

## The application of P/E ratio for selection of stocks of small companies listed on NewConnect market

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**Abstract:** *Purpose* – The aim of the article is to verify whether the Price/Earnings (P/E) ratio is helpful for selection of stock of small companies listed on NewConnect with higher rates of return.

*Design/Methodology/approach* – The article embraces an empirical research – the quantitative analysis that has been based on the several hundred stocks quotations data from NewConnect in years 2007–2015. Stock market quotations derive from the websites devoted to stock exchange: gpw.pl, newconnect.pl, gpwinfostrafa.pl and stooq.pl. Values of P/E ratio and rates of return of stocks in consecutive years have been used from NewConnect Statistic Bulletin from 2007–2015 placed on the NewConnect website. The scope of research embraces small companies on NewConnect which had positive values of P/E ratio. Consequently, in each year the number of companies taken into account fluctuated. The research hypothesis has been put forward: in years 2007–2015 stocks of small companies listed on NewConnect with the lowest values of P/E ratio offered higher rates of return than companies with the highest values of P/E. In both cases there are only above-zero (positive) values of P/E considered.

*Findings* – The main finding of the article is that P/E can be a useful tool to select potentially more profitable stocks. It occurred that stocks with the lowest P/E values generally offered higher rates of return in the next calendar year than stocks with the highest P/E values.

The analysis confirmed that the P/E ratio can be a useful method to choose stocks with brighter prospects than average stocks. It appeared that companies quoted on NewConnect with statistically lower P/E values are relatively better investments. In the period given, companies from the first and the second group (lowest P/E ratios) had on average higher rates of return than enterprises with higher P/E values. It seems that stocks perceived at the end of the year by investors as 'cheaper' grew in the next year faster than stocks known as being 'quite expensive' or 'expensive' (high P/E values).

*Originality/value* – the article covers the quantitative research worked out by the author. It concerns the usefulness of P/E ratio for taking investment decisions on the stock market for small companies – NewConnect. Previous studies about P/E ratio and its applications focused mainly on the main market of the Warsaw Stock Exchange. Therefore, the empirical research in the article contributes to the methods of assessment of investment attractiveness of small companies' stocks. It is important to emphasize that data is based on the quotations from 9 years, so the whole period of NewConnect functioning (since its foundation) is embraced.

**Keywords:** NewConnect, financial analysis, alternative trading system, price earnings P/E, rate of return

### Introduction

The article concerns very specific part of Polish capital market, namely NewConnect. Its rapid growth, particularly when it comes to the number of debuts, is undis-

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putable. It belongs to one of the most dynamic alternative markets in Europe (Mosionek-Schweda, 2010). Comparing with other European markets it is placed quite high in terms of the number of Initial Public Offerings (Szczepankowski, 2010). However there are still a few detrimental factors which cause that stocks quoted on NewConnect are treated as being riskier than those quoted on the main market on the Warsaw Stock Exchange. For instance, D. Kordela (2012) quotes several facts about this stock exchange. She claims that investments on NewConnect are more risky due to the low level of capitalization of this market. Another thing is a low stake of institutional and foreign investors in the total turnover which does not prop up the liquidity. The demand on stocks listed on NewConnect is still insufficient. The net of investors willing to buy shares is still in the developing phase. Consequently, it is not possible to classify NewConnect to the group of mature capital market (Kordela, 2015). In such a context, it is especially reasonable to find proper ways to select companies which can bring potentially higher rates of return than others with relatively low level of risk. Such methods is served by tools of financial analysis. To one of them belong the analysis of market value ratio, and in particular, Price Earnings (P/E) ratio.

The aim of the article is to verify whether the Price / Earnings (P/E) ratio is helpful for selection of stock of small companies listed on NewConnect with higher rates of return. The research hypothesis has been put forward: in years 2007–2015 stocks of small companies listed on NewConnect with the lowest values of P/E ratio were higher rates of return than companies with the highest values of P/E. In both cases there are only above-zero (positive) values of P/E considered. The hypothesis has been based on the assumption that investors prefer small companies with relatively lower P/E values as they are considered to be cheaper and less risky.

