Dividends and M&A transactions financing

Leszek Czerwonka [1]

Abstract

The basic methods of payment in case of mergers and acquisitions are: cash and exchange of shares. Acquisitions of publicly listed companies have to be done by invitations to sell shares (tender offers). In tender offer transactions it is possible to pay for the shares of the target company both in cash and shares. However, the attempts of takeovers which took place on the Warsaw Stock Exchange in years 2002-2010 were always completed with cash. Since the acquiring companies had to raise enough cash, it has been hypothesized that during a few years before attempting to take over a company, the acquirers pay dividends to a lesser extent than other listed companies. The conducted analysis, however, tends to reject this hypothesis, which means that there is no significant difference between the dividend payments by companies wishing to take over another company and the average one for all listed companies.

Key words

Dividend policy, takeovers, acquisitions, tender offers

JEL Classification: G34, G35

1. Introduction

Companies often choose mergers or acquisitions as a development path. There are several methods of payment for the shares of the acquired companies, however, one of the simplest, which is often used - is to pay in cash. The need to raise the funds leads to the question how companies intending to take over another company want to achieve this goal. One way of obtaining it may be non-payment of dividends to shareholders. However, such behaviour could be detrimental for shareholders in several ways. Firstly - as shown by previous studies, acquiring companies on average do not gain on these transactions. Secondly, the need for raising funds would deprive shareholders of dividends. Additionally - one of the theories regarding the dividend policy is the pro-dividend theory stating that refusal to pay dividends will affect the valuation of the company. Because of that, the shareholders of the acquiring company could be harmed in several ways. Therefore, it is necessary to look at the issue whether the acquiring companies pay dividends to a lesser extent than others.

The aim of this study is to answer the question whether companies that acquire other companies prepared for these transactions by raising funds and not paying dividends for several years prior to the acquisition. This problem combines three aspects:

1. decisions concerning the acquisitions of other companies and participating in mergers,
2. decisions on methods of financing acquisitions,
3. decisions about payment or non-payment of dividends and their impact on the valuation of the company.

Main research hypothesis of this study states that companies preparing for the acquisition paid fewer dividends than the average of all listed companies. The research method applied is

[1] Leszek Czerwonka, PhD, Department of Microeconomics, University of Gdańsk, Poland, e-mail: leszek.czerwonka@ug.edu.pl.

the analysis of dividend payments by companies that have announced tender offers several years before attempting to take over another company.

2. Mergers and acquisitions and shareholders‘ benefits

Firms’ combination may occur in the form of a merger or acquisition. The merger is a combination of two or more enterprises into one entity. The acquisition is gaining control by the company, investor or group of investors over another entity (target company) (Pawłowicz, 2005, p. 229-230).

Previous studies on takeovers indicate that the owners of the acquired companies usually gain from these transactions, and the acquiring companies at least do not lose on these operations. Jensen and Ruback (1983) analysed several research programs concerning impact of information about mergers and acquisitions on abnormal rates of return on shares. The study was divided into panels of acquisitions and mergers, the authors calculated the weighted average abnormal rates of return. In the acquisition panel for the target companies returns showed a strong increase, however, in the case of acquiring companies, the increase of rates of return was small or did not occur.

Calculations were also carried out for the merger panel - here also higher rates of return for companies being acquired were noted (although much lower than in acquisition panel). Jarrell and Poulsen (1989), Roller, Stennek and Verboven (2001), Goergen and Renneboog (2003), Piecek (2004) and Perepeczo and Zarzecki (2006) also found a positive effect of tender offers on the rates of return on shares of companies being acquired. Additionally, Roller, Stennek and Verboven (2001) observed that the takeover transactions had usually no effect on the acquiring companies. Long-term analysis, which examines a period of 3 to 5 years after the merger transaction, shows poor results for the average acquiring companies, compared to the control group or overall market behaviour. The decline in share prices of acquiring companies in a few years after the transaction was noticed by, among others, Asquith (1983), Agrawal, Jaffe and Mandelker (1992), Rosen (2006).

