

Організація і методика економічного аналізу і аудиту

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SOME EXTERNAL FACTORS THAT INFLUENCE THE CHOICE OF SHARES BUYING ON CAPITAL MARKET

The external factors which influence on the investors' decisions while choosing shares for purchase in order to achieve high returns have been analyzed.

The factors that influence on the shares' prices have been presented in the article.

The survey has been carried out where responders answered questions about factors determining them to shares purchase

Introduction. All investors like the idea of achieving high returns on the investments, most tend to dislike the high risks that are associated with anticipated high returns. Various factors effect the investment effectiveness. When an investor buys shares one must be sure in the moment of taking up the decision that these shares will bring him/her profit either in form of dividend or in the rise of shares' value. This conviction arises from analysis according to which investor bought shares. There can be many factors that induce the investor to buying shares: it can be a suggestion of reliable investor, information in a newspaper that given company develops well, or profound analysis of company which says that company's value is much bigger than the one reflected in actual value of shares. When one of the factors influences the bigger number of investors it can cause a situation that when disclosed it influences demand of shares, which is strictly connected with this factor.

The reaction of market on appearing information is very important for an investor. If an investor will guess how the market reacts on given information he/she can choose the proper strategy of investing. That is why an investor should be aware on what kind of market he/she invests and what is more if information he/she gets helps him/her to achieve above the average profit.

Many economists think that today's stock markets are effective markets, markets on which the prices of stocks undergo intense modification as a result of appearing of new information. It means that the current value of stocks reflect all information about them. It means that on an effective market none can "beat the market", which means none can achieve above the average profits.

Many social groups are interested in the effects of company's operation. The affair groups (groups of interest) are shown in the fig. 1. and they can be defined as all groups which influence the company activity and which can be influenced by the company.

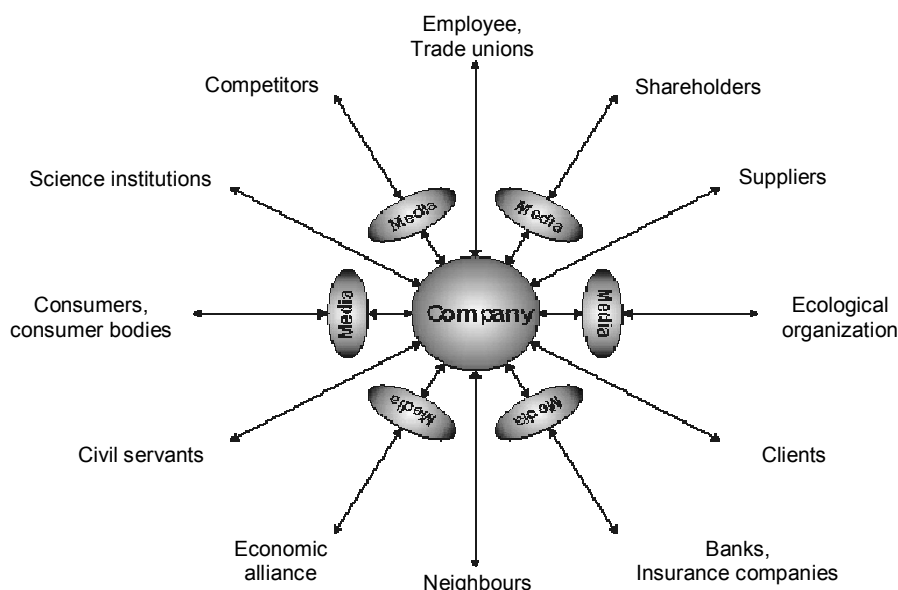


Fig. 1. Social groups interested in the effects of company's operation
Source: [1]

The choice of most suitable investment on the capital market, which meets the potential shareholder's expectations, is determined by a lot of factors. In the literature a lot attention is put on the company's aims that are considered from different shareholder groups' points of view. Generally these considerations can be divided into two basic approaches:

- shareholders model and
- groups of interest model.

In the shareholders model, so called: the model of the integrated value for shareholders, it is assumed that the main aim of managing is the value's maximization for shareholders through the value's maximization for a company. The affairs of groups that are interested in the company's functioning have peripheral significance in relation to shareholders, even though in the situation when a company bankrupts the shareholders' claims are satisfied at the end. A lot of researchers think that a company does not have any moral duties and should be treated as a investment project. Moreover, it seems that the fulfilment the capital owners' aims accomplishes at the same time the goals of other groups of interest.