The time scope of the article embraces years 2007–2015 since the foundation of NewConnect. This period was especially interesting on the capital market due to the global financial crisis, its aftermaths and the rapid growth of NewConnect, for instance, in terms of the huge number of Initial Public Offerings of small firms. In the article the empirical study has been conducted. It utilized data from the Warsaw Stock Exchange – NewConnect. The research embraced the financial data of several hundred companies listed on NewConnect – the maximum number of shares of enterprises was 418 in 2015. Companies with positive P/E values have been selected and the descriptive statistics have been computed. They have been divided into four groups in terms of the value of P/E and the next stage was about counting the average, median, maximum and minimum rate of return as well as standard deviation and variance of returns in consecutive groups.

The structure of the article is as follows. Chapter 1 embraces the basic information about financial analysis and main groups of financial ratios as well as some deliberations about P/E ratio. Chapter 2 is strictly empirical. It covers the description of data utilized in the study, methodology of the research and the most important results of calculations.

## **1. Financial analysis and P/E ratio**

The aim of this chapter is to discuss and describe the indicators of financial analysis. Financial analysis is one of the major techniques of stock market analysis. It uses

economic data to assess the prospects of companies. Indicators play a crucial role in comparing and contrasting companies' rates of return within sectors. The proponents of financial statements analysis utilize the data included in reports about economic situation of a company to calculate a vast range of ratios (Brigham, Houston, 2005, p. 107–108). Thanks to that, it is possible to compare and contrast financial stability of a particular firm with the other firms, and to come to conclusions whether it is worth investing or not. There are 5 groups of ratios used in the analysis of financial statements which are listed below:

1. Liquidity ratios.
2. Asset management ratios.
3. Debt management ratios.
4. Profitability ratios.
5. Market value ratios.

Ratios from these groups are the most widely-used.

Liquidity ratios measure the firm's ability to pay off its financial obligations, especially those short-term (due within the coming year). Companies should possess sufficient amount of liquid assets that can be immediately converted to cash at the going market price if required. Liquidity analysis concentrates on the measuring short-term assets and liabilities which is very important in case of enterprises being heavily indebted. It is the measure to what extent a company can pay its bills and the ability to meet creditors. Financial difficulties mean that a firm begins to delay in settling its liabilities (Brigham, Houston, 2004, p. 78; Dębski, 2005; Sindicador.net, 2015). To this group belong current ratio and quick ratio.

Asset management ratios concern the efficiency of assets use. They are also named as indicators of rotation. They inform whether the whole amount of assets is sufficient, too low or too high in comparison with sales levels. Both too high or too low amount of assets would be detrimental to the firm's financial result (Brigham, Houston, 2004, p. 79; Eduinwest.pl, 2015). The typical representatives of this group are inventory turnover ratio and Days Sales Outstanding (DSO).

Debt Management Ratios measure to what extent a firm uses debt financing. Using financial leverage is often desired by the shareholders due to the higher return responding to the unit of equity. Another advantage to the shareholders is that they do not have to issue shares and divide their stake in the company. Consequently, they maintain control and it is not necessary for them to add a new capital into a firm. Nevertheless, too big scale of financial leverage increases the possibility of a bankruptcy, at least reduce the chances to raise finance from banks. To this group belong, for instance, times-interest-earned (TIE) and debt ratio which measures to what extent assets are financed by loans (Gajdka, Walińska, 2000).

Profitability ratios provide aggregated information about the results of managing assets, financial issues and resolving problems with liquidity. These factors influence the overall financial result. This group of indicators include, inter alia, Return on Sales (ROS), Return on Assets (ROA) and Return on Equity (ROE). The best approach is to compare their value with values of indicators of other firms in the industry because their levels vary so much in different sectors. It is also recommended to conduct the trend analysis i.e. check the direction of changes of indicators levels.

The last group constitute market value ratios. It consists of such widely-used indicators as Market/Book ratio (M/B), Price/Cash Flow (P/CF), Price/Earnings (P/E). The level of these ratios answers the question whether investors evaluate a company's prospects high or low. For stock investors it is one of the most important group of ratios. They are often compared in sectors – comparing their values between firms of very similar operational activity is of the highest prognostic value (Brigham, Houston, 2004, p. 90; Flotyński, 2014, p. 17–18). The formula to calculate P/E is as follows:

$$\frac{P}{E} = \frac{\text{stock price}}{\text{earnings per share}}$$

It is often interpreted as how much the market wants to pay for one stock (Mayo, 1997, p. 55). There are various methods of calculating P/E. According to Ritchie (1997, p. 200–202), net income from last 12 months per share, net income per share prognosticated by analysts for next 12 months, average predicted net income per share for the following 5 or 6 years or anticipated net income per share in 3 or 6 years can be taken as earnings. The most popularized is an approach to take earnings per share from last 12 months. Such a method of calculation is often implemented to the research with the little correction – net income for the previous year is assumed to be known just in the beginning of January in the next year. In reality, quite similar values could be applied by using the analysts' prognoses. In literature, there are several approaches to the interpretation of P/E values. Some authors claim that higher value of P/E signifies the low level of risk because investors are more willing to buy companies which are safer than others. Hence, firms stocks with relatively high P/E should be found as good investment (Kowalczyk, 1993, p. 30–31). Other authors claim the opposite. A. Sopoćko (2005, p. 130–131) suggests that P/E value above 15 indicates overvalued stocks and its value below 5 is common for undervalued stocks, so their price growth in the future is more probable. According to Hamrol (2005, p. 246–247) low P/E levels may be considered as too pessimistic and stocks with such characteristics should be bought. The legitimacy of buying relatively cheap securities have been confirmed by numerous studies. J. Czekaj et. al. (2001, p. 126–128) conducted research for the Warsaw Stock Exchange measuring the efficiency of P/E strategy and he has established that stocks with relatively low P/E ratio gave much higher rate of returns than stocks with relatively high levels of P/E. Ritchie (1997, p. 200–204) came to similar conclusions. This ratio has one disadvantage – problems with counting its value for companies which incur losses. In such a situation P/E is infinite. To the needs of this article, to be able to compare different stocks, the author differentiated companies with losses, thereby, stocks with losses have been marked as worse investment goals than shares with even tiny profits. Consequently, companies with losses in their financial statements have been excluded from research. Generally, it has been assumed that companies presenting the lowest (but above-zero) levels of P/E have been the best assets to invest. Of course, companies listed on the NewConnect derive from various sectors, so their typical P/E can vary significantly. In certain sectors usual P/E levels can be higher than in others and the divergence between two sectors is clearly visible. In research, the differences between P/E sector levels are not considered.

To conclude, the profitability ratios and market value ratios seem to be the most important to this article because portfolio investors are searching for companies offering high rate of dividends and having relatively high true value in comparison with market value. Considering this needs, market value ratios and profitability ratios would give some crucial hints (Dębski, 2005, p. 96–101). According to D. Ford (1997, p. 111) reliable conclusion from, for example, P/E examination can be reached by comparing values of P/E with other companies from the same sector P/E values. Firms operating in the same industry has similar everyday activities so such a comparison is much more credible than in the case of enterprises from different sectors. The same can be done with other ratios such as ROE which role in economic analyses increases.

It is important to add that to evaluate stocks in terms of their true value often P/E ratios are utilized (Gruszczyńska-Broźbar, 2009, p. 90–111). It is one of the most widely-used indicator to assess an investment attractiveness. This ratio is often called as 'profit multiple' (Perez, Truskowski, 2011, p. 43–45). By comparison the current market value of stocks with their true value, the conclusion can be drawn whether the company is overvalued or undervalued. Fundamental analysts invest into shares which price is lower than their true value. There is a popular method of multiplying P/E by the company's forecast profit to receive a stock value (Bodie, Merton, 2003, p. 345–346).

Financial ratios such as earning per share (EPS), which is utilized to calculate P/E, are often the part of investment strategy. However, it is not a simple task due to different assumptions and specification of financial analysis. Time horizon also varies. So it is desirable to utilize advantages of financial analysis – some features that would cooperate with each other and create effect of synergy or value added W. O'Neill (2000, p. 19–24). O'Neill chooses only companies with strong position on the market and with growing trend in profits year by year. He chooses only companies which increase their earnings per share (EPS) and revenues year by year. Interestingly, B. G. Malkiel (2003, p. 113–116) proposes the assessment of P/E indicator and its dynamics within the space of several years. Such an approach amongst investors is often the basis to build investment strategies.

## **2. Data, methodology and results of research**

The study has been devoted to the Polish capital market. Time frame of research embraces almost the whole period of NewConnect existence since its set-up in 2007. The data from years 2007–2015 have been utilized. Stock market quotation derive from the websites devoted to stock exchange: gpw.pl, newconnect.pl, gpwinforesta.pl and stooq.pl. Values of P/E ratio and rates of return of stocks in consecutive years have been used from NewConnect Statistic Bulletin from 2007–2015 placed on the NewConnect website. The scope of research embraces small companies on NewConnect which had positive values of P/E ratio. Consequently, in each year the number of companies taken into account fluctuated.

The research consists of several stages. Stage 1 embraced P/E data collection. The number of companies considered in subsequent years was dependent on the level of P/E of these companies. If their revenues exceeded total costs and they

showed net profit in financial statements, it was possible to calculate P/E. Contrariwise, if a company incurred losses, the value of P/E would be negative so it was not included in the research group. Then in stage 2, for stocks with above-zero P/E, yearly rates of return have been obtained from NewConnect Statistic Bulletin. Stage 3 constitutes the following procedure. For stocks with positive P/E level the rate of return from next year have been assigned. For instance, for companies selected in the end of 2014 (due to their positive level of P/E) rates of return from 2015 have been attributed. Owing to this fact, it was possible to check if the level of P/E can be helpful in selection of shares with potentially higher returns in 2015 than returns of companies with negative P/E (which made losses). In stage 4 companies chosen to research have been divided into 4 different groups. This division has been conducted in terms of the P/E value. Just to remind, only shares with positive P/E have been selected. According to previous assumptions, companies with positive (but as close to zero as possible) P/E value were the most desired to buy. So, a firm 'A' with P/E amounting to 1,4 would be perceived as being better investment goal than a firm 'B' with P/E amounting to 5,7. These exemplary values are quite low and close to zero. As a consequence both stocks may be known as relatively cheap. Results of calculation have been shown in table 1 and table 2. Groups of stocks represented the division in the ascending order in table 1 and 2, column 3 'Percent of the total number of companies': 25% of companies with the lowest P/E values in the given year constituted group 1 ('0–25%' in column 3), next 25% of stocks create group 2 ('26–50%'). These 2 rows group representatives of the half of research sample in each year. Group 3 and group 4 was named as '51–75%' and '76–100%' respectively. All of these groups are separate because they do not cover the same companies – one stock can be the member of the only one group.