3. Transaction financing

There are several methods of payment for shares of the acquired company. Principal methods of payment for acquisitions are (Sudarsanam, 2003, p. 378):

- cash – target shareholders receive cash in exchange for target shareholders’ shares
- share exchange – target shareholders receive a specified number of the bidder’s shares for each target share
- cash underwritten share offer – target shareholders receive bidder’s shares, then sell them to an investment bank or stockbroker for cash (vendor placing) or to the bidder shareholders (vendor rights)
- loan stock - target shareholders receive a loan stock/debenture in exchange for their shares
- convertible loan or preferred shares - target shareholders receive loan stock or preferred shares convertible into ordinary shares at a predetermined conversion rate over a specified period
- deferred payment - target shareholders receive part of consideration after a specified period, subject to performance criteria.

The choice of payment method for transaction is crucial since it affects the profitability of the transaction, the shape of ownership structure after the acquisition as well as any commitments made by the acquirer to the board and shareholders of the acquired companies.

This is not a unilateral decision made by the buyer as it requires taking into account the interests and capabilities of the shareholders and management of both the buyer and the candidate to acquire (Frąckowiak, 1998, p. 252-253). Various payment methods generate different benefits for the bidder and the shareholders of the acquired company.

3.1 Basic methods of payment

Payment in cash seems to be the easiest way to finance mergers or acquisitions. A bidder making a cash offer can finance it from one or more of the following sources (Sudarsanam, 2003, p. 397):

- internal operating cash flow or cash flow from prior asset disposals
- a pre-bid rights issue
- a cash underwritten offer, e.g. vendor placing or vendor rights
- a pre-bid loan stock issue
- bank credit.

The cheapest source of cash is the firm's operating cash flow because of lack of costs of transaction associated with the organization of the financing and the resulting delays. Most of the bidders, however, have too little operating cash flows and, except for acquisitions of relatively small companies, they are not sufficient for this type of transaction.

One way to raise money to buy a firm is to issue ordinary shares directed to institutional investors. If the bidder is a public company the money can be raised through a new issue of shares addressed to the shareholders.

Another way to acquire funds is borrowing. Acquisitions are typically financed with long-term loans, only exceptionally it is possible to provide short-term loan, a bridge loan until permanent funding source is obtained (Szczepankowski, 2000, p. 241).

Taking out a loan to finance the acquisition may prevent the use of the firm's assets to secure further loans, and reduce the level of liquidity and profits which are subject to service and repayment of the loan. As with bonds, borrowing may result in losses if the achieved rate of return on investment is lower than the cost of the capital employed in the transaction (Frąckowiak, 1998, p. 275).

Another of the basic ways to pay with the acquiring company's own resources is to increase share capital by issuing new shares and exchange them for the acquired company's shares. The new issue is addressed directly to the shareholders of the company being acquired. Shares for the exchange may also be purchased on the stock market, and then there is no need to raise capital.

The main problem with exchanging the shares is to determine the exchange ratio, i.e. ratio showing the number of shares of the acquiring company that will be received by the shareholders of the acquired company for each of their shares.

The exchange ratio is calculated with the aid of the following formula:

Exchange ratio (ER) = market value of the acquiring company's shares / market value of the acquired company's shares

In practice, when determining the exchange ratio, the bidder takes into account the rate of earnings per share (EPS) to avoid the diluting of profits. The acquired company should solicit to obtain the highest rate of ER, while it is in the interest of the bidder to determine the ER as low as possible.

Negotiating the transaction, the bidder and the acquired company have conflicting interests in relation to the payment terms. If the acquiring company offers cash, makes an incorrect valuation of the target company, and after the acquisition finds irregularities in the balance, all the losses will be incurred by bidder's shareholders. If the transaction involves an exchange of shares - shareholders of the acquired companies will have to accept some part of the losses. It is also significant that non-cash forms of payment for the purchase lead to certain tax benefits (Frąckowiak, 1998, p. 263).

3.2 Other methods of payment

Apart from the basic methods of payment for shares of the acquired company, such as cash or exchange of ordinary shares, bonds or preference shares of the acquiring company can be the payment for the shares of the target company. Payment can also be made using the above instruments, but in the form of the deferred payment (earn-out).