In the groups of interest model, so called: pluralistic approach, companies are treated as a social institutions. Advocates of this approach claim that companies have duties that exceed the protection of shareholders' affairs. It causes many dilemmas due to the fact that the affairs of different affair groups are often contradictory. The pluralistic approach signifies sacrificing a part of the owners' profits in flavour of social aims' realization. Of course, it doesn't mean that in the shareholders model the social goals are not attained.

In order to carry out research concerning external factors influencing attractiveness of buying shares by investors there was conducted a survey through the Internet. Respondents were chosen through information sent on their mailboxes belonging to Internet forums on portals: money.pl, bogatyojciec.pl, inwestor24.pl, forumpi.pl, inwestor.fora.pl. On mailboxes one cannot send attachments that is why respondents had to send their private mail addresses on which questionnaires were sent. All together

400 messages were sent on which about 100 people responded. Finally respondents filled in and sent back 80 questionnaires. Analyzed investors were put into three categories according to number of years they invest on the stock.

- Inexperienced – 3 years of investing
- Medium experienced – from 3 to 6 years of investing
- Experienced – over 6 years of investing

In the beginning of 2008 Polish investors took part in this survey. It should be pointed out that the period during which the survey was taken was time of big declines on the stock, which could be the beginning of bear market after five years of big growth on Polish stock.

1. MACROECONOMICS FACTORS

In economy macroeconomic events influence usually the whole stock market. Some events are long lasting creating trends but there are others, which give one impulse changing temporarily prices of shares. The most important macroeconomic events are:

- the change of interest rates,
- political events,
- the change in depot of stock indexes,
- others.

1.1. THE CHANGE OF INTEREST RATES

One of the most important factors influencing the growth of shares prices is level of interest rates. When interest rates are on low-level banks have low interest of credits, companies incur smaller costs of foreign capital and easier contract credits on goal investments. The financial goal will be better; companies will develop which will result in the growth their value. The growth of company's value will result in growth of their shares value. Naturally the growth of interest rates will cause similar process, however, in opposite direction. That is why on Wall Street there is a hypothesis that after third reduction of interest rates by Federal reserve board, market will turn to bull market while when interest rates will grow three times market will turn to bear market. M. Pring [4] says about two other forms in which interest rates influence stock market. Firstly, level of interest rates influences the change in relation between different kinds of financial instruments. The second reason pointed by Pring is that some investors buy shares with borrowed money. That is why the level of credit cost, which depends on interest rate, will affect investors' willingness to invest with borrowed money.

In Poland Council of Monetary Policy determines interest rates. Since 1991 when the stock in Poland started functioning interest rates were systematically diminished, fig. 2. and now in 2008 they are increased.

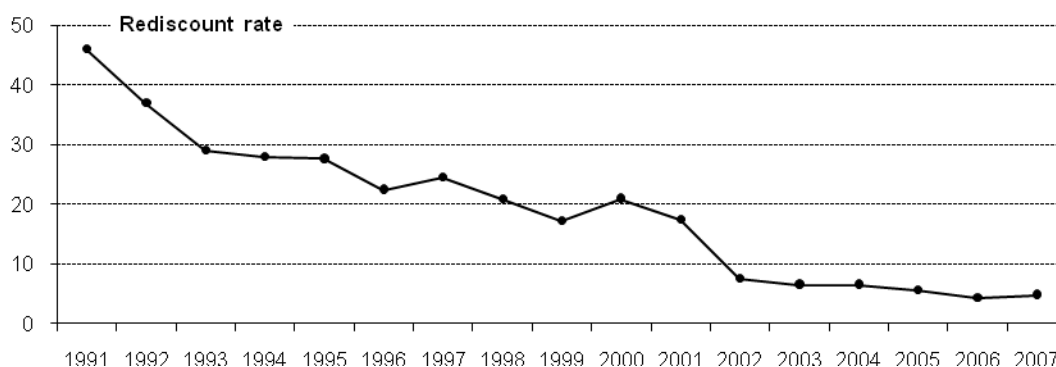


Fig. 2. Rediscount rate in Poland

The level of interest rates is important for the whole economy that is why their changes are observed by investors. Reasonable investor should be anxious when he/she is aware of the fact that series of reductions are broken and the other way round when the growth of series of raise is broken investor should optimistically look on the market.

Henryk Gurgul [1] worked on the influence of information about raise and reduction. On the basis of results he formulated conclusion that shares' prices grow in both cases either the rediscount rate grow or is reduced.

In the survey the investors were asked answer the question: will you buy shares after another reduction of interest rates?

- Yes,
- No.

Respondents' answers shows figure 3.

On the question if after another reduction on interest shares investors will buy shares 85 % of respondents said no, fig. 3. The biggest group that gave this answer was most experienced investors. However, among inexperienced and medium experienced investors the same number of people – 25-27 % gave negative answer. 15 % of respondents answered that they would buy shares after reduction of interest rates, however, none from experienced group. It is in opposition to theory that the reduction of interest rates influence growth of prices on the market.

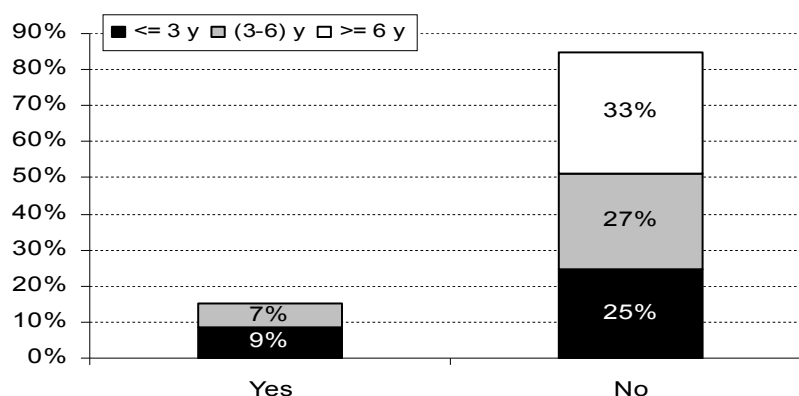


Fig. 3. The proportion of investors who will or will not buy shares after reduction of interest rates.

The change in interest rates influence the market it is a long-term influence as when the rates are reduced companies do not invest in their own development right away and investors do not transfer their savings from deposits to stock and do not take credits to invest in shares on the market.

1.2. POLITICAL EVENTS

Lately politics have smaller influence on Warsaw's stock, which is connected with the fact that investors got used to different controversial speeches, which took place during the cadence of coalition PiS, LPR and Samoobrona parties. However, there is still possibility to manipulate prices of specific sectors or company. After Business Centre Club in the last few years we could observe spectacular detention of entrepreneurs and managers for the sake of political theatre without announcing public opinion charges and explanations. After checking the case by independent court they turned up to be innocent. For example: Roman Kluska (owner of Optimus), Andrzej Modrzejewski (chairman of Orlen) or bosses of JTT Computer. Arrests and charges had influence on shares prices right

away as investors did not want to buy shares of this companies for example after unofficial announcement about detention of Ryszard Krauze share prices of Prokom dropped more than 8 % and shares of other two companies that he controls Bioton and Petrolinvest dropped 11 % and more than 21 %, respectively.

Another way of controlling share prices is creating bills, which can influence companies. Good example is draft bill connected with bio-petrol, it made the shares of companies which can benefit from it raise approximately – Skotan 15 % and Elstar Oils 7 %.

Politicians will always have influence on the stock as they establish law, which can help or obstruct companies from making money. That is why investors should observe bills, which can change economic situation of companies.

1.3. The change in depot of stock index

When on the stock there are hundreds or few thousands of securities it is impossible to notice through observation of one value if market is in a stage of raise or fall. Creating stock index which value depends on the prices of all shares on the stock is a solution to this problem. Index is not fixed it is revised and companies which do not fulfil conditions are replaced by these which fulfil this conditions. Many investigators asked the question what significance for company does the belonging to given index have and if inclusion or exclusion of company from given index influence turnover and price of shares. In United States there was analysis of one index – S&P 500 – the biggest American companies. Answers were not unambiguous. Bebeish and Whaley [by 1] on the basis of analysis discovered that shares accepted to index after 1989 gained 3.1 % on the day of announcement of information and 4.1 % on the day when the company was formally accepted to index. Authors stated that raise of prices on the day of company's inclusion to index were dictated by the fact that there was demand for them as index found purchased added shares. Shares of companies excluded from index were behaving the same way but in opposite direction. Share prices were falling as index founds were disposing of excluded companies' shares, the price of this shares was falling down.

