INFORMATION CONTENT OF SHARE REPURCHASE PROGRAMS

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Abstract:
The article aims to present the meaning of the share repurchase programs and to identify the reasons of share repurchase made by companies. The reasons of share repurchasing contain the information that companies wish to convey to their shareholders. Once the reasons of share repurchase are identified it would be possible to find out what signal they transmit to shareholders.

The article analyses selected statistical data on the listed companies that repurchased their shares from selected countries. It also focuses on the reasons of share repurchase of the listed companies.

Having carried out research for the selected listed companies, I found that share repurchases are not used to signal only the excessive amounts of cash hold in the corporation. There are also other reasons for share repurchase. These reasons might comprise the following: changing the structure of ownership or stabilizing the market share prices. And companies might use share repurchases for conveying different information to their shareholders.

The conclusions drawn from my observations and statistical data may constitute a viable basis for more comprehensive research. One possible direction of such research is to determine the financial situation of companies repurchasing their shares. Another possible direction of research is to identify the financial market condition of the company repurchasing their shares.

The article attempts to discuss the reasons of share repurchase programs. The uniqueness of this approach lies in analysing share repurchase in a broader sense, where it is viewed not to be a mere substitution for dividends.

Keywords: Share repurchase, dividend, substitution, information content.

1. SHARE REPURCHASE PROGRAMS POPULARITY

In recent years share repurchase programs have become an important financial management tool. E. F. Fama and K. R. French found that in the years 1978-1999 the proportion of dividend payers fell from 66.5% to 20.8% (Fama, French, 2001). G. Grullon and R. Michaely found that expenditures on share repurchase programs (relative to total earnings) increased from 4.8% in 1980 to 41.8% in 2000. Consequently, share repurchases as a percentage of total dividends increased from 13.1% in 1980 to 113.1% in 2000 with the amount of 200 billion dollars. They also found that the amount of share repurchase as a percentage of net profit increased from 4% to 31% and the number of companies repurchasing their shares increased from 31% in 1972 to 80% in 2000 (G. Grullon, R. Michaely, 2002). In 1999 and 2000 industrial firms spent more money on share repurchases than on dividend payments. It means that for the first time in history, share repurchase programs have become more popular than dividends. The number of US companies and the amount of money spent on dividend payment were reduced, while the number of companies and money spent on share repurchase increased (Fama, French, 2001, DeAngelo, DeAngelo, Skinner, 2004, Hrdlicka, 2006).

IBM company spent more than 60 bln dol on share repurchase in the years 1987-2001. What is more, IBM are to buy their shares spending 50 bln dol in the five years' time. At the same time IBM plans to pay out 20 bln dol in dividends. (Linebaugh, 2012). Coca Cola repurchasing their shares reduced their number by 23% in 1982-2001. Out of 30 corporations included in Dow Jones Industrial Index, 16 companies reduced the number of listed shares in recent years.

Due to the financial crisis, American companies diminished the amount of money spent on dividend and share repurchase. Yet, they did not stop paying. In 2007 money spent on share repurchases reached the amount of $170 bn, in 2008 diminished to $80 bn, and in 2009 to $30 bn, but in 2010 they soared to 78 bn dollars (Demos, 2011). In 2012 American companies' expenditures on share repurchase program reached the level of 274 billion dol. This amount is higher than the amount of money raised in IPO in 2012 (Linebaugh, 2012).

In December 2012, General Electric announced that within the next 3 years they are going to repurchase their shares spending 10 bln dol. In 2013, United Technologies are planning to spend about 1 bln dol on repurchasing their shares, while Boeing's plan says about 2 bln dol. Safeway (second largest supermarket chain in USA) spent 2 bln dol on repurchasing their shares in 2012, reducing their amount by 29% (Linebaugh, 2012).

2. INFORMATION CONTENT IDEA AND SIGNALING HYPOTHESIS

There are various theories in the literature that try to explain the motives behind stock repurchase. The similarities between dividends and stock repurchases (e.g. positive market reactions, cash distribution) make it easier to apply the dividend theories to stock repurchases.