Bonds are securities which are confirmation of the loan taken by the issuer and that the issuer agrees to return it within a specified period of time, plus fixed interest. The bonds allow borrowing from many creditors at once, often for a very long period of time. The bond issuing provides various benefits for the acquiring company. It is commonly believed that the cost of raising capital from this source is lower than the cost of capital raised from share issues (Szczepankowski, 2000, p. 243). That is because of two factors:

- reduction of interest expense caused by the tax shield effect,
- lower risk of placing the issue in the bond market than the new equity capital in the stock exchange.

Convertible securities can be bonds or convertible preference shares that can be converted into ordinary shares during a certain period of conversion, at a fixed rate of exchange. Preference shares can be privileged as to: the right to vote, dividends, division of property in the event of liquidation, or the right of priority to get shares of new issues. The privilege of the shares must be clearly defined in statute of the company (Tarczyński Zwolankowski, 1999, p. 40). Conditions relating to the preference shares may differ, as equity issues are covered by friendly negotiation. Preference shares issued by Polish listed companies may not be privileged as to voting rights (Polish Commercial Companies Code, 2000, art. 351)

Companies making acquisitions in the developed market economies successfully use deferred payments in these transactions. It reduces the risk that entails uncertainty of valuation of a company, since payment is dependent on the future performance of the acquired entity with the previous management keeping their positions (Sudarsanam, 1998, p. 193).

The method of earn-out payment consists of the following elements:

- immediate payment in cash or shares of the acquiring company,
- deferred payment amount, contingent upon the achievement of the predetermined financial results.

Earn-out factor can be paid in cash, but also in shares or bonds. The advantages and disadvantages of earn-out are presented in table 1. In the eighties and nineties of the 20th century, the method of earn-out was used to finance acquisitions of private companies in the service sector (Szczepankowski, 2000, p. 230).

	Acquirer	Vendor
Advantages	• vendor's talents retained • valuation risk reduced • 'buy now and pay later' reduces financing need • provides hedge against warranty and indemnity claims	• increases personal wealth • career opportunities may be brighter • buyer can fund future growth of business
Disadvantages	• conflict of motives between vendor and buyer • vendor given autonomy and buyer's integration plan delayed • vendor, after becoming rich, may lack motivation • management succession after earn-out may cause problems	• loss of control • pressure for short-term results • culture shock of working in a large, 'bureaucratic' company.

Table 1:. Advantages and disadvantages of earn-out
Source: Sudarsanam (2003, p. 403).

The choice of financing structure is influenced by such factors as availability of various forms of financing, assessment of the financial situation of the buyer, a candidate for acquisition and joint enterprises. Assessment of the situation of companies can show the unused credit capacity, it should also determine the ability to generate income of the candidate to be acquired and the potential synergistic effects.

Financial instruments for financing the acquisition should be selected on the basis of (Frąckowiak, 1998, p. 270):

- preferences regarding the financing structure and the cost of capital,
- the time required to obtain financing,
- the availability and cost of different forms of financing.

The solution preferred is to use debt, but it requires the bidder to carefully analyse and assess the feasibility of operating and debt repayment.

4. Dividend policy and takeovers

Dividend policy in connection with mergers, their impact on the valuation of shares and, more generally, the changes in the wealth of shareholders, are very important issues from the perspective of investors. Therefore, these issues have been the subject of many studies.

The impact of dividends on the share prices of the company is not clear. There are three approaches to the theory of dividend policy, which generally can be called theories: (1) pro-dividend, (2) anti-dividend and (3) neutral (Sierpińska, 1999, p. 131).

Pro-dividend theories are theories based on the hypothesis that an increase in dividends increases the share price and the company's value. If a constant rate of growth of companies is assumed (and consequently - constant growth rate of dividends paid), the stream of future dividends can be expressed by the amount of current dividends and dividend growth rates. According to the model of Gordon, share price will be higher the more the company pays dividends in the base year and the greater its growth is (Gordon, 1959).

