

# Dividend Policy of Listed Energy Companies in Poland

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#### Abstract

The discussed problem of dividend policy in energy companies is extremely important in the context of the need to restructure the sector and move away from coal as an energy carrier in favor of renewable sources. In this light, the strategy of distribution into profits retained in the company and profit transferred to shareholders becomes important. The dividend policy is shaped by many macro-and microeconomic factors. In the current economic situation, factors such as the overall economic situation, inflation and the stock market situation, the net profit generated, the level of corporate debt, or the need to maintain financial liquidity play a significant role in it. The dividend policy affects the capital structure and the cost of its acquisition, which determines the profitability of restructuring projects. The research hypothesis is that the lack of a stable dividend policy is a significant cause of the undervaluation of energy companies on the stock exchange. The market valuation of the companies studied was much lower than their book value. However, the calculated Pearson linear correlation coefficients do not confirm this hypothesis. The dividend rate is only one of many factors that contribute to the undervaluation of energy companies on the stock exchange. It diminishes the possibility of obtaining equity capital on the stock exchange in the form of a new series of shares, and at the same time maintains a rational capital structure.

Keywords: profit distribution, determinants of dividend policy, dividend rate, market indexes

#### 1. Introduction

The net profit generated by the company is divided into retained profit, reinvested profit, and profit that is transferred as dividends, royalties, and other payment distribution methods. Companies listed on the Polish stock exchange transfer an average of 30% of net profit to shareholders. In the period of high net profits, some funds may be transferred to shareholders through a share buyback. The shareholder benefits not only from the dividends themselves but from the increase in their prices. While stock prices are not directly influenced by the company, it can indirectly influence them by paying dividends. Profit distribution decisions are strategic; retained profit is a source of financing for development projects. It also impacts the property and capital situation and the level of debt. The capital market can perceive the dividend policy as a signal of the company's financial condition. Significant payouts are well received, and failure to pay out signals the company's deteriorating financial condition. Dividend policy is one of many different factors that influence stock prices, and the solution to the problem of its impact on share prices has been the subject of research and scientific discussions for many years.

The article attempts to evaluate the dividend policy in energy companies in the context of the average values from the WSE stock exchange in Warsaw and the fuel and gas sector.

The research hypothesis is that energy companies do not pursue a stable dividend policy, and dividend yields are higher than the average of the stock market. Such a lack of a stable dividend policy is one of the reasons for the undervaluation of energy companies on the stock exchange.

#### 2. The dividend policy and the ways of its implementation

The issue of dividend policy and its importance to share-holders and companies is an ambiguous issue. Thus far, it has

not been clearly defined due to different approaches of individual groups of stakeholders towards the distribution of net profit. The dividend payment policy is generally the decisions made regarding the distribution of net profit into retained profit, reinvested profit and the profit paid to shareholders. The dividend policy is defined as all long-term profit sharing decisions, as defined in the pre-planned distribution key. These payments can be made from the current net profit and retained profit from previous periods in the form of a separate dividend or supplementary capital. Quoting Lintner's global research on dividends (1962), Kwiatkowski (2018) noted that companies determine the amount of dividend payments primarily based on the amounts of previous payments. This is due to the judgment of company managers who believe that investors have more confidence in companies with stable dividend payment policies. He also noted that the basic factor influencing the change in the amount of the payment is the change in the amount of the company's net profit. According to Lintner, as profits increase or decrease, companies adjust the amount of dividends to a less than proportional degree. In other words, dividends are "sticky", which in the literature is referred to as "dividend smoothing".