At the most fundamental level, the dividend irrelevancy theory of Miller and Modigliani (Miller, Modigliani, 1961, pp. 411-433) implies that share repurchases and dividends are perfect substitutes for each other, given that capital market are perfect and complete. Under this assumption, firms pay residual cash to investors either through dividends or share repurchases without affecting the value of the firm, provided that the investment policy is determined. The idea of perfect substitution between dividend and share repurchase was developed by Grullon and Michaely (G. Grullon, R. Michaely, 2002).

Miller and Modigliani (1961) prove the irrelevance of cash payout to firm value under perfect market assumptions. Relaxing the perfect market assumptions to let managers be better informed, they suggest that payout policy can reveal unrecognized firm value. Miller and Modigliani (1961) suggest also that when markets are incomplete, firms can convey information about future cash flows through changes in payout policy.

The idea of information content draws on from agency theory and is connected with information asymmetry and signaling hypothesis. Agency theory was developed by M. C. Jensen and W. H. Meckling (Jensen, Meckling, 1976, pp. 305-360). The main idea of agency theory is that agent (manager) and principal (owner) have got different scope of duties and different interests. That is why there appears assymetry in the information gained. The agent (manager) knows more and has better and thorough knowledge on the company operating activities. It means that manager possesses private information about the firm, the one not shared with the market. And this assymetric information has the impact on the investor decisions. Jugding by decisions taken by managers or actions taken by managers, investors can react properly. This situation leads to conclusions that managers' decisions and actions have information content and might convey information (signal) to the investors.

The theory of information content and signaling hypothesis was developed by Ross (Ross, 1977, pp. 23-40) and Battacharya (Bhattacharya, 1979). But the best known models are those of Bhattacharya (1979), Miller and Rock (Miller, Rock, 1985), and John and Williams (John, Williams, 1985). The signaling models developed in the late 1970s and early 1980s suggest that firms adjust cash distribution level to signal their prospects. A rise in dividends or a declaration of a stock repurchase program typically signal that the firm will do better.

Agency theory suggest also that firms with free cash flows in excess of their investment opportunities are likely to spend them on value-destroying projects that reduce the firm's value. Grossman and Hart (Grossman, Hart, 1980), Easterbrook (Easterbrook, 1984), Jensen (Jensen, 1986) argue that if shareholders can minimize the cash management controls, it will be much harder for management to engage in unmonitored spending. One way to take excess cash from the firm is to increase the level of payout (free cash flow hypothesis). In the presence of information asymmetry between investors and managers, Easterbrook (Easterbrook, 1984) and Jensen (Jensen, 1986) argue that managers are imperfect agents of investors and cash payout can mitigate agency conflicts.

Agency theory suggests that firm with free cash flows in excess of its investment opportunities are likely to spend them on value-destroying projects that reduce the firm's value. As a partial solution to this problem, Easterbrook (1984), and Jensen (1986) argue that if equity-holders can minimize the cash that management controls, then it will be much harder for management to engage in unmonitored spending spree (e.g. invest in negative NPV projects). One way to take excess cash from the firm is increasing the level of payout.

Thus, share repurchase and other methods are an integral feature of the process a firm undergoes from growth phase to a more mature phase. Typically, in a growth phase, a firm has many positive NPV projects available, high capital expenditures, low free cash flows, and high earnings growth. At some point, the firm's growth slows down and its economic profits declines. In this phase, capital expenditures decline, and the firm generates larger amounts of free cash flows (Grullon, Michaely, 2004).

Mutual contribution of these theories above mentioned, as well as the one of other studies, was the statement that because managers gained a better knowledge of the company, their decisions and activities include information on the financial standing of the company. The investors perceive these managers' decisions and activities as signals of current and future financial standing of the company.
While signaling and conveying information about financial standing of the company, managers might use different tools containing specific information. These tools include the following: decisions about taking loan, paying out dividends, issuing shares or just repurchasing share.

If a specific tool is to be deemed as containing information and having ability to convey information the following conditions must be met:

1) managers must be aware that decision, about e.g. raising capital, includes information content (the company is growing and it needs additional financing); it means that managers being aware of this information content will intentionally take decisions and actions, which have information content;
2) investors must be convinced that this very tool possess information content and helps to form investors' opinion on the situation of the company; it means that investor gainig information on managers' decisions and actions has the ability to forecast the actual repurchase magnitude and is ready to respond to the signal (usually by selling or buying shares resulting in change in share prices).

This article refers only to one aspect of the problem discussed above. The scope of this article covers investigating whether managers perceive repurchasing shares as a tool of communicating specific information to the investors and, if yes, what kind of information they want to convey to the market.

3. REASONS FOR THE SHARE REPURCHASE

Using share repurchase as one of the tools of communicating between companies and shareholders, one should note that in the recent years share repurchase programs have become important and more and more common. Therefore, there is a growing number of studies referring to this phenomenon. A number of researchers proved that share repurchase constitutes a substitute for dividend. It particularly holds true for cash transferred to shareholders (Grullon, Michaely, 2002**)**. Grullon and Michaely found that share repurchase activity over the last two decades has helped the average total payout ratio of firms to stay relatively constant despite the decline in the average dividend payout ratio. Consequently, share repurchase is deemed as substitution for dividend. Grullon and Michaely imply that, because of this substitution, it is the payout (as either dividends or repurchases) that can be used to signal excessive cash holdings by managers and companies. That lead investors to think share repurchase signals the company holds excessive amount of cash.

The results of several studies on stock repurchase of different researchers are discussed in the paper of Wang, Johnson (Wang, Johnson, 2005). Generally share repurchase is positively assessed by the market and results in share prices rising.

Sharing with stockholders excessive amount of money is not the only reason for share repurchase. It seems that there are also other reasons. Then managers might use share repurchase to convey other information to shareholders.

The managers repurchase shares for both internal and external reasons which are the following:

1) internal:
   a) transferring cash to shareholders,
   b) changing the capital structure,
   c) changing the ownership structure,
2) external:
   a) stabilizing share prices,
   b) improving financial ratios.

Transferring cash to shareholders by share repurchase diminishes the amount of cash in the company. It is consistent with free cash flow hypothesis and agency theory. Diminishing the amount of cash mitigates potential over-investment. The lower level of cash encourages the management to make more effort to make the way of using money left in the company more effective (Jensen 1986). This is consistent with agency theory. The decision to repurchase share in order to transfer free cash to shareholders is the subsequent decision. The main decision is to decide how much money the company is able to transfer to the sharehoolders (and how much to investment in the company itself). And then, once the company is aware the amount of cash available to the shareholders, it has to decide on the way of transferring the money; whether by paying out dividend or by repurchasing shares. It is consistent with substitution hypothesis (Grullon, Michaely, 2002). But one might ask if investment opportunities decline after share repurchase announcements, why should the market react positively to such events. A reduction in investment opportunity set is not good news. Jensen (1986) explains the positive market reaction to such events by alluding to the notion that the market is already aware of the reduction in profitable investments, and it reacts positively to share repurchase announcement because these events reduce the amount of free cash flows at management's disposal (Grullon, Michaely, 2004).

Share repurchase (especially when leading to redemption of shares) diminishes the amount of shares and the level of equity. It means that capital structure (equity – debt relation) is also changed. This relation should be changed only when the company is able to gain positive effects of leverage. It means that raising the leverage should result in Return on Equity improvement. This is the only case when share repurchase makes economical and financial sense.

Share repurchase results also in changing ownership structure. Then the dissatisfied investors might exercise their right to leave, while the voting power of the remaining investors (satisfied and loyal) gains in strenghten. In this aspect, share repurchase might be used as a means of defense against hostile takeovers. But the price in share repurchase must be higher than offered by bidder. With large dispersion of shares and investors, after share repurchase, even investors holding small blocks of shares might have big impact on resolutions. Such an action is only support for clientele hypothesis

(Litzenberger, Ramaswamy, 1980). This hypothesis states that investors enjoy specific preferences and they buy shares of the company whose policy and the course of action they accept, and they sell shares when they feel dissatisfied with the company’s policy and performance.

