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Takeovers as a way of investing versus dividend payments on the warsaw stock exchange

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Abstract. The aim of this study is to investigate the relationship between participation in merger transactions, and paying dividends. Acquiring companies should pay higher than average dividends, because a great number of studies show that on average they have lower prices. However, it is rather improbable that companies which need money for external growth transactions are eager to share their profits with their shareholders. Therefore, the research hypothesis of this study is a statement that the company engaged in the acquisition of other entities pays lower dividends on average in comparison to other companies. The study was based on a sample of companies listed on the Warsaw Stock Exchange, which were involved in merger transactions as the acquiring party. The method used is statistical analysis of dividend indicators. The period of analyses are from the year 2000 to 2009.

Keywords: Dividends, dividend yield, mergers, acquisitions, Poland.
JEL classification: G32, G34, G35.

INTRODUCTION

Mergers are complex transactions, which have to gain a profit for shareholders. The shareholders' profits are made up of two parts: the capital gain resulting from an increase in share price and dividends paid by the company. Whilst the issue of changes in stock prices after a merger or acquisition transaction has been the subject of many studies, the issues of investment's return in the form of dividend in connection with transactions of mergers or acquisitions are not as widely studied as the problem of capital gains. The aim of this study is to investigate the relationship between participation in merger transactions, and distribution of profits as dividends. Researches on the impact of mergers on the price of merging firms' shares indicate that owners of targets gain when owners of raiders have, on average, little profit or even loss. Therefore, the compensation for the shareholders of the acquiring companies could be higher than average dividends. However, it is rather improbable that companies which firstly collect funds for the acquisition then repay the loans taken to finance the transaction and incurring additional restructuring costs of the combining entity, and that companies are eager to share their profits with shareholders. Therefore, the research hypothesis of this study is a statement that the company engaged in the acquisition of other entities pays lower dividends on average in comparison to other companies. The study was based on a sample of companies listed on the Warsaw Stock Exchange, which were involved in merger transactions as the acquiring party in the years 2000-2005. The amount of dividends paid were analysed using indicators as dividend to the market value of a firm (dividend yield), and dividend to the book value of a company, adjusted by the average value for the entire stock market for the period 2001-2009.

MERGERS, DIVIDENDS AND CHANGES IN STOCK PRICES – LITERATURE REVIEW

Issues connected with mergers and dividend policy, the impact on the valuation of shares and, more generally, on changes in the wealth of business owners, are very important from the point of view of investors. Therefore, these issues have been the subject of many studies.

Researches on the impact of mergers on firms' values indicate that shareholders of targets always gain on transactions, while shareholders of acquirers have little profit or they even lose on these transactions. Such a thesis was stated by Jensen and Ruback, who analysed several research programmes on business combinations (Jensen and Ruback, 1983). Research programmes analysed by Jensen and Ruback concerned short-term effects, mostly a few days (a maximum of 12 months) around the announcement of the transaction.

However, long-term analyses, with a research horizon from 3 to 5 years after the merger, also indicate that on average the acquirers have worse results in comparison to the control group or to the entire market. The decline in acquirers' stock prices can be observed over a few years after the transaction (Asquith, 1983; Agrawal et al, 1992 or Rosen, 2006).

Also, the impact of dividend policy on the valuation of the shares has been the subject of researches for decades. Three approaches to dividend policy are: neutral approach (lack of effect of dividends on the share prices), the pro-dividend approach (share prices grow with increasing dividends) and the anti-dividend approach (drop in stock prices in response to an increase in dividends). Authors who have dealt with these issues include: Lintner (1956), Gordon (1962), Miller and Modigliani (1961, 1963), King (1966), Friend and Puckett (1964), Fama and Babiak (1968), Marsh and Merton (1986, 1987), Campbell and Shiller (1988a, 1988b) and others. Dividends more broadly, in terms of their information content, the volatility of dividends, dividend policy changes and other issues related to dividends and capital markets have been studied by such authors as: Watts (1973), Woolridge (1983), Brennan and Thakor (1990), Asquith and Mullins (1983), Denis, Denis and Sarin (1994), Firth (1996), Donaldson and Kamstra (1996), Nissim and Ziv (2001), Goyal and Welch (2003), Koch and Sun (2004) and others.

The studies cited above involved separately the impact of mergers on the value of the businesses and the impact of dividend policy on the value of companies. The relationship between mergers and dividend policy appeared in the literature in the context of takeover risk due to reduced dividend payments. The rationale for such a claim may be the thesis of Jensen (Jensen 1986, 1988), stating that if business managers overinvest rather than pay the shareholders, there is a high probability that managers allocate money for investments with negative net present value. Therefore, the consequence for non-payment of dividends may be a lower valuation of the company, and in such situations an undervalued company can easily become a takeover target. The attempt to verify this hypothesis in relation to British companies was made by Dickerson, Gibson and Tsakalotos (1998). These authors, on the basis of their research, found that an increase in dividend payments significantly reduces the likelihood of the acquisition, but it cannot be explained well by the theory of free cash. The proposed explanation is the theorem of keeping the loyalty of investors through dividends (Dickerson et al, 1998, p. 298).

The researches above indicate that there is an impact of mergers and acquisitions and dividends on shareholders' wealth. This research aims to examine the relationship between participation in merger transactions and the distribution of profits as dividends. The benefits of shareholders consist of a capital gain resulting from the increase in share price and dividend. This analysis is to point out if a shareholder of the company involved in the acquisition can count on the dividend, or the benefit from the transaction should be based on the growth of the company's value.

DATA AND ANALYSIS METHODS

The research sample was determined as follows: there were selected mergers and acquisitions worth more than 300 thousand USD (about 1 million PLN) from the M&A Thompson Reuters database. Only transactions in which participated companies to which Poland was assigned as a country of origin and firms had the status of an acquirer in the transaction (data obtained from Thomson Reuters service under a special agreement between the University of Gdansk and the Thomson Reuters company). From the list of all transactions obtained in this way selected transactions were picked out, those in which companies listed on the Warsaw Stock Exchange took part in. The mergers and acquisitions occurred in years 2000-2005. If some company participated in a number of transactions in a given year, it was included in the sample only once. In addition, the analysis is limited to companies for which the value of transactions was higher than 1 percent of the book value of the company at the end of the year, so as to avoid the impact on the sample of the non-essential transactions from the point of view of the size of companies (however, not rejecting those that may have had an impact on the growth potential of the new entity). Sample size is 38 companies.

For companies that have been classified as research sample, dividend yield (dividend divided by share price) was determined within four years after the transaction, and then it was adjusted by the average dividend yield for the year. This ratio shows if in the next few years after the acquisition firms on average pay higher or lower dividends in relation to all the participants of the stock market. A second measure of the dividend payout – the dividend in relation to the book value of the company was also used. Dividend yield is dependent on the share price. If investors appreciate the company, hoping to increase its profits in the future, a company's share price rises, which would result in a decline in the dividend yield. Therefore, the second used relative measure of the dividend is the ratio dividend to book value of the company. For all companies coefficients for book value were determined for four years after the acquisition, and then they were adjusted (divided) by the average value of dividends to book value, calculated for all participants of the stock market. The value of the adjusted coefficient less than 1 means that the company has lower dividends from the average of the market, and the value greater than 1 indicates a higher rate compared to the average of the market. The method used is the method based on the mechanism used in calculating the abnormal rates of return (especially the mechanism of calculation of abnormal returns BHAR by Rosen (Rosen, 2006)) for changes in stock prices as a result of certain events, such as information about mergers, dividend policy changes or corrections of expected financial results. Calculations are based on data from the Factbooks of the Warsaw Stock Exchange from the years 2000-2010, missing data was completed with the use of data from the archive GPWInfostrefa, portal of the Warsaw Stock Exchange and the Polish Press Agency.

THE DIVIDEND AFTER THE ACQUISITION

Analysis of dividend payments made by listed companies that participated in transactions of mergers as the acquiring party, indicates that these companies pay on average lower dividends in the years following the transaction, compared with the average for all companies listed on the Warsaw Stock Exchange. The average adjusted dividend yield for acquiring companies in the following years was between 0.38 and 0.46, which means that these companies pay out on average about 60 percent lower dividends in comparison to all the listed companies (Table 1 - results are statistically significantly different from the reference value 1).

Table 1

Average coefficients: dividend yield and dividend/BV for the acquiring companies after an acquisition for subsequent years (reference value – 1)

	Average	Standard deviation	p-value
Dividend yield – year 1	0.441	1.065	0.002555
Dividend yield – year 2	0.464	0.815	0.000246
Dividend yield – year 3	0.438	0.733	0.000033
Dividend yield – year 4	0.375	0.731	0.000006
Dividend/BV 1	0.416	0.853	0.000154
Dividend/BV 2	0.448	0.820	0.000189
Dividend/BV 3	0.517	0.959	0.003626
Dividend/BV 4	0.399	0.744	0.000015

Souce: own compilation.

Also, analysis of the adjusted dividend / book value ratio gives similar results - the value of the indicator ranges from 0.4 to 0.52, also indicating lower by 50-60 percent payment of dividends in relation to the average for all listed companies (Table 1).

Table 2

The percentage of acquiring companies that did not pay dividends in subsequent years and those whose dividends were relatively lower than the average for all listed companies

Year	1	2	3	4
No dividend	63	55	47	50
Dividend yield below average	87	79	84	89
Dividend/BV below average	87	84	79	87

Source: own compilation.

In order to determine whether the low average dividend rates for acquiring companies results from the lack of dividend payments, or perhaps from a small number of companies that pay above-average dividends, an analysis of the distribution of results was made. The number of companies that did not pay dividends decreased over time further from the transaction, initially two thirds of companies did not pay dividends but in the 3rd and 4th year after the transaction the share of non-paying companies had dropped to about 50 percent. (Table 2). Taking into account the companies that do not pay out dividends, 80-90 percent of companies had dividend coefficients lower than the average on the market in all years. So, on average, only one in six or seven companies involved in the merger transactions as acquiring party pay dividends higher than the average.

Determination of correlation between the dividend coefficients in subsequent years enables us to test to what extent companies stick to a fixed dividend policy. Achieving a perfect positive correlation is not possible because as Table 2 shows with the passing of time, more and more companies pay dividends, however obtaining a strong correlation between successive years would suggest following an established dividend policy by the companies participating in the merger transactions.

Table 3

Pearson's correlation for subsequent years from the merger

	From 1 to 2	From 2 to 3	From 3 to 4
Dividend yield	0.198842	0.881533*	0.729570*
Dividend/BV	0.458794*	0.889838*	0.711083*

* statistically significant at level 0.05.

Source: own compilations.

The correlation between dividend coefficients: dividend yield and dividend / book value ratio, measured by the linear Pearson's correlation coefficient is strong and statistically significant for coefficients from the year 2 and 3 or 3 and 4, while the correlation between the dividend coefficients for the dividend payment for the year 1 and 2 is weak and not statistically significant in the case of dividend yield and moderate in the case of dividend / book value ratio (Table 3).

After removing one outlier the linear correlation coefficient between the values of dividend yield in the first and second year after the transaction increases to 0.55 and is statistically significant, and the correlation coefficient for dividend / book value ratio in year 1 and 2 increases to a value of 0.58. After removing the two outliers correlation coefficients are respectively 0.69 and 0.74. These results indicate a fairly strong correlation of dividend coefficients in all the subsequent years.

Table 4

Spearman's rank correlation for subsequent years from the merger

	From 1 to 2	From 2 to 3	From 3 to 4
Dividend yield	0.560208*	0.641706*	0.844459*
Dividend/BV	0.565997*	0.705271*	0.823364*

* statistically significant at level 0.05.

Source: own compilations.

Calculations of the correlation coefficient were also made using non-parametric tests on the full sample of 38 companies. Correlation between dividend coefficients: dividend yield and dividend/book value ratio for the following years, measured by Spearman's rank correlation coefficient, ranges from 0.56 between for year 1 and 2 after the transaction, up to over 0.8 in years 3 and 4 after the merger (Table 4). This method also indicated that there is strong correlation between the dividend coefficients in subsequent years, for companies included in the sample, statistically significant for all periods.

CONCLUSION

The analysis conducted on a sample of companies participating in mergers as acquiring companies indicates that these companies pay dividends on average lower in comparison to all companies on the stock market. This means that in a long period (several years), the shareholders of the companies involved in mergers should receive higher than average capital gains resulting from the increase in share prices of these companies, in order to compensate for the lack of participation in the firms' profits.

In addition, it was found that the analysed companies have established dividend policies, which had been consistently implemented in the subsequent years. The observed changes in dividend policy included the payment of dividends by a growing number of companies with growing distance from the moment of the acquisition.

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