The dividend policy is the result of different preferences of shareholders and depends on economic priorities, as on well as the current and future financial situation of the company. Nevertheless, the management boards of companies propose such a profit distribution so that too low retained profit does not hamper the company's development. Retained profit increases the possibilities of implementing development projects, and therefore the company's ability to generate profits in the future. The retained profit also shapes the level of debt. It allows for financing development projects with equity, which reduces financial risk. This is important in the case of large net profit

Tab. 1. Basic stock exchange indexes for the stock market, fuel, gas, and energy sectors in Poland in the years 2010–2020. Source: own study based on data taken from Stock Exchange Annals - "Sector indexes" (x, the company generated losses)

Tab. 1. Podstawowe wskaźniki giełdowe dla rynku akcji, sektorów paliw i gazu oraz energetycznego w Polsce w latach 2010-2020. Źródło: własne

Years	WSE stock market			Fu	els an	d gas	Energy			
	P/BV	P/E	Dividend yield ratio DYR	P/BV	P/E	Dividend yield ratio DYR	P/BV	P/E	Dividend yield ratio DYR	
2010	1.16	18.2	2.4	1.07	12.3	0.7	1.30	10.6	1.6	
2011	1.06	12.5	2.5	0.74	7.9	1.0	1.23	7.2	4.8	
2012	0.89	11.7	3.9	0.88	15.5	0.7	0.98	6.9	7.3	
2013	0.96	15.8	3.6	0.75	14.9	2.7	0.75	8.2	6.1	
2014	1.09	29.9	3.1	0.78	X	3.4	0.88	10.8	5.7	
2015	1.05	18.3	2.3	0.96	20.1	3.0	0.63	29.8	7.5	
2016	0.82	17.3	3.4	1.24	49.0	2.5	0.58	110.6	6.0	
2017	1.09	39.2	2.3	1.29	8.3	2.7	0.65	8.5	3.9	
2018	0.98	12.7	2.5	1.25	8.7	2.3	0.61	13.2	3.8	
2019	0.86	11.0	2.9	0.93	10.4	3.7	0.52	12.2	3.0	
2020	0.67	24.8	3.6	0.71	10.6	1.3	0.59	Х	4.2	

Tab. 2. The P/BV ratio of energy companies on the stock market in Poland in 2010–2020. Source: own study based on the Stock Exchange Annals Tables 14. Sector indicators (all companies) (- data not available)

Tab. 2. Wskaźnik C/WK spółek energetycznych na rynku giełdowym w Polsce w latach 2010-2020. Źródło: własne

		U	, ,	,	U	,					
Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CEZ	1.82	0.26	1.48	0.66	1.24	0.92	0.88	1.08	1.25	1.13	1.14
Enea	1.07	0.76	0.64	0.53	0.56	0.39	0.35	0.40	0.31	0.23	0.20
Energa	-	-	-	0.84	1.14	0.60	0.43	0.57	0.36	0.28	0.38
Kogeneracja	1.68	1.00	1.21	0.63	-	0.75	1.00	0.88	0.41	0.34	0.31
PGE	1.09	1.80	0.82	-	0.80	0.61	0.48	0.49	0.40	0.31	0.29
Tauron	0.77	0.59	0.49	0.43	0.49	0.27	0.31	0.30	0.20	0.15	0.26
ZEPAK	-	-	0.42	-	0.35	0.12	0.30	0.34	_	0.23	0.51

fluctuations in particular periods. Securing a company against underinvestment affects both its market perception and its competitive position.

The optimal policy comes down to establishing such proportions of the division that maximize the added value of the company. Despite many years of research, decisions on dividend payments and their impact on the price and value of the company have not been clearly defined (Frankfuter, Wood, 20021). This discussion was called the dividend puzzle. Black argued that the deeper the analysis of the issue of dividend, the more they resemble puzzles whose pieces do not fit together (Black, 1976). According to Black, in the dividend policy is treated as the fundamental puzzle of finance. Therefore, many mutually exclusive theories and hypotheses have been published, in which the authors attempt to explain the dividend policy. Currently, the literature on the subject offers several leading theories explaining the relationship between the payment of dividends and the price of the company's shares and its value.

The basic determinant of the company's current and future ability to meet the needs of its stakeholders is its market value. Dividends are of particular importance to shareholders in terms of their impact on the company's value. Shareholders expect an optimal return rate on the invested capital, which depends on the level of dividends paid and the increase in share prices. Most researchers believe that the choice of dividend policy and any amendments to it is met with a certain reaction of investors, which affects the company's market value. Investors' reaction to a change in dividend policy is the market's assessment of the event, as reflected in an increase or decrease in additional returns realized by shareholders.