The research embraced the financial data of several hundred companies – the maximum number of shares of enterprises was 418 in 2015. Obviously, only for the part of them statistics have been calculated. This is because in many cases P/E values were sub-zero due to the fragile financial situation of small companies. Many of them incurred substantial losses. Another reason is that some companies initially were listed on NewConnect but along with their fast development they started to be quoted on the WSE main market. Furthermore, the number of companies available for research decreased due to sanctions introduced by the stock exchange. For example, if a company does not publish financial reports and does not comply with very precise regulations, the trade of its stock on the market can be suspended. There were such instances during the years 2007–2015. The total number of companies with positive P/E varied from 7 in 2008 or 42 in 2009 to 195 in 2015. Table 1 and 2 sum up the results of research. In its consecutive columns they cover information about the descriptive statistics calculated in stage 5: mean rate of return, median rate of return, standard deviation of the rate of return, variance of the rate of return, maximum and minimum rate of return. These metrics are related to rates of return of stocks in consecutive groups.

**Table 1**

Statistics of small companies embraced in the research which were quoted on NewConnect in years 2012–2015

Year	Number of companies	Percent of the total number of companies	Mean rate of return (%)	Median rate of return (%)	Standard deviation of the rate of return	Variance of the rate of return	Maximum rate of return (%)	Minimum rate of return (%)
2015	195	(First group) 0–25%	48,96	-15,00	338,83	114804,80	2309,64	-85,19
		(Second group) 26–50%	9,37	-2,70	57,56	3313,36	200,00	-94,80
		(Third group) 51–75%	18,03	7,53	49,85	2484,74	153,77	-60,00
		(Fourth group) 76–100%	18,34	-5,86	124,01	15378,08	764,66	-91,24
2014	190	(First group) 0–25%	-0,63	0,00	51,73	2675,61	180,00	-93,34
		(Second group) 26–50%	21,22	-14,11	130,41	17006,03	631,58	-96,00
		(Third group) 51–75%	-4,84	-17,35	76,08	5787,84	383,33	-88,38
		(Fourth group) 76–100%	41,28	-14,42	178,61	31901,36	890,42	-97,99
2013	182	(First group) 0–25%	28,06	-2,68	113,78	12945,36	489,41	-92,86
		(Second group) 26–50%	12,29	-11,79	122,48	15000,57	763,16	-78,95
		(Third group) 51–75%	32,16	13,17	86,67	7511,58	292,25	-90,71
		(Fourth group) 76–100%	11,10	-8,64	73,46	5396,22	284,06	-87,55
2012	156	(First group) 0–25%	-0,58	-8,05	41,83	1749,88	106,86	-88,57
		(Second group) 26–50%	-9,09	-20,75	52,50	2756,12	204,45	-88,24
		(Third group) 51–75%	-22,57	-30,43	45,94	2110,54	158,82	-99,39
		(Fourth group) 76–100%	-26,83	-31,61	45,05	2029,47	85,98	-87,29

Source: own study based on the data from <http://www.newconnect.pl> and NewConnect Statistic Bulletins.

By standard deviation the average deviation from the mean rate of return of companies in the group is calculated. For 2008 only mean rate of return for each group has been computed. This is because there were only 7 companies (objects) take into consideration. As a consequence, above-mentioned 4 groups are not numerous and counting the descriptive statistics for them would not bring any additional value. It is important to emphasize that 2007 was also included in research, although, it is not listed in the tables. Companies with low P/E values have been selected and their rates of return in 2008 were assigned to them. Therefore, data

from 2007 is embraced by the 2008 row. Stage 6 of research consists of the analysis of obtained data.

**Table 2**

Statistics of small companies embraced in the research which were quoted on NewConnect in years 2008–2011