The Warsaw's stock publishes few indexes. Henryk Gurgul [1] in 2005-conducted research investigated the influence of inclusion or exclusion of company from WIG20 index. Results show that rate of companies' shares which were included into index raised 1.5 % five days before the changes in index's depot were announced. However, on the second day after announcement the rate of included company's shares dropped 1.5 %. It can be stated that investors knew about the change from confidential information or on the basis of accurate prognosis of change. When it comes to shares of companies excluded from index any changes connected with the time of announcing information or in the time of exact exclusion were noticed. In the research the author notices that on the day of changing index the raise of turnover of shares, which were included or excluded from WIG20, was observed.

In the researches conducted by authors on the question Does the change of depot in WIG20 index influence investment decision most of respondents (52 %) said that they take no notice of it, fig. 4.11 % of most experienced investors said that they take into consideration changes when it comes to their investment decision. Situation in this question is similar to question considering split on respondents investments. Investors react on the change in depot in WIG20 with a rise of included shares 1.5 % five days before announcement of change and on the day of announcement the value drops 1.5 %. That is why only part of investors these who are well informed would be interested in the change.

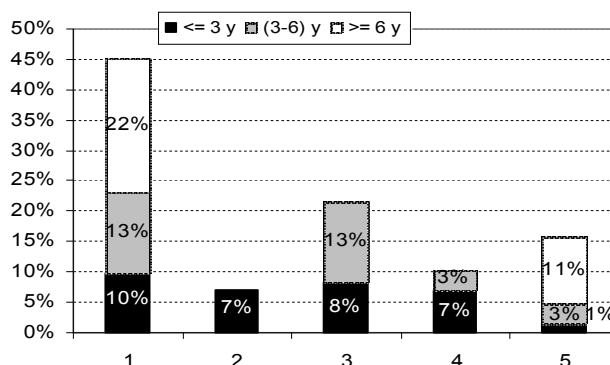


Fig. 4. The influence of changes of depot in WIG20 on investors' investments

In Poland index funds are just being created that is why including companies into index do not bring so many changes as in the west. With development of Polish funds we can count on bigger influence of change in index on shares' rates of companies included or excluded.

2. FACTORS OF CAPITAL MARKET

Many investors on capital market observe events which occur on that market. They observe other investors and sometimes follow their investments, press information and so on.

2.1 Transactions of insiders

People working on the highest positions in joint stock company are the ones who have the best information about position and future of company. These people are called insiders unlike people who are not well informed so called outsiders. There is a question should we follow insiders when it comes to transactions. When the person who has the best access to information does it we can be almost sure that company is in good condition or that something can happen which will cause the increase of shares' price. However, when insider sells shares it can be interpreted in many ways. This person can sell shares because the company is in bad condition but on the other hand company can be in good financial condition but shares' price is over estimated and shareholder want to gain profits. Another reason of selling shares by insider is maybe willingness to regain invested money.

There were many researches conducted all over the world considering transactions of insiders, however it is still arguable if they bring profit. On Polish market transactions of insiders were investigated by H. Gurgul [1]. In the time of research since 1998 to 2004 – 406 transactions took place. Results show that if investors would follow insiders who bought shares and keep them for six months they would have financial loss. If they would follow insiders who were selling shares they would gain profit. Also the moment of making decision is important. The example can be company Cash flow in which few members of the board and supervisory board in a month before an announcement of adjustment of forecast in march 2007 (according to which profits were to increase over 100%) bought shares in over a dozen instalments for less than 10 zloty, fig. 5. In this period there were 7 announcements about transactions that most informed people did. All together they bought 10 thousands of theirs companies shares. After an announcement of adjustment of forecast the price of shares went up to 23 zloty and after few months it decreased to 5 zloty.