### 3. Determinants of the dividend policy

The variety of factors that determine the dividend policy makes it practically impossible to establish a fixed set for a specific company. These factors are systematized in the literature according to various criteria. Kowerski (2011) distinguishes the determinants related to the age and sector of companies and the dividend in the preceding year as fundamental, market, and fundamental market. Most often, however, these determinants are divided into micro- and macroeconomic, as well as capital market determinants.

Microeconomic factors affecting the dividend policy include cash flow and availability, net profit and its stability, the need to maintain control over the enterprise, the management board's unwillingness to increase debt, return on equity, capital structure, planned share buyback, investors' preferences as to dividends, the life cycle of the enterprise, as well as available investment projects. In turn, macroeconomic factors determining the distribution of the company's profit include inflation, growth of the gross domestic product (GDP), investment dynamics, national currency, dynamics of export and imports, and others, such as economic sentiment, fluctuations in market indexes (P/E, P/BV) or capital market situation (Jabłoński, Kuczowic, 2016).

The study of selected macroeconomic factors by Jabłoński and Kruczowic (2016) was based on the analysis of the correlation between GDP growth, investment rate, and economic sentiment index (PMI) and the amount of dividends paid by 48 companies listed on the Warsaw Stock Exchange in the years 2002-2013. The Pearson linear correlation coefficient was used in the study, which in effect showed that there was no significant correlation between macroeconomic factors and the amount

ab. 3. The P/E ratio of energy companies on the stock market in Poland in 2010–2020. Source: Stock Exchange Yearbooks, Tables 14 and 22, Sector indicators (all companies)

Tab. 3. Wskaźniki C/Z spółek energetycznych na rynku giełdowym w Polsce w latach 2010–2020. Źródło: Stock Exchange Yearbooks, Tables 14 and 22, Sector indicators (all companies)

Companies	2010	2011	2012	2013	2014	2015	201	5 2017	2018	2019	2020
CEZ	8.4	12.2	11.2	6.6	13.4	12.5	11.6	16.9	25.0	18.6	19.7
Enea	17.0	9.8	9.7	8.1	7.5	5.5	х	5.7	5.0	3.5	Х
Energa	-	-	-	Х	9.8	6.0	18.2	8.3	4.1	6.7	Х
Kogeneracja	11.3	9.0	12.0	5.2	Х	11.0	10.3	7.0	12.5	8.7	3.3
PGE	14.0	13.4	6.2		9.5	X	8.9	5.2	13.4	7.5	X
Tauron	14.3	8.1	5.5	5.5	7.8	4.2	х	4.2	3.7	13.9	X
ZEPAK	-	-	4.3		15.6	12.6	X	3.8		X	X

Tab. 4. Dividend rate of energy sector companies in Poland in 2010–2018. Source: own study based on data from the Stock Exchange Annals – Tables: "Companies according to market value"

Tab. 4. Stopa dywidendy spółek sektora energetycznego w Polsce w latach 2010–2018. Źródło: własne na podstawie Stock Exchange Annals – Tables:
"Companies according to market value"

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018
CEZ	6.9	6.6	6.7	7.7	6.9	8.9	3.0	6.6	6.1
Enea	1.6	2.4	9.2	2.6	3.8	4.2	2.2	-	-
Energa	-	-	-	7.5	4.3	11.4	5.4	1.5	-
Kogeneracja	3.2	5.0	5.1	-	-	_	6.9	7.7	6.8
PGE	3.0	4.8	10.0		5.8	6.1	2.4	-	-
Tauron	-	2.8	6.5	4.6	3.8	5.2	_	-	-
ZEPAK	-	-	-	-	2.6	13.3	-	8.5	-

of dividend. Gajdka (2013) notes that if investors see great opportunities for economic growth, the probability of dividend payment will be lower. On the other hand, in the event of an economic slowdown, investors will prefer a dividend payout to retain the net profit in the company for investment purposes. Also, Brav, Graham, Harvey, and Michaely (2008) argue that investors are willing to accept low dividends in the event of high investment rates.