Year	Number of companies	Percent of the total number of companies	Mean rate of return (%)	Median rate of return (%)	Standard deviation of the rate of return	Variance of the rate of return	Maximum rate of return (%)	Minimum rate of return (%)
2011	74	(First group) 0–25%	-33,56	-36,67	26,35	694,20	36,72	-71,17
		(Second group) 26–50%	-40,21	-46,44	39,68	1574,30	90,67	-84,93
		(Third group) 51–75%	-41,52	-41,58	20,10	403,97	-10,26	-71,88
		(Fourth group) 76–100%	-35,47	-41,54	27,55	758,79	7,78	-72,12
2010	30	(First group) 0–25%	11,08	-10,66	63,21	3995,15	107,48	-62,50
		(Second group) 26–50%	33,37	37,38	41,33	1708,30	100,00	-16,57
		(Third group) 51–75%	7,38	7,14	38,49	1481,48	77,13	-38,33
		(Fourth group) 76–100%	-14,14	-14,60	34,04	1159,05	44,68	-63,64
2009	42	(First group) 0–25%	48,20	26,67	105,36	11101,20	290,00	-96,41
		(Second group) 26–50%	27,12	10,39	55,05	3030,16	130,79	-34,27
		(Third group) 51–75%	17,18	6,49	73,92	5464,41	175,86	-64,79
		(Fourth group) 76–100%	-9,83	3,00	31,89	1017,13	26,05	-68,71
2008	7	(First group) 0–25%	-65,54	-	-	-	-	-
		(Second group) 26–50%	-42,13	-	-	-	-	-
		(Third group) 51–75%	-77,07	-	-	-	-	-
		(Fourth group) 76–100%	-68,06	-	-	-	-	-

Source: own study based on the data from <http://www.newconnect.pl/and> NewConnect Statistic Bulletins.

The first column in table 1 and 2 presents year from which the data derives. The second column sums up the number of companies in 4 groups and in consecutive years. The next columns cover the division on groups and descriptive statistics. It occurs that in years 2009, 2011, 2012 and 2015 the average rate of return of the first group was the highest. Of course, in 2011 and 2012 it was negative but the returns in other groups were even lower, so these results of the first group remain still quite

satisfactory. Moreover, in 2014 the median rate of return is the highest in the first group and in 2013 this group is on the second place. When it comes to median return, first group almost always prevailed over the fourth group (with the exception for 2015). Also average and maximum rate of return are in the fourth group usually lower than in the first group. The values of standard deviation and variance indicated quite high diversity in stock returns in subsequent groups. As for the third group, it had by far poorer results than the first group – its mean rates of return were lower in 2008, 2009, 2010, 2011, 2012, 2014 and 2015. These results suggest that the lower P/E values in the first group usually accompany better results.

## **Conclusion**

As shown in the article, there are some simple methods for selection of stocks that would be potentially more profitable than others. Price earnings ratio (P/E) is a representative of one of such methods. The analysis confirmed that the P/E ratio can be a useful method to choose stocks with brighter prospects than average. It appeared that companies quoted on NewConnect with statistically lower P/E values are relatively better investments. In the period given, companies from the first and the second group had on average higher rates of return than enterprises with higher P/E values. It seems that stocks perceived at the end of the year by investors as 'cheaper' grew in the next year faster than stocks known as being 'quite expensive' or 'expensive' (high P/E values). Therefore, the research hypothesis which has been put forward in the article has been verified positively. The aim of the article has been realized.

It is clearly visible that using P/E ratio would be favorable for improving the portfolios returns. It may be highly recommended to use a profit multiple as a kind of 'filter' to find proper stocks. Certainly, it is desirable to use it as an additional manner of investment in an integrated strategy. Of course, it must be remembered that such results have been obtained in market circumstances in crisis and post-crisis period so it is not sure if it is stable in the future.

The application of P/E on NewConnect is of crucial importance for the stock market and requires further and careful study. One of the possibilities for future research constitutes the thorough analysis of the influence of below-zero P/E ratio levels on stock returns. It would be supplementary to this study. Another thing to think over would be the analysis of the impact of other market value ratios such as Price/Cash Flow (P/CF) and Price/Book Value (P/BV). Moreover, the detailed study of the level of debt management, liquidity, asset management and profitability ratios and their correlation with rates of return of shares would be also exceptionally significant and of high probability of practical application. One thing is obvious, there still will be a huge need to develop methods of stock portfolio selection on NewConnect – the market for small enterprises which offers the wide range of attractive investment possibilities.