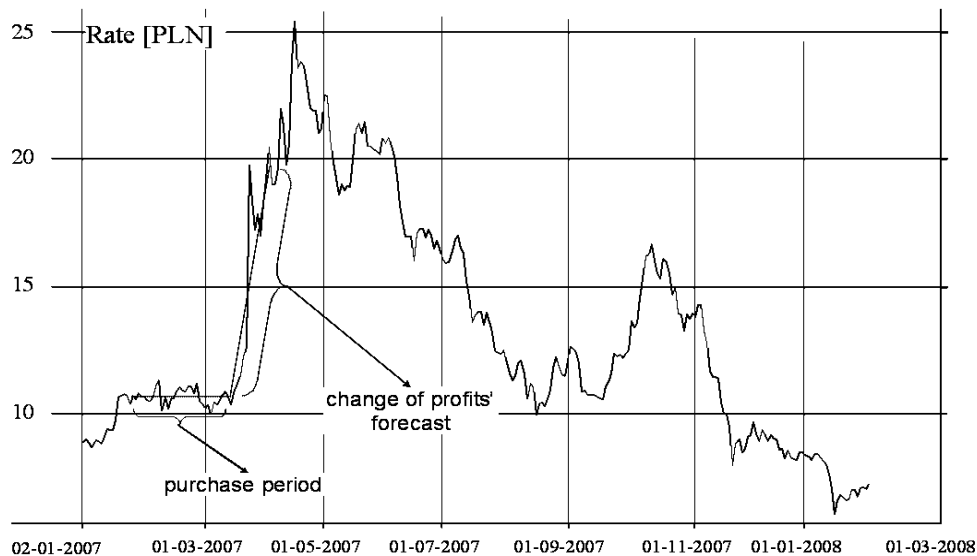


Fig. 5. Share rate of Cash Flow Company

Following insiders investor would be at a loss, however when investor would be satisfied with 100% profit the investor would achieve goal. Probably insiders do not sell shares as the fundamental value did not decreased. In this case shares were changed their price started to decrease, drops on the market at that time intensified this effect and shares were losing their value. As a result of year lasting investment insiders lost.

In an answer to question: do you follow insider's transactions?

– yes,

– no.

the respondent answers shows the figure 6.

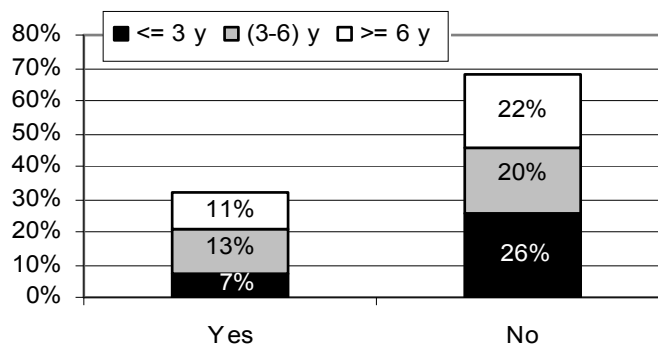


Fig. 6. Do investors follow insiders' transactions?

Most of the investors, 68 %, said that they do not follow. The least experienced investors mostly gave this answer. 32% of respondents stated that they follow insiders.

If a respondent follow insiders he/she was able to point what kind of activity they did. If yes please point what activities do you do:

- I buy when insiders buy,
- I sell when insiders sell,
- I do opposite to what insiders do.

On formulated it this way request most of respondents (44 %), fig. 7., said that they follow insiders when they buy shares. 37 % surveyed stated that they sell shared when insiders. Whereas, 18 % of respondents said that they behave in an

opposite way to insiders. It can be concluded from answers to this question that small number of investors follows transactions of insiders. The fact can be that despite confidential information that insiders have they do not always gain profit from their transactions and that is why other investors have small trust when it comes to insiders deeds.

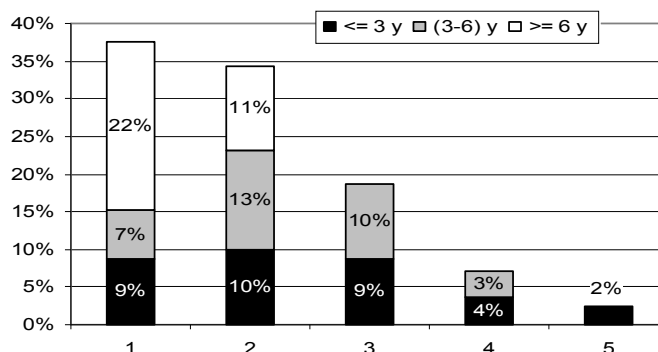


Fig. 7. Ways of following insiders' transactions

Many analytics claim that in while observing insiders each situation should be treated individually and the reason why shares are being sold or bought should be found. Insiders should be observed but while making decisions one should take into consideration more aspects as insiders mostly follow rise of fundamental factors of company and the marked may not be able to adapt to fundamental value.

