

# Information Content, Signalling Hypothesis and Share Repurchase Programs in Poland

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The article aims to present the meaning of the share repurchase programs and to identify the reasons of share repurchase and information share repurchase convey to investors. The information comprises the following: signalling better financial prospects or signalling intrinsic value. The article analyses selected statistical data on the listed companies that repurchased their shares. Having carried out research for the selected listed companies, I found that companies are not willing to disclose the reasons for share repurchases. However, if they reveal the reason it is not only cash transfer to shareholders.

*Key words:* share repurchase, information content, signalling hypothesis

## Share Repurchase Programs Popularity and Reasons

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 and French 2001). G. Grullon and R. Michaely (2002) 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 (Grullon and 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 and French 2001; DeAngelo, DeAngelo, and Skinner 2004; Hrdlicka 2006).

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 and Michaely 2002). Grullon and Michaely (2002) 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 (2002) imply that, because of this substitution, it is the payout (as either dividends or repurchases) that can be used to signal at least excessive cash holdings by managers and companies. That lead investors to think share repurchase signals the company holds excessive amount of cