder in each case the company profit will be allocated in the form of dividends, only the company's earned profit is not the best indicator for share selection to the portfolio of the securities.

Therefore Griciūtė et. al. (2007) proposes to calculate the profit of share (EPS). It is calculated by dividing the net profit from the number of shares released in circulation. Silviana & Rocky (2013) writes that by knowing the share profit investors can calculate the profitability of investments, because this indicator reflects the future income, capital gain or losses due to capital reduction. It is used, when it difficult to analyze the inner activity of the company. However, this indicator, does not show the evaluation of analyzed company in the market. Small indicator can mean, that company underestimates or the market does not believe that company will work successfully in the future" (Norvaišienė 2006: 64). This indicator is calculator only for profit making companies.

By the opinion of G. Kancerevyčius (2009), when the company is working at a loss, does not get the profit and does not pay dividends is suitable calculation of market price and rate of sales (P/S). The bigger the market price rate of sales and share is, the bigger the possibility, that the company will soon become profitable. It is known that profit often fluctuated due to accounting reasons, so the bigger benefit is given by using more stable sale data. If P/E indicator is distorted by large fluctuations in profit, then this indicator is appropriate to change by the rate calculation of market price and sale.

Indicator, which helps to evaluate the growth of future income is called PEG. It is calculated by dividing P/E indicator from profit growth rate expected from the next year in percentage terms. According to D. Cibulskienė & Ž. Grigaliūnienė (2006), the smaller calculated company's PEG value, the more attractive its share value is, because for each additional profit unit investor will pay less. "Small PEG indicator shows, that the company is underestimated. The right evaluation is when the PEG is equal to 1. If PEG exceeds this vale- the company is overvalued.<...> PEG indicator is usually used by conducting the analysis of growing companies" (Cibulskienė & Butkus 2009: 48).

D. Cibulskienė & Ž. Grigaliūnienė (2006) write that investors, conducting fundamental analysis, often want to compare paid dividends of various companies. Absolute dividend expression is not very appropriate for that, so into analysis the dividend profitability indicator is included. It is calculated by dividing one share dividends from share price. If the company is young, growing, its indicator value will usually be small, while the dividend profitability of the strong, mature companies will be quite high. Dividend profitability cannot be calculated for small companies, as they usually do not pay dividends to shareholders. This fundamental analysis instrument can be useful not to all shareholders, especially those, who do not seek to generate income from dividends.

Many of authors also indicate that for fundamental analysis the coefficient of dividend payout is especially important, which is calculated by dividing one share dividends from share profitability or by dividing the whole dividend amount from general profit amount. "The coefficient of dividend payout reveals what kind of profit part is given to dividend payout to the shareholders (Mackevičius 2011: 142). This coefficient not always allows to optimally evaluate the attractiveness of the investments, as new, developing companies are more likely to reinvest profit rather than paying dividends to shareholders. The high, attractive dividend profitability can also mask the irrational company management and profit allocation. R. Kancerevyčius (2009) also advises to pay attention to the fact, that different industry branches have different fund need and different profit fluctuation, so it is the best to compare dividend payout coefficient with branch average.

The calculation of balance value is one more important element of fundamental analysis, as D. Cibulskienė & Ž. Grigaliūnienė (2006) claim, that previously mentioned indicators are not enough to form the portfolio of securities. Balance value is determined by company's property minus liabilities. In this way, it is evaluated what net material value of the company will be if company decides to go out of business. According to authors, all companies expect to remain on the market, implement development and earn profit, so their market value significantly exceeds the balance value. For this reason balance value is valuable indicator to investors, who are looking for undervalued shares, current price of which is very attractive to buy. In order to compare balance values of several companies it is necessary to evaluate balance value per one share.

The ratio of share price and book value (P/B) compares the share price in the exchange with real property price of the company. P/B is calculated by dividing the share market value of the company from share nominal value. The smaller this indicator values, the better shares are evaluated in the market. By using P/B indicator it is attempted to find such companies, market value of which is smaller than actual value of its property. The low indicator value shows that company's shares are not evaluated enough or that it is managed poorly, and high P/B ratio allows to understand, that shares in the market are overvalued or the rapid company growth is expected. If this ratio is lower than 1, it

means, that the price of share is right, meanwhile if it is higher- the company is considered to be overvalued. D. Cibulskienė and M. Butkus (2009) highlight that the advantage of this indicator is its simplicity, because it show certain safety limit (when the accountable profit litas is purchased for a smaller price), and disadvantage - the possibility to manipulate with indicator value, depending on the accounting differences.

Return on equity (ROE) shows what percentage of profit part goes to property litas. Sometimes this indicator is used for selecting companies which earn big profit with small capital (Cibulskienė & Butkus 2009: 53). The indicator is calculated by dividing net profit from capital of the owners. Griciūtės et. al. (2007) claims that ROE indicator is suitable measure for evaluation of investment effectiveness: to find out how much of profit is earned by one unit of currency, invested by the shareholders. The more ROE indicator value is higher, the more company is attractive to investor.