2.2. Analysts' recommendations

Van K. Tharp [8] claims that recommendations can be used, but it is necessary to spend a considerable amount of time to find the proper publications. Rate of return of past recommendations needs to be analysed, the basic assumptions must be investigated and it must be checked if analysts really apply them. If a recommendation is finally considered a valuable one, all recommendations need to be used concurrently, because selective use of them gives much worse results.

To a question: *do analysts' recommendations influence your decisions?*

– yes,

– no,

most (66 %) of the respondents answered that recommendations do not influence their investment decisions (fig. 8). All investors with the most experience in investment answered that the recommendations do not influence their decisions.

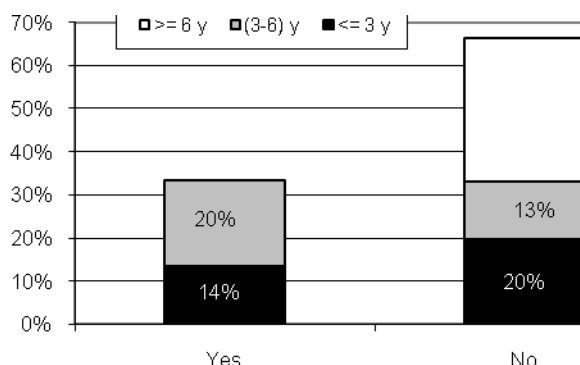


Fig. 8. Participation rate of investors who are influence by analysts.

The answer to this question confirms the research of Henryk Gurgul [5], who also noticed that investors do not significantly act accordingly to analysts' recommendations.

It can be concluded that using recommendations can in result be really profitable, but not when they are recommendations by professionals. It is necessary thus to devote much time to find appropriate bulletin which publishes the specialists' information which could allow to get a huge profit.

2.3. The stock gurus

Individual investors, especially minor ones need the major ones to copy their actions. Commonly such people are called stock gurus. Alexander Elder [6] claims that on financial markets there are 3 types of guru:

- market cycle gurus,
- magic methods gurus,
- dead gurus.

Market cycle gurus appear and disappear with a boom on a market. In United States such cycles occurred on 4 year basis. Usually this meant 2.5-3 years of growth and 1-1.5 year of fall. It shows that every 4 years new gurus appeared and were copied by a crowd of investors. They were mostly stock analysts who had their own theory about the market. Initially the prices would not fit to their theory, but later the situation changed and the market followed the theory.

Polish capital investors were asked to answer the question: *Do you copy investments by the biggest Polish investors?*

- yes,
- no,
- sometimes,

most of the respondents (52 %) claimed that they did. 47 % of them answered that it happened to them sometimes. Only 1 % of the respondents said they did on a regular basis. The experienced investors were the biggest group within those who answered “no”. The intermediate investors usually said “sometimes”. This explains that experienced investors try not to work accordingly to the modern trends in investments and inexperienced investors prefer to follow other ones.

It seems there are no such gurus in Poland yet. It is possible that the market has not been prepared for their theories yet. People evidently need somebody to show them the way, so the richest investors in Poland are automatically hailed market gurus. Adam Sorek [1] was probably the first market guru in Poland, who invested his 200 million in bonds and then in stocks. Two years later his estate earned on stock exchange was estimated 6 million PLN. Roman Karkosik appeared as his follower, and currently Leszek Czarnecki is the most important for investors who seek a lead. Czarnecki's biggest success was the creation of capital group Getin, which at the moment of his advent in 2002 was worth 12 million PLN. Five years later it increased to 11 billion. It shows 1000 % growth within 5 years. Investors like following him and copy his actions on the stock exchange.

2.4. Press information

One of the possible ways to acquire information is reading press information. That is why the information from reliable magazines or newspapers influence investors' decisions. The complex analyses and different articles concerning companies or investors are the most trusted ones. A good example of investor's reaction to press information was a publication in Puls Biznesu rumouring son of investor Elzbieta Sjöblom buying stocks of Elektrim, believing a profit of around 1000 %. The very information spurred a rise in the price of bond by over 25 % during the first publication. Another session brought a rise of

several per cent. During the two sessions the investors could earn over 30%. Another example of influence of information on the price of stock was analysis of Karen Notebook in Puls Biznesu two days before the company debuted on stock exchange. The analysts from internet portal gieldowe.pl valued the stocks of the company at 6.12 PLN while their actual market price was 29 PLN. As a result of the publication there was a sudden selling of company's volume which lead to a fall of the price by about 30 % within one day. The power of reaction was big, taken under consideration small number of readers of Puls Biznesu in comparison to readers of daily press.