Anti-dividend models can be used to justify the hypothesis that investors are willing to pay more for shares of companies that pay lower dividends than for the shares of similar companies with higher payouts. Anti-dividend theories are based mainly on fiscal arguments. Two main reasons are (Brigham, 1996, p. 224):

- higher tax rate on dividends than capital gains in some countries,
- tax burden at the time of payment of dividends, while capital gains taxes are paid only when selling shares.

The third approach to the impact of dividends on the share prices is a theory about the neutrality of dividends. The basic model of the dividend irrelevance theory is the model of Miller and Modigliani. They constructed a model that analyses the relationship between price and value of the company's shares and the dividends paid. The essence of the model are the investments that the company intends to carry out. These investments can be financed from retained earnings or issuing new shares. The dividend reduces the size of the profit that could be used for investment. Investors' benefit from share ownership will be the same regardless of whether it will come to from receiving the dividend, or from the capital gain (Miller, Modigliani, 1961). The conclusion resulting from the analysis of Miller and Modigliani's model is the lack of impact of the dividend on the company's share price.

The studies mentioned above involved the impact of mergers on the value of firms as well as 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 risk of being acquired due to reduced dividend payments. The rationale for such a claim could be the thesis of Jensen (1986, 1988), which states that if the managers of the company over-invest rather than pay the cash to the owners, it is likely that they allocate money for investments with a negative net present value. Therefore, the consequence of not paying dividends may be lower valuation of the company, and as a result, the underestimated company can easily become a takeover target. An attempt to verify such a hypothesis in relation to British companies was made by Dickerson, Gibson and Tsakalotos (1998). Their research demonstrates that an increase in dividend payments significantly reduces the likelihood of takeover, but this cannot be well explained by the theory of free cashflow. The proposed explanation is maintaining the loyalty of investors through dividends (Dickerson et al., 1998, p. 298).

5. Intentions to acquire and the dividend payments among companies listed in the Warsaw Stock Exchange

The aim of the above review of issues related to the topic of acquisitions and dividends was to present the trends and results of studies on the motives of acquisitions, the shareholders' profits from such transactions and dividend policy. The objective of managers should be to maximize the benefits for shareholders in the form of capital gains and dividends. Previous studies indicate that the acquiring companies usually do not benefit from such transactions, and often even make a loss. Therefore, compensation for shareholders might be higher dividends. However, it seems that in acquiring companies, such dividends may be even lower than the average in other listed companies - after all, money is needed to make the acquisition. Thus, because shareholders cannot usually count on capital gains, as it was checked in the form of preliminary analysis, whether shareholders can count on the payment of dividends to at least the same extent as the average for all listed companies.

The analysis is based on a sample of companies listed on the Warsaw Stock Exchange, which in 2002-2010 years announced an invitation to sell shares (tender offer) of another listed company. There were 29 such companies at that time. Another condition was that a company should be listed on the stock exchange at least 3 years before the announcement of the tender offer, so that it could be checked whether the company paid the dividends in that period. Ultimately, companies that have attempted to take over another listed company by a tender offer in years 2002-2010 were in number of 21 (Table 2). The lists of invitations to sell shares and the dividend payments come from the Warsaw Stock Exchange Fact books 2000-2011.

Year	Number of all invitations to sell shares in years 2002-2010	Number of listed companies announcing invitations to sell shares in years 2002-2010	The number of companies announcing invitations to sell shares in years 2002-2010, which were listed at least 3 years prior to the announcement
2002	35	3	3
2003	33	1	1
2004	36	0	0
2005	31	0	0
2006	42	7	4
2007	34	6	4
2008	13	3	2
2009	33	3	2
2010	28	6	5
Razem		29	21

Table 2: Tender offers in years 2002-2010

Table 3 presents the propensity to pay dividends of listed companies in the years 1999-2010. In this period, the proportion of listed companies paying dividends ranged from 19 to 32 per cent. That is, in some years only one fifth of the public companies paid dividends, but there were years that even every one third of companies paid them. Weighted average for this period is 26 per cent. Thus, on average, about one quarter of the companies paid the dividends in the period 1999-2010, which constitutes more than half of the entire lifetime of the Warsaw Stock Exchange.