An important macroeconomic factor influencing dividend policy is inflation expressed in price increases. Companies react to high double-digit inflation and to price drops (deflation). Both of these phenomena affect the company's financial result and the implementation of its investment program. In the case of inflation, dividend companies often suspend dividend payments to allocate the financial result to investments in assets that would allow maintaining the real value of capital (Skousen, 2011). In periods when inflation is low, companies pursue a stable dividend policy and pay dividends every year. In periods when there is elevated inflation, investors expect not only growing profits, but also an increase in dividends that is roughly comparable to the rate of profits (Brigham, Houston, 2005).

The propensity of companies to pay dividends increases with the improvement of the economic situation on the capital market (Kowerski, 2011). Moreover, the probability of dividend payment increases when stock exchange investors value higher the companies that pay dividends, both in relation to companies that do not pay dividends (Baker, Wurgler, 2004) and companies purchasing their own shares (Pieloch-Babiarz, 2017).

In energy companies, the ownership structure can have a significant impact on the dividend policy. In several companies, the State Treasury has controlling blocks of shares. As Kaźmierska-Jóźwiak (2016) notes, in a situation where the Treasury is a significant shareholder of the enterprise, decisions regarding the distribution of the company's net profit and dividend payment are often determined by the state's fi-

nancial needs and policy. Due to its generally substantial needs, the Treasury aims to increase dividend payout ratios, even to the point of "financial drain" of companies. The impact of the company's ownership structure on decisions regarding dividend payments was investigated by, e.g., Michaely and Roberts (2012]). Based on a study of 8,751 British companies, the authors indicate that companies with a government shareholder pay higher dividends, which is due to the higher probability of a problem in such an agency. In the case of state-owned companies, the risk is even doubled: it occurs not only between the management staff and the politicians who supervise them, but also between politicians, who are "ultimate" owners of companies, and the society (Kwiatkowski 2018).

One of the determinants of the dividend policy is the company's life cycle. The enterprise life cycle theory is that a company begins to pay dividends as it moves from high growth to low growth. The decline in the company's growth rate, profitability, and systematic risk determines the transition from immaturity to maturity in the life cycle. In the early stages of development, companies need funds for investments. Therefore, they rarely pay dividends, as opposed to mature companies, where the need for financial resources is lower. As investment opportunities decrease along with the development of companies, the demand for investment outlays is reduced and more funds are left for the payment of dividends (Sierpińska-Sawicz, 2015).

In their investigations of dividend decision factors, many researchers took into account the investment opportunities of companies (measured by the ratio of the market value to the book value of assets, or the annual growth rate of assets). Development companies that prefer to keep a large share of their profits pay low dividends. Kowerski (2011) emphasizes that with the transition to the next phases of the life cycle, the investment opportunities of companies decrease, resulting in a reduction in capital expenditure. This means that more funds are retained for dividend payments. Damodaran notes that offering a high-

Tab. 5. Pearson coefficient for dividend yield and the P/BV ratio. Source: own calculations Tab. 5. Współczynnik Pearsona dla stopy dywidend i relacji C/WK. Źródło: własne

Variable Correlation coefficients are significant at p <0.05000  N = 9 (the missing data was removed on a case-by-case basis)								
	Mean	Standard deviation	P/BV	Div. rate				
P/BV	<b>V</b> 0.622800 0.195349			0.172079				
DIY	6.051609	1.660037	0.172079	1.000000				

er dividend does not add to the company's value if it invests in bad projects. On the other hand, a company implementing good projects increases its value, even when it does not pay dividends to its shareholders (Damodaran, 2017).

The way a company finances itself determines its dividend policy in many different ways. Payments to shareholders are one way to achieve the optimal capital structure. A large share of debt in financing should influence lowering the level of dividends, as large debt is a specific obligation of the management board to allocate the generated cash first of all to its servicing. A company with easy access to a wide variety of capital sources can provide larger payouts to shareholders. Thus, the greater the share of debt in the capital structure, the lower the dividend payment ratios (Cwynar, Cwynar 2007, Pieloch-Babiarz, 2018). In some situations, creditors can limit the payment of dividends to shareholders to protect their interests. The provisions of bond or loan agreements include covenants, e.g., on limiting the payment of profit dividends, to ensure the company's ability to service the debt (Sierpińska-Sawicz, 2018). In conclusion, it should be emphasized that the dividend payment policy is always the result of a number of factors with different impact strengths, which should be assessed considering the sectoral conditions. In energy companies, the dividend policy will be most influenced by the economic situation, inflation and government anti-inflation measures, the ownership structure, the financial results and the need to invest in renewable energy sources.