Polish capital investors were asked to answer the question: *do you make investment decisions as a result of information read in reliable press?*

- yes,
- no.

was mostly (60 %) answered negatively. These respondents were mostly the most experienced investors. The least experienced investors most likely used press articles to make proper decision, fig. 9.

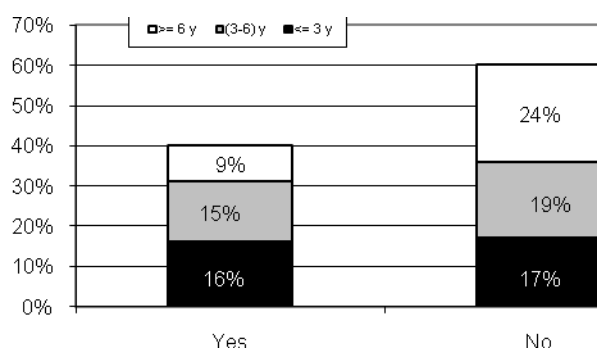


Fig. 9. Participation rate of investors who are influenced by publications.

Press information about companies will always influence the value of them as long as the magazines are considered reliable among investors.

Investors usually hope that they discovered a piece of information the market has not taken advantage yet. Such information is deemed a confidential one.

The market reaction to the information is very important to an investor. If an investor correctly predicts the behaviour and reaction of the stock exchange to information, he would be able to choose the right investment strategy. An investor should be conscious of the market he invests on and accordingly if the new information on the market can quickly bring a profit.

Many economists say that the stock markets today are efficient markets – the ones that suffer rapid changes of prices as a result of new information. This means that the current price of a security represents all information about it [2]. This means that on effective markets nobody can “defeat” the market – get gigantic profit.

Definitely a market complying with demands of efficient market is an ideal one and does not really exist. Not complying with some of the requirements of efficient market does not still mean that the market is not efficient. Short term investment demands reading of different publications which can change the balance of a volume. For long-term investment there is no such risk because the price of stock usually adjusts to its actual value.

2.5. The change of index *P/E* and *P/BV*

Many indexes are used to evaluate shares' market attractiveness. One of the most popular index used by investors all over the world is index *P/E* – a price of profit.

This index contains much information that is why it is often used while taking up decisions by investors. Index's value is mostly high for companies, which are characterized with dynamic development and growing profits. Investors are ready to pay more for shares of companies, which develop dynamically. Companies which do not augurs well mostly have low value of this index. Many investors think that in order to gain profits it is advisable to buy shares, which are underestimated, it means these with low *P/E* index and sells when they have big *P/E* index. However, it is difficult to decide when shares are underestimated and when not. According to Van K. Tharp [7] in USA barrier that divide expensive shares from inexpensive ones is index's value at level 17. He analyzed period between 1927 and first half of 2002 and concluded that purchase of shares when average index *P/E* on stock was more than 17 it gave average refund 0.3 % while buying shares when index was lower than 17 gave profit 12.4 %. Fisher and Statman [by 8] come up with other conclusions. They analyzed actions from longer period 1872-1999 and concluded that in some periods when index was low shares in the next year had high refund rate but often in history of American stock when index *P/E* was low the next year decline on stock was noticed. The same high *P/E* index did not determine declines on the stock. The difference in works of authors can be caused the fact that Tharp researched the whole period when index was higher than 17 while Fisher and Statman concentrated only on results, which gave shares in a year period after calculation of index.

On Polish stock during the whole period of its functioning the relation between the level of *P/E* and profits from shares can not be stated, fig 10.

Average value of index is almost 29 and was considerably increased in 2002, when index was exactly 70.3 and in 2003 when it was 146.2. Even such a high index in 2003 did not cause in the next few years decline on the stock because since 2003 bull market started. The rise in next years was caused by economic development which made companies financial results higher and that is why index went down.