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### ZASTOSOWANIE WSKAŹNIKA CENA DO ZYSKU (P/E) DO SELEKCJI AKCJI MAŁYCH SPÓŁEK NOTOWANYCH NA RYNKU NEWCONNECT

**Streszczenie:** *Cel* – weryfikacja czy wskaźnik cena do zysku C/Z (P/E) jest pomocny w selekcji akcji

przedsiębiorstw z NewConnect do portfela i czy przy jego użyciu możliwy jest wybór akcji przynoszących wyższą stopę zwrotu.

*Metodologia badania* – Artykuł zawiera empiryczne badanie ilościowe obejmujące notowania kilkuset akcji z alternatywnego rynku NewConnect dla małych spółek z lat 2007–2015. Hipoteza badawcza: w latach 2007–2015 akcje małych przedsiębiorstw z rynku NewConnect z niskimi wartościami wskaźnika P/E przynosiły wyższe stopy zwrotu niż akcje z wysokimi wskaźnikami P/E. W każdym przypadku uwzględniano jedynie akcje z wskaźnikiem P/E większym od zera. Notowania akcji pochodzą ze stron internetowych portali poświęconych tematyce rynku kapitałowego: gpw.pl, newconnect.pl, gpwinfostrafa.pl and stooq.pl. Wartości wskaźnika P/E i stopy zwrotu z akcji w poszczególnych latach zostały pozyskane z Biuletynu Statystycznego NewConnect wydawanego przez Giełdę Papierów Wartościowych w Warszawie dla lat 2007–2015. Zakres badania obejmuje małe spółki z NewConnect, które miały dodatnie wartości wskaźnika P/E - w rezultacie miało to wpływ na liczbę spółek wziętych pod uwagę w badaniu w każdym z rocznych okresów.

*Wynik* – Głównym wnioskiem płynącym z artykułu jest stwierdzenie, że wskaźnik P/E jest użytecznym narzędziem do selekcji spółek z wyższym potencjałem wzrostu niż średnia rynkowa. Akcje przedsiębiorstw z najniższymi wartościami P/E na koniec danego roku oferowały wyższą stopę zwrotu w roku kolejnym niż akcje z najwyższymi wartościami P/E. Analiza potwierdziła, że wskaźnik P/E może być użyteczną metodą do wyboru akcji spółek z ponadprzeciętnymi perspektywami wzrostu. Przedsiębiorstwa notowane na NewConnect ze statystycznie niższymi wartościami P/E były relatywnie lepszymi inwestycjami. W badanym okresie, akcje z niższymi wartościami P/E dawały średnio wyższe stopy zwrotu niż akcje z wyższymi wartościami P/E. Wyraźne jest, że cena akcji spółek postrzeganych przez inwestorów na koniec roku jako „tańsze”, rosła w kolejnym roku szybciej, niż cena akcji spółek postrzeganych jako droższe (z wyższymi wartościami P/E).

*Oryginalność/Wartość* – Artykuł zawiera badanie ilościowe opracowane w całości przez autora. Dotyczy ono przydatności zastosowania wskaźnika cena do zysku do podejmowania decyzji inwestycyjnych na rynku giełdowym dla małych spółek NewConnect. Dotychczasowe badania dotyczące wskaźnika P/E i jego zastosowań koncentrowały się głównie na jego wykorzystaniu na rynku głównym GPW. Tym samym poprzez badanie empiryczne artykuł wnosi nowy wkład do metod oceny atrakcyjności inwestycyjnej akcji małych przedsiębiorstw. Warto podkreślić, że badanie oparte jest na danych z 9 lat, czyli obejmuje cały okres funkcjonowania NewConnect.

**Słowa kluczowe:** NewConnect, analiza finansowa, alternatywny system obrotu, cena do zysku C/Z, stopa zwrotu

## Cytowanie

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