## 4. Data sources and stock market ratios used in the study

Data used to evaluate the dividend policy were taken from the Stock Exchange Annals. There are 12 companies from the energy sector listed on the Warsaw Stock Exchange. Only seven of them paid dividends in the years 2010-2018. In the first three years (2010-2012), the dividend was also paid by Będzin, but it was omitted in the investigation due to the short period of dividend payment. In 2019 and 2020, none of the energy companies (except the Czech company CEZ) paid dividends, hence the research period for energy companies regarding the dividend rate is shorter than for the entire stock exchange and the fuel, gas, and energy sectors. Until 2013, the value of the dividend for shares of the CEZ company was given in PLN, using the Czech koruna converter on the last day of December. In the years 2014-2020, the value of the dividend in the Stock Exchange Annals is given in korunas. Similarly, for other foreign companies listed on the Warsaw Stock Exchange, the dividend per share is given in the domestic currency of the dividend payer.

To evaluate the dividend policy, the price-to-book value ratio (P/BV), the price-to-equity ratio (P/E) and the dividend yield ratio (DYR) were used. The years when the company had a negative financial result and the P/E ratio was not calculated are marked with the x symbol in the tables. The P/BV ratio, i.e., the market price of a share to its book value, shows how many zlotys must be paid on the stock exchange for each zloty of the

company's assets after paying off all its debts. The value of the ratio below 1 indicates that the company's market is undervalued and its assets are poorly used. Values above 1 indicate the market reaction to the implementation of the investment program. Companies with a ratio greater than 1 have greater opportunities to issue a new series of shares on the stock exchange. Therefore, the P/BV ratio is, in a sense, a measure of whether the company has favorable investment opportunities (Sierpińska, 2012). If the company has negative equity, i.e., when its debts are greater than the assets, then 0 is given in the stock exchange statistics.

The P/E ratio, that is, the market price of shares to net profit per share, is based on the profits generated by the companies in a given period. Usually, profits earned in four consecutive quarters are considered. The index determines the number of years after which the capital used for the purchase of shares will be returned, assuming that the company will generate similar profits. The dividend yield ratio (DYR) presents the ratio of the dividend paid per share to the market price of the share. It communicates the value of the dividend per price unit of a single share.

#### 5. Research results

Table 1 presents the basic stock exchange indexes for the stock market, the fuel and gas sector, and the energy sector. As observed, these indicators show considerable variation over time. The price-to-book value ratio of the WSE stock market is higher than for the fuel and gas sector and for the energy sector. In the last two years of the companies analyzed period, the analyzed were valued the lowest by the market. In 2020, the average market value of the companies was only 67% of their book value. In the fuel sector, the ratio was similar and amounted to 71%. Companies in the energy sector were valued very poorly. In 2019, their market value was only 52% of their book value, while their stock market value was 86% (93% for fuel and gas companies). In 2020, despite the pandemic and the decline in the corporate financial results of listed companies, the market valued energy producers higher than a year before. The P/BV ratio for the stock market decreased by 22% compared to 2019, while for the fuel and gas sector it decreased by 24%.

The P/E ratio supplements the missing information, and therefore its is meaningful for a potential share buyer. It indicates the period of return on investment in the shares of listed companies. For the entire stock market, it ranged from 11 to 30 years. Based on the profits generated, in 2016, investors would have to wait almost 50 years for the return on capital invested in shares in the fuel and gas sector, and more than 100 years for investments in the energy sector. The P/E ratio is influenced by various factors, not only profitability that influences the share price but also the market situation.