After conducting the fundamental analysis, determining the prognosis of the calculated indicators' future values and after using the chosen discounting (reductionism) scheme, investor- analyst find their current value, i.e. "inner" value of the share. Later this value is compared with current share market price. If share market price is smaller than calculated "inner" value, then it is said, that share in the market is "underestimated" and according to fundamental analysis principles it should be bought. In this case, it is believed, that in the future the market price will be close to "real" one. Meanwhile, when the share market price is bigger than "inner" one, then it is said, that the share is "overvalued" and it should not be bought while expecting price increase (Rutkauskas & Stankevičius 2006: 57).

In addition to all the above mentioned company financial indicators evaluation, when conducting the fundamental analysis, to the investor it is also very important evaluate qualitative parameters of the company. The fundamental analysis on the level of the company loses its essence if qualitative indicators are not included into general company evaluation. The investor, in order to make most optimal and long term investment solutions must be well aware of the qualitative criteria and rely on general logic, although it may be difficult to objectively evaluate one or other qualitative indicator (for example, the company's management, which is not well known). D. Savickaitė & V. Valvoniš (2007) identify four main groups of company qualitative parameters: company's management; business, production, customers, market; plans strategies, forecasts and other qualitative factors. By the opinion of the authors, investor conducting the fundamental analysis on the level of the company can evaluate each qualitative indicator with points.

By conducting the qualitative company analysis, firstly it is needed to evaluate the company management. At this stage, the investor must access to the company's management structure, personal and marketing. The biggest attention must be paid to evaluate qualification, experience and expertise of managers, Also the information about the company's owners is collected, the provided information reliability is tried to be evaluated, as well as the

effectiveness of management to the company. Not least important must be the evaluation of marketing, image, reputation. Also, if there is a possibility, the company risk management and company structure can be analyzed.

By evaluating the business, production, customer or market it is recommended to take into account the company's market share, competitiveness of products and services provided, dependence on suppliers and buyers. Additionally, the company's level of activity diversification and cost structure can be taken into account.

The second qualitative analysis stage- the evaluation of plans, strategies, forecasts. If the available information is enough the most important is to evaluate the company's financial planning, control, also take into account the accuracy of the financial forecasts, its frequency and monitoring. Also the company's activity (business) plan or strategy can be evaluated.

Finally, the qualitative company analysis is completed with evaluation of other indicators. At this stage it is recommended to take into account the level of the technologies used by the company, environmental or other risk types and implementation of previous company's commitments.

IV. CONCLUSION

By conducting fundamental analysis, i.e. examining everything what is behind the limits of securities market in order to determine the share market prices and fundamental indicators which influence them over the long term, firstly, the most suitable country is selected, then the effectively operating industry branch and finally, the effectiveness indicators of company activity are analyzed.

Both the country's and global economic state is very important for the investor, who plans the expected investment profitability and money flows. So it is appropriate and important to determine and evaluate the main macroeconomic indicators of the country: gross domestic product, inflation, level of unemployment, interest rate and budget deficits. Not less important is to properly analyze the fiscal and monetary policies, current business cycle phase and predict possible various external phenomena consequences to prices of securities. After evaluating and structuring the whole information, the investor can decide whether it the time is proper of investment, or it is better to refrain.

By conducting industry branch condition analysis, firstly the profitability of a certain industry branch is calculated and compared to general market profitability. Later, the branch development cycle stage must be determined and interfaces with economic cyclic movement must be found. Generally, industry branch analysis includes the research of branch structure and main characteristics, main economic and industrial and research of branch perspectives.

In order to determine the real company's share value it is necessary to use both quantitative and qualitative indicators. The general analysis of these indicators helps to evaluate which company's shares are "underestimated" and which –

"overvalued". It allows the investor to make optimal investment decisions and evaluate in which investment in company's shares is more profitable. A more detailed analysis allows the investor to evaluate better the investment risk and expect the higher investment returns.