Share repurchase might be used for creating employee ownership. Shares might be repurchased from the market and distributed to managers and employees as a kind of incentive. It also proves agency theory because when managers and employees are owners they are more motivated and ecouraged to make efforts more effective in order to meet the company's targets.

Stabilizing share prices is connected with affecting the share prices and is the most connected with information content and signaling hypothesis. The managers having a better knowledge on the company and taking decision on repurchasing shares send specific signal. Repurchasing shares is a sign of managers being convinced that the shares are undervalued and the market share price should be higher. It means that managers believe that actual situation and future prospects are good satisfactory enough. The managers would not repurchase shares if they were not convinced of higher intrinsic value than the one of the market share prices. When getting signal on shares undervaluation investors might become interested in buying these shares (because of their undervaluation and potential future higher profits per share).

What is more, while repurchasing shares, the company diminishes the amount of listed shares. These two aspects (the signal of undervaluation and the diminished number of listed shares), even under constant demand, lead to an increase in market share price. Another aspect is that repurchasing shares, the company transfers cash to shareholders. This in turn is also a signal that company's financial prospect are not at risk. This is the way managers want to show that company may expect good prospects and is able to gain neccessary cash flow from future operations (Bhattacharya, 1979, Miller and Rock, 1985; Vermaelen, 1984).

Share repurchase (especially when connected with redemption of shares) diminishes the amount of listed shares. It changes and improves market ratios such as ROE or EPS. As these ratios are important for investors, their improvement means that potential investors would be eager to buy the company’s shares. These might lead to an increase in P/E ratio and, subsequently, to the rise in demand and share prices.

Clearly, there are many reasons for share repurchase. But it is worthwhile noting that repurchasing shares in order, e.g. to change capital structure, might result in share prices rise. Managers might achieve various results while repurchasing shares.

One should point out that there are different procedures of repurchasing shares which lead to achieving different results:

1) share repurchase resulting in redemption of repurchased shares or
2) share repurchase conducted in order to further resale repurchased shares.

Redemption of shares means that the number of shares issued and listed decreases. Redemption of shares brings to reduction of the owners' authorized capital and equity. It means that the level of equity is lowered permanently. Repurchasing shares with their redemption allows reaching all reasons mentioned above (transferring cash to shareholders, changing capital structure, changing ownership structure, stabilizing share prices and improving financial ratios).

Repurchasing shares for further resale means that the number of shares does not change. But the number of listed shares diminishes. The level of equity is temporarily lowered as long as company holds its own shares (until their resale). Repurchasing shares for further resale allowes reaching some (although not all) of the reasons mentioned above (transferring cash to shareholders, changing ownership structure, stabilizing share prices).

4. METHODOLOGY OF RESEARCH

The article refers to only one part of signalling hypothesis connected with information content. This part refers to information content assigned to share repurchase by managers. The article does not analyse the information content of share repurchase seen by investors and does not refer to investors’ reaction to the announcement of share repurchase. Their main focus is on the reasons of share repurchase announced by managers of the listed companies.

The article analyses selected statistical data on the listed companies that repurchased their shares from Polish stock exchange (Warsaw Stock Exchange). The table reports the number of companies that started share repurchase in subsequent years with the announced reason for share repurchase. The survey does not cover companies that announced only share repurchase not followed any action. Nor does it cover the companies that continued repurchasing their shares during the next year either, companies are included into research once only.

The survey covers the years 2005-2012. It is important to mention that in 2004 in Poland there were amendments to Commercial Code and then share repurchase procedure was eased. The analysed period covers the years of both prosperity and crisis.

Table 1: Reasons for share repurchase indicated by Polish companies listed on WSE

year	Number of companies that started share repurchase	reasons				
		Cash distribution	Undervaluation	Incentive system for employees	capital group restructuring	No reason indicated
2005	22	3	0	2	0	17
2006	14	0	0	1	2	11
2007	11	0	0	2	0	9
2008	40	0	4	5	4	27
2009	27	0	2	6	1	18
2010	17	0	1	2	2	12
2011	33	0	2	7	2	22
2012	45	0	6	3	5	31

Source: www.gpwinfostrefa.pl

The total number of companies that started repurchasing their shares amounts to 209. It is almost half of the companies listed on WSE.