In the Polish stock market, the average value of the dividend yield is calculated for the entire stock market and for individual sectors. The dividend rate is of interest mainly to investors who invest in stocks to receive recurrent income rather than to profit from the increase in the value of the stock. In 2010-2020, the dividend rate ranged from 2.3% to 3.9%. The average for the period in question was 3.2%. In the energy sector, it was 4.9%. The lowest rate in this sector, 1.6%, was reached in 2010 and the highest was 7.5% – in 2015. The higher than average dividend rate for the entire stock exchange could be due to the share of the State Treasury in these companies.

Table 2 presents the P/BV ratios for individual companies. The Czech company CEZ, which paid dividends every year, was valued the highest by the market. On the other hand, Enea and Tauron recorded a drastic drop in value. In 2010, the market value of these companies was estimated at approximately their book value. In the last year of the analyzed period, the market value of Enea constituted only 20% of its book value, and that of Tauron - 26%. Throughout the period in question, the market significantly below its book value, despite ongoing investments. In 2019, it was only 15%. Energa also recorded a significant drop in value. In 2014, its market value was higher than the book value by 14%, and in 2019, its value decreased and amounted only to 28% of the book value. In 2010, the market value of Kogeneracja was 68% higher than its book value, despite the ongoing economic crisis, and in 2020 it was only 31% of the book value. It seems that the reasons for such a low valuation of energy companies are large fluctuations in their financial results, the lack of a long-term dividend policy, and the economic situation. Shareholders are never sure whether they will receive dividends. The companies pursue a residual dividend policy and allocate the rest to dividends after determining the amount of funds needed for investments.

The level of indebtedness of companies and the need to maintain debt servicing capacity also contributed to the abandonment of dividend payments in some years. In the period analyzed, the debt of energy companies was systematically growing. Tauron's overall debt ratio in 2019 was 54%, while in 2010 it dropped to 37%. In Enea in 2019, debt accounted for 53% of financing and in 2010 it was only 23%. ZEPAK debts financed 62% of assets and in the Czech company CEZ 64% (Kowalik 2021).

The policy on the structure of financing sources is reflected in the P/E ratio. The data in Table 3 inform about the large fluctuations in the return period on capital invested in shares of energy companies. The capital invested in the shares of Enea in 2010 could yield in 17 years, and in 2020 – in 3.5 years. The increase in profit did not increase share prices, the level of which depends not only on financial results but primarily on the economic situation, the level of interest rates, inflation, capital market conditions, and other microeconomic factors.

Table 4 shows the dividend rate for the investigated energy companies. CEZ paid dividends every year and its yield was even and quite high compared to the dividend rates of other energy companies. The average rate for this company was 6.6%. In Polish energy companies, the dividend rate was highly diversified. In Enea in 2010 it was 1.6% and in 2012 it was 9.2%. Similarly, in PGE in 2010, the dividend rate was 3.0%, and in 2012 it was more than three times higher and amounted to 10.0%. In ZE PAK, the dividend rate in 2014 was 2.6% and a year later 13.3%. In the following year, the company stopped paying dividends. The presented dividend rates indicate the lack of a stable dividend policy and do not meet the expectations of investors who focus on recurring income from shares.

To reinforce the verification of the hypothesis presented in the introduction, the correlation between the dividend rate and the P/BV ratio was analyzed. The results of the calculation are presented in Table 5.

The analysis covers the years 2010-2020 and takes into account the financial data of seven companies, for which geometric means of the examined indicators were calculated. The Pearson correlation coefficient was determined and statistical significance was tested, at the significance level p=0.05. The Pearson linear correlation coefficient is r=0.17 and shows a very low positive correlation. The lack of a statistically significant linear dependence of the variables studied indicates that the value of companies is determined by many factors, and the dividend rate is only one of them, and not the most important one.

Apart from the dividend value per share, the level of the dividend rate was influenced by changes in share prices, which are influenced by, e.g., stock market situation. Since 2017, the largest energy companies, Enea, PGE, and Tauron, have not paid dividends. The funds were allocated to investment projects and debt service. The failure to pay dividends was also influenced by factors such as the COVID-19 pandemic, lower financial results, and the need to restructure the sector toward renewable energy sources. Also, the level of dividends was undoubtedly influenced by the State Treasury's share in the four largest energy companies (Enea, Energa, Tauron, and PGE).