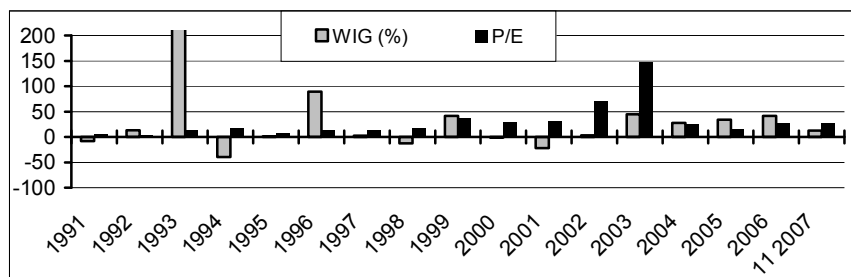


Fig. 10. WIG in relation to average index *P/E* on WSE in Poland

Medium value of index cannot be taken into consideration when it comes to forecast growth on market. More correct is using this index to compare companies on stock, companies which are from the same sector and which *P/E* index is much lower than this of competitive companies.

In an answer to question do you take into consideration *P/E* index (price/profit), most of respondents (66 %) that yes they do take index into consideration, fig. 11.

This answer was given by medium and high investment experience. 11 % of respondents think that this index has very small influence on their investment decisions.

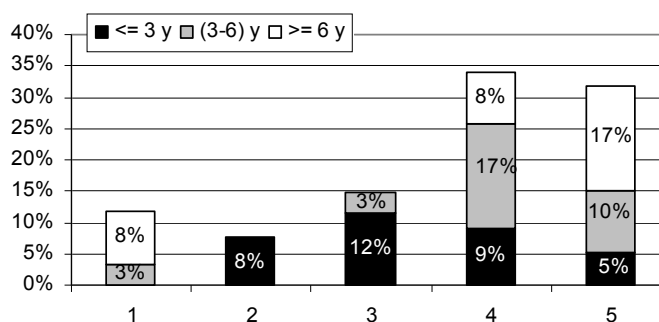


Fig. 11. The influence of P/E index on investors' investments.

Another popular index used by investors is *P/BV* - price to book value:

This index is used from financial reasons – it is assumed that value of a company should be reflected in its book value. It is assumed that companies, which are able to work out high profit in relation to its equity, can have higher index. These are mostly companies, which deal with new technology where the biggest are ideas and people. Whereas for companies with lower incomes in relation to their assets index can drop lower than one. It is connected mostly with production companies, which own expensive machines and buildings, which are not used effectively. It is often considered that investors should choose companies which index is lower than indexes of competitive ones. It means that the bigger index the bigger expectations when it comes to companies' profits.

In an answer to question do you take into consideration index *P/BV* (price/book value) similar as in the last question most of respondents answered that index *P/BV* influence their investment decisions, fig. 12. This time most experienced investors stated that they take into consideration this index (assign 4 or 5 to this factor).

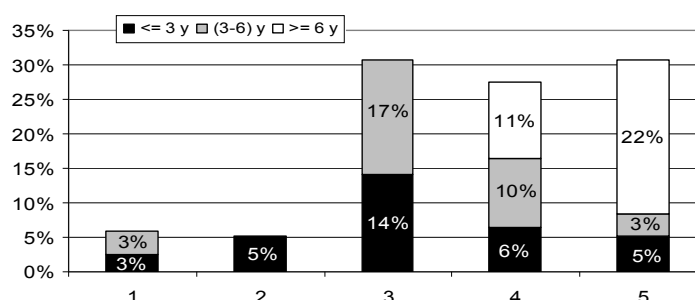


Fig. 12. The influence of index P/BV on investors' investments.

This index is important share's relative measure used in comparing shares of competitive companies. Investors should use it while making investment decisions.

CONCLUSIONS

Investment is the main factor for economic development and growth. It is also the main way of increasing capital. Everyone who has financial surplus should effectively multiply them. Investing is an activity, which aims in increase of assets using certain financial resources. In is connected, however, with some self-denial as in order to delight oneself with spending bigger sums of one should limit current consumption. Investing is

connected with refraining from realization of some pleasures at this time with hope for increasing one's possibilities and perspectives in the future. That is why before realization of investment aims one should analyze the chance to achieve these aims. Macroeconomic analysis of market and events occurring inside of companies can prompt which investments will be the best ones.

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