The table indicates that the number of companies repurchasing their shares is growing. The years 2008 and 2012 are crucial as the number of companies repurchasing their shares increased to more than 40. It is about 12.5% of companies listed on Warsaw Stock Exchange (WSE).

There were also two other important years when the number of companies repurchasing their shares was significant – these were 2009 and 2011 when the number of these companies increased to about than 30. It is also about 10.0% of all the companies listed o WSE.

Under The Polish Commercial Code there is no requirement to indicate the reason for share repurchase. Thus, it is only optional and good will when companies indicate the reasons for share repurchase.

Therefore, it is more often than not that companies indicate no reason for share repurchase. About 70% of all companies that started share repurchase in the years 2005-2012 do not indicate any reason. One might conclude that companies expect investors themselves assign information content to share repurchase according to their knowledge. In this manner the managers are given a wide leeway to take decision on allocation and usage of repurchased shares at their convenience.

Common reason for repurchasing shares is incentive program for managers and employees. About 14% of all companies repurchasing their shares indicate this reason. It is important to mention that companies repurchasing their shares in order to distribute them among employees, the number of shares doesn't change. But the number of listed shares diminishes. The level of equity is temporarily lowered as long as company holds its own shares (until their resale or distribution). Repurchasing shares in order to distribute them among employees means that company wants to change ownership structure. But repurchasing their shares to distribute them among employees, company cannot achieve all mentioned aims, especially company cannot change capital structure or improve financial ratios.

Another reason indicated by Polish companies is that 8% of all companies repurchasing their shares while undergoing the process of the restructurization of their capital group. It is connected with mergers and aqusisition. It mostly occures when repurchase of shares is used to pay for the aquired company. Occasionally, it refers to the shares remained on the mergers of the companies.

Only 7% of all companies indicated undervaluation as the reasons for the share repurchase. These companies stated that "current situation on the financial markets does not reflect tha actual value of the company". All of these companies were willing to repurchase their share using procedure that results in share redemtption. Share redemption leads to diminishing the amount of shares and the level of equity permanently. Share redemption reflects that the company is able to meet almost all the targets mentioned above. It especially holds true in respect of changing capital structure, changing ownership structure, and improving financial ratio (ROE, EPS).

Only 3 companies (1.4% of all companies repurchasing their shares) admitted that they repurchase their share in order to transfer cash to their shareholers.

5. RESULTS

On carrying out the research for the selected listed companies, I found that share repurchases are not used only to signal the excessive amounts of cash held in the corporation. There appear to be also other reasons for share repurchase. These reasons might include: changing the structure of the ownership or stabilizing the market share prices. It means that companies might use share repurchases for conveying different information to their shareholders.

Judging by the numbers it is possible to conclude that managers are not willing to share with investors the reasons for share repurchase. It is also possible to notice that the reasons are known to strategic investors, not to minority shareholders. Thus, share repurchase programs let minority owners give up investing in the company and let strategic investors strenghten their voting power. It is is also possible to state that companies expect investors themselves assign information content to share repurchase according to their knowledge. And usually share repurchase is deemed as actions bringing good news. But Miller and Rock (1985), Bhattacharya (1979), Vermaelen (1981) theorize that payout decisions are not actions that just happen to have information content. Rather, these decisions are explicit signals about future earnings, sent intentionally, and at some cost by the managers of the firm to their stockholders. As a signal of good prospects in the presence of asymmetric information must be costly, so that other firms can not easily copy, otherwise the signal is void.

The conclusions drawn from my observations and statistical data may provide viable grounds for more comprehensive research. One possible direction of such research would be to identify the financial situation of companies repurchasing their shares. This might help companies to determine whether liquidity or profitability is the decisive factor while deciding to repurchase their shares. It would be also possible to state that share repurchasing is the main factor determining financial situation of the company as well as its liquidity and profitability (return on equity). Yet, another possible direction of research is to investigate the financial market condition of the company repurchasing their shares. This, in turn, may help to determine whether the rise or fall in share prices is the main factor determining share repurchase, or whether it might be possible to state that share repurchasing is the factor determining the change in share prices.

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