REFERENCES

- Achelis, S. (2013). *Technical Analysis from A to Z*, 2nd Edition. McGraw-Hill. 400 p.
- Aleknevičienė, V. (2011). *Management of Company's financials: tutorial* [lit. Įmonės finansų valdymas: vadovėlis] Kaunas: Spalvų kraitė. 430 p.
- Bernstein, L. A. (1975). *In Defense of Fundamental Investment Analysis*. Financial Analysts Journal, 57-61.
- Cibulskienė, D., & Butkus, M. (2009). *Investment Economy: Financial Investments: instructional book* [lit. Investicijų ekonomika: finansinės investicijos: mokomoji knyga] Šiauliai: Šiaulių universiteto leidykla. 191 p.
- Cibulskienė, D., & Grigaliūnienė, Ž. (2006). *The Influence of Fundamental and Technical Indicators on Formation of Portfolio of The Securities* [lit. Fundamentalių ir techninių veiksnių įtaka vertybinių popierių portfelio formavimui] Šiaulių universitetas: Ekonomika ir vadyba: aktualijos ir perspektyvos, 2 (7), 25-34.
- Davulis, G. (2009). *Economy Theory: the tutorial for high school students* [lit. Ekonomikos teorija: vadovėlis aukštųjų mokyklų studentams] Vilnius: Mykolo Romerio universiteto Leidybos centras. 432 p.
- Emsbo-Mattngly, E., et. al. (2014). *The Business Cycle Approach to Equity Sector Investing*, The Asset Allocation Research Team, September 2014 (online): <https://scs.fidelity.com/common/application/markets_sectors/business_cycle/Business_Cycle_Sector_Approach.pdf>.
- Graham, B., & Dodd, D. L. (1940). *Security Analysis*. 2nd ed., New York: McGraw-Hill.
- Griciūtė, R.; Grigaliūnienė, Ž., & Juozėnaitė, V. (2007). *Formation of Securities Portfolio on the Basis of Fundamental Analysis, the Works of Junior Scientists* [liet. Vertybinių popierių portfelių formavimas fundamentaliosios analizės pagrindu, Jaunųjų mokslininkų darbai], 3 (14), 141-150.
- Grimm, R. C. (2012). *Fundamental Analysis as a Traditional Austrian Approach to Common Stock Selection*. The Quarterly Journal of Austrian Economics 2, 221-236.
- Juozaitienė, L. (2007). *Company finance: analysis and management: tutorial* [lit. Įmonės finansai: analizė ir valdymas: vadovėlis] Šiauliai: Šiaulių universiteto leidykla. 415 p.
- Kancerevyčius, G. (2009). *Finance and Investment* [lit. Finansai ir investicijos] Kaunas: Smaltija. 904 p.
- Karniouchina, E. V., et. al. (2013). *Extending the Firm vs. Industry Debate: Does Industry Life Cycle Stage Matter?* Strategic Management Journal, 34, 1010-1018.
- Kartašova, J., & Venclauskienė, D. (2014). *Valuation of fundamental analysis reliability in stock pricing: theoretical approach*, in 8th International Scientific Conference "Business and Management 2014", May 15–16, 2014, Vilnius, 225-262.
- Lileikienė, A., & Dervinienė, A. (2010). *Formation and Management of Share Portfolio on the Basis of Fundamental and Technical Analysis* [lit. Akcijų portfelio formavimas ir valdymas fundamentalios ir techninės analizės pagrindu], Vadyba, 17(1), 15-24.

- Mackevičius, R. (2012). *Logistic Analysis of Economic Cycles*: doctoral dissertation, [lit. *Ekonominių ciklų logistinė analizė: daktaro disertacija*] Vilnius: Vilniaus universitetas. 169 p.
- Mackevičius, J., Poškaitė, D., & Villis, L. (2011). *Financial Analysis: Tutorial Book* [lit. *Finansinė analizė: mokomoji knyga*] Vilnius: Mykolo Romerio universiteto Leidybos centras. 158 p.
- Moube, A. C. F., & Jannach, J. M. (2003). *Mutal Funds and Corporate Stock Selection*. Göteborg University. School of Business, Economics and Law. 137 p.
- Norvaišienė, R. (2006). *Management of Company Investments* [lit. *Įmonės investicijų valdymas*] Kaunas: Technologija. 206 p.
- Rutkauskas, A. V., & Stankevičius, P. (2006). *Management of Investment Decisions: Monography*. [lit. *Investicinių sprendimų valdymas: monografija*] Vilnius: Vilniaus pedagoginio universiteto leidykla. 374 p.
- Savickaitė, D., & Valvonis, V. (2007). *Company ratios: experience of Lithuanian banks*. Monetary studies [lit. *Įmonių reitingavimas: Lietuvos bankų patirtis, Pinigų studijos*] 1, 86-108.
- Silviana & Rocky. (2013). *Analysis of Return on Assets and Earnings per Share on the Stock Market in the Banking Companies in Bursa Efek Indonesia*. Journal of Global Business and Economics, 7 (1), 119-125.
- Snieška, V. (2011). *Macroeconomics* [lit. *Makroekonomika*] Kaunas: Technologija. 804 p.
- Ulys, D. (2007). *Measurment Model of The Company's Shareholders Possessed Value*. Economics and Management [lit. *Įmonės akcininkų turimos vertės matavimo modelis, Ekonomika ir vadyba*], 147-153.
- Valentinavičius, S. (2010). *Investment Management. Theoretical and Practical Aspects*. [lit. *Investicijų valdymas. Teoriniai ir praktiniai aspektai*] Vilnius. 303 p.
- Vaškelaitis, V. (2006.) *Money: Central Banks and Their Functions*. [lit. *Pinigai: centriniai bankai ir jų funkcijos*]. Vilnius: VĮ Mokslo tyros institutas. 443 p.
- Žėkas, M., & Žigienė, G. (2009). *The Influence of Economic Cycles to Securities Portfolio* [lit. *Ekonomikos ciklų įtaka VP portfelio formavimui*], Journal of Management Science, Klaipėda, 14(2), 59-66.