Year	Number of companies paying dividends	Number of companies	Percentage of companies paying dividends (%)
1999	66	221	30
2000	62	225	28
2001	54	230	23
2002	40	217	19
2003	48	203	24
2004	57	230	25
2005	82	255	32
2006	86	284	30
2007	87	351	25
2008	109	374	29
2009	94	379	25
2010	99	400	25

Table 3: Dividend payments in public listed companies in the Warsaw Stock Exchange

Table 4 presents the propensity to pay dividends by companies which announced invitations to sell shares of other listed companies in the years 2002-2010. The percentage of companies that paid a dividend 3 and 2 years before attempting to take over another company was 31 per cent – thus it was higher than the average rate for the entire stock market during this period. A year before the takeover attempt and the announcement of tender offer the share of companies paying a dividend drops by 33 per cent (10 percentage points) and is only equal to 21 per cent.

Number of companies that paid dividends before the announcement in:	Paying	Non-paying	Percentage of paying	Percentage of non-paying
1 year	6	23	0.21	0.79
2 years	9	20	0.31	0.69
3 years	9	20	0.31	0.69

Table 4: Dividend payments by listed companies that have attempted takeover of another company listed on the Warsaw Stock Exchange

Throughout the period of 3 years before an attempt to take over another listed company the dividends were paid on average by 27.7 per cent of companies in the research sample (table 5). Because of the small sample any attempts of statistical inference should be treated with caution, however, it was checked using *t* test whether the average for the sample of companies intending to make an acquisition (27.7 per cent) differed statistically significantly from the average for all listed companies (26 per cent).

Average value	Standard deviation	Reference value	t	p-value
0.276667	0.057735	0.26	0.500000	0.666667

Table 5: Test t for the mean in relation to a fixed reference value for the percentage of companies paying dividends

The test results indicate that there is no reason to reject the null hypothesis of equal means in both sets (table 5: p-value = 0.67). This means that within 3 years before attempting to take over the companies announcing tender offers for other listed companies pay dividend as often as the other listed companies.

6. Conclusions

In mergers and acquisitions, the basic methods of payment are cash and shares. These are the only possible methods in tender offers announced on the Warsaw Stock Exchange. Despite the possibility to exchange shares in previous invitations to sell shares, acquirers always offered cash as payment for the purchased shares.

The necessity to possess ready money by the acquiring companies to pay for the shares of the acquired firms leads to the hypothesis that companies that attempt to take over another company, have not been paying dividends by way of preparation to tender offers. On the other hand, if we consider pro-dividend theory within the theory of dividend policy as appropriate, such conduct would result in a reduction in the value of the company in the years preceding the takeover attempt.

To examine this issue more closely, an analysis of dividend payments by companies that have announced an invitation to sell shares of other listed companies has been conducted. On the basis of the analysis of the behaviour of the companies announcing tender offers it cannot be said that those companies paid dividends to a lesser degree than average remaining companies within the stock market. This study is a preliminary study to a research on this topic using more detailed methods.

References

[1] AGRAWAL, A., JAFFE, J.F., MANDELKER, G.N., 1992. The Post-Merger Performance of Acquiring Firms: A Re-Examination of an Anomaly. *The Journal of Finance*, 47(4), pp. 1605-1621.

[2] ASQUITH, P., 1983. Merger bids, uncertainty and stockholder returns. *Journal of Financial Economics*, 11, pp. 51-83.

[3] BRIGHAM, E.F., 1996. *Podstawy zarządzania finansami. Tom 2.* Warszawa: Państwowe Wydawnictwo Ekonomiczne.

[4] DICKERSON, A.P., GIBSON, H.D., TSAKALOTOS, E., 1998. Takeover Risk and Dividend Strategy: A Study of UK Firms. *The Journal of Industrial Economics,* 46(3), pp. 281-300.

[5] *Factbook 2000 (-2011)* by the Warsaw Stock Exchange, Warsaw.

[6] FRĄCKOWIAK, W., 1998. *Fuzje i przejęcia przedsiębiorstw*. Warszawa: Polskie Wydawnictwo Ekonomiczne.