#### 6. Summary

In conclusion, it should be emphasized that energy companies listed on the WSE exchange market do not pursue a stable dividend policy. This is reflected in the P/BV and P/E indexes. The dividend policy in energy companies is the result of various premises that companies follow when distributing net profit. The lack of a stable dividend policy in the investigated companies is one of the determinants of their undervaluation on the stock exchange. Such companies are often taken over by companies that are stronger in terms of capital. However, the participation of the State Treasury in these companies reduces the risk of takeover. When the sector needs restructuring, companies need to construct strategies of profit distribution, investing, and selection of financing sources adequate to their investment needs. These strategies can provide a stable operating platform in a dynamically changing environment. Only strategies consistent with the company's development needs can ensure business continuity on the market.

As the pulse of the economy, the energy sector ensures the stable functioning of business and households, but is a large emitter of CO<sub>2</sub>, which increases the costs of manufacturing energy. The energy sector requires considerable outlays for a swift and deep restructuring. Individual companies have different financing opportunities, and their level of indebtedness also varies. Companies that have greater opportunities to raise capital in the debt market could allocate a greater part of their net profit to shareholders in the form of dividends. The shareholding structure also plays an important role in the dividend policy. The State Treasury, being a significant shareholder in energy companies, stopped collecting dividends in 2018–2020 (except for Energa). This is noteworthy in cases where dividends are a source of state budget revenues.

#### Literatura - References

- Baker, M., Wurgler, J., 2004. Appearing and Disappearing Dividends: the Link to Catering Incentives, Journal of Financial Economics, No.73 (2), s. 271-288
- Black, F., 1976. The dividend puzzle. The Journal of Portfolio Management, Vol. 2(2), pp. 5-8. DOI: 10.3905/ jpm.1976.408558
- 3. Brav, A., Graham, J.R., Harvey, C.R., Michaely, R. 2005. Payout Policy in the 21st Century. Journal of Financial Economics, No.77 (3), pp. 483–527 DOI:org/10.1016/j.jfineco.2004.07.004
- 4. Brigham, E.F., Houston J.F., 2005. Podstawy zarządzania finansami, PWE, Warszawa
- 5. Gajdka, J., 2013. Behawioralne finanse przedsiębiorstw. Wydawnictwo Uniwersytetu Łódzkiego, Łódź
- 6. Cwynar, A., Cwynar, W. 2007. Kreowanie wartości spółki poprzez długoterminowe decyzje finansowe, Polska Akademia Rachunkowości, Warszawa
- 7. Damodaran, A., 2017. Finanse korporacyjne, Teoria i praktyka, Helion, Gliwice
- 8. Frankfuter, G.M., Wood, Jr. B. G., 2002. Dividend Policy Theories and Their Empirical Tests. International Review of Financial Analysis, Vol.11, Iss.2, pp. 111-138, DOI.org/10.1016/S1057-5219(02)00071-6
- 9. Jabłoński, B., Kuczowic, J., 2016. Makroekonomiczne determinanty polityki dywidend, Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, no. 287, pp. 77-89
- Kaźmierska-Jóźwiak, B., 2016. Struktura własności a skłonność do wypłaty dywidendy, Zeszyty Naukowe Uniwersytetu Szczecińskiego, Finanse, Rynki Finansowe, Ubezpieczenia, no. 4(82), part 2, pp.171-178. DOI: 10.18276/frfu.2016.4.82/2-13
- 11. Kowalik, M. 2021. Zarządzanie poziomem zadłużenia spółek energetycznych w kontekście zmian na rynku energii, Rynek Energii, no. 4, pp. 16-25 DOI: org/10.29227/IM-2021-01-16
- 12. Kowerski, M., 2011. Ekonomiczne uwarunkowania decyzji o wypłatach dywidend przez spółki publiczne, Konsorcjum Akademickie Wydawnictwo WSE w Krakowie-WSIiZ w Rzeszowie-WSZiA w Zamościu, Kraków-Rzeszów-Zamość
- 13. Kwiatkowski, J., 2018. Struktura akcjonariatu a polityka wypłacania dywidend spółek prowadzących działalność badawczo-rozwojową w Polsce, International Business and Global Economy, no. 37, pp. 286 -298. DOI: 10.4467/23539496IB.18.020.9393.
- 14. Michaely, R., Roberts, M.R. 2012. Corporate Dividend Policies. Lessons from Private Firms. The Review of Financial Studies, Vol. 25, Issue 3, pp. 711-746, DOI.org/10.1093/rfs/hhr108
- 15. Lintner, J., 1962. Dividends, earnings, leverage, stock prices and the supply of capital to corporations, The Review of Economics and Statistics, Vol. 44(3), pp. 243-269, DOI.org/10.2307/1927792
- 16. Pieloch-Babiarz, A., 2017. Determinants of Payout Policy and Investment Attractiveness of Companies Listed on the Warsaw Stock Exchange. Equilibrium Quarterly of Economics Economic Policy, no. 12 (4), pp. 675-691. http://dx.doi.org/10.24136/eq.v12i4.35
- 17. Pieloch-Babiarz, A., 2018. Zróżnicowanie determinant wypłaty dywidendy przez przemysłowe spółki notowane na giełdzie Papierów Wartościowych w Warszawie w latach 2001-2017, Zeszyty Naukowe Uniwersytetu Szczecińskiego, Finanse, Rynki Finansowe, Ubezpieczenia, no. 2 (92), pp. 313 -224, http://dx.doi.org/10.18276/frfu.2018.92-27
- 18. Sierpińska, M., Jachna, J., 2012. Ocena przedsiębiorstwa według standardów światowych, WN PWN, Warszawa
- 19. Sierpińska-Sawicz, A., 2015. Cykl życia spółki a polityka dywidend i poziom realizowanych inwestycji, Zeszyty Naukowe Uniwersytetu Szczecińskiego, no. 855, Finanse, Rynki Kapitałowe, Ubezpieczenia, Issue 74, Vol.1, pp.193-202, http://dx.doi.org/10.18276/frfu.2015.74/1-17
- 20. Sierpińska-Sawicz, A., 2018. Covenants as barriers limiting enterprises use of bank loans, Gospodarka Surowcami Mineralnymi Mineral Resources Management, Vol. 34, Issue 4, pp. 165-180, DOI: 10.24425/122588
- 21. Skousen, M., 2011. Struktura produkcji. Giełda, kapitał, konsumpcja, Fijorr Publishing, Warsaw

# Polityka dywidend giełdowych spółek energetycznych w Polsce

Podjęty w artykule problem polityki dywidend w spółkach energetycznych jest niezmiernie istotny w warunkach potrzeby restrukturyzacji sektora, odejścia od węgla jako nośnika energii na rzecz źródeł odnawialnych. W tych warunkach ważna staje się strategia podziału zysku na część zatrzymaną w przedsiębiorstwie i część wytransferowaną do akcjonariuszy. Polityka dywidend kształtowana jest przez wiele czynników makro- i mikroekonomicznych. W obecnej sytuacji gospodarczej niemałą rolę mają w niej takie czynniki: jak inflacja, koniunktura gospodarcza i koniunktura na rynku giełdowym, poziom wygenerowanego zysku netto, poziom zadłużenia spółek czy też konieczność utrzymania płynności finansowej. Polityka dywidend wpływa na strukturę kapitału i na koszt jego pozyskania co decyduje o opłacalności podejmowanych przedsięwzięć restrukturyzacyjnych. W badaniu założono, że brak stabilnej polityki dywidend jest istotną determinantą niedowartościowania spółek energetycznych na giełdzie. Wycena rynkowa tych spółek była dużo niższa niż ich wartość księgowa. Obliczone współczynniki korelacji liniowej Persona nie potwierdzają jednak tej hipotezy. Stopa dywidend jest tylko jednym z wielu czynników mających wpływ na niedowartościowanie spółek energetycznych na giełdzie. Wpływa ono na ograniczenie możliwości pozyskania kapitału własnego na giełdzie w postaci emisji kolejnej serii akcji a równocześnie na utrzymanie racjonalnej struktury kapitału.

Keywords: podział zysku, determinanty polityki dywidend, stopa dywidend, wskaźniki rynkowe