[7] GOERGEN, M., RENNEBOOG, L., 2003. Shareholder Wealth Effects of European Domestic and Cross-Border Takeover Bids. *EIFC - Technology and Finance Working Papers 20, United Nations University, Institute for New Technologies.*

[8] GORDON, M., 1959. Dividends, Earnings, and Stock Prices. *The Review of Economics and Statistics*, 41(2), pp. 99-105.

[9] GUGLER, K., MUELLER, D.C., YURTOGLU, B.B., ZELEHNER, C., 2003. The effects of mergers: an international comparison. *International Journal of Industrial Organization*, 21, pp. 625-653.

[10] JARRELL, G.A., POULSEN, A.B., 1989. Stock Trading before the Announcement of Tender Offers: Insider Trading or Market Anticipation? *Journal of Law, Economics & Organization*, 5(2), pp. 225-248.

[11] JENSEN, M.C., 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review*, 76, pp. 323-329.

[12] JENSEN, M.C., 1988. Takeovers: their causes and consequences. *Journal of Economic Perspectives*, 2, pp. 21-48.

[13] JENSEN, M.C., RUBACK, R.S., 1983. The Market For Corporate Control: The Scientific Evidence. *Journal of Financial Economics*, 11.

[14] MILLER, M.H., MODIGLIANI, F., 1961. Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, 34(4), pp. 411-433.

[15] PAWŁOWICZ, L.J., 2005. *Ekonomika przedsiębiorstw. Zagadnienia wybrane*. Gdańsk: Ośrodek Doradztwa i Doskonalenia Kadr.

[16] PIECEK, G., 2004. Analiza ponadprzeciętnych stóp zwrotu w wyniku reakcji na informację o przejęciach i fuzjach – badania dotyczące polskiego rynku kapitałowego (cz. III). *Nasz Rynek Kapitałowy*, 4/5, pp. 84-91.

[17] PEREPECZO, A., ZARZECKI, D., 2006. *Wyniki badań efektów finansowych przejęć na podstawie danych rynkowych spółek notowanych na warszawskiej Giełdzie Papierów Wartościowych,* [in:] D. ZARZECKI (ed.), *Zarządzanie Finansami. Inwestycje i wycena przedsiębiorstw. Tom I*. Szczecin: Wydział Nauk Ekonomicznych i Zarządzania Uniwersytetu Szczecińskiego.

[18] *Polish Commercial Companies Code - Ustawa z dnia 15 września 2000 r. Kodeks spółek handlowych*, Dz.U. 2000 nr 94 poz. 1037.

[19] ROLLER, L., STENNEK, J., VERBOVEN, F., 2001. Efficiency gains from mergers, Centre for Economic Policy Research. *Report for EC Contract*, II/98/003, London.

[20] ROSEN, R.J., 2006. Merger Momentum and Investor Sentiment: The Stock Market Reaction to Merger Announcements. *Journal of Business*, 79(2), pp. 987-1017.

[21] SIERPIŃSKA, M., 1999. *Polityka dywidend w spółkach kapitałowych.* Warszawa-Kraków: Wydawnictwo Naukowe PWN.

[22] SUDARSANAM, S., 1998. *Fuzje i przejęcia*. Warszawa: WIG Press.

[23] SUDARSANAM, S., 2003. *Creating Value from Mergers and Acquisitions. The Challenges*. Harlow, England: FT Prentice Hall, Pearson Education Limited.

[24] SZCZEPANKOWSKI, P.J., 2000. *Fuzje i przejęcia*. Warszawa: Wydawnictwo Naukowe PWN.

[25] TARCZYŃSKI, W., ZWOLANKOWSKI, M., 1999. *Inżynieria finansowa*. Warszawa: Agencja Wydawnicza Placet.

[26] Ustawa z dnia 29 lipca 2005 r. o ofercie publicznej i warunkach wprowadzania instrumentów finansowych do zorganizowanego systemu obrotu oraz o spółkach publicznych, Dz.U. 2005, nr 184, poz. 1539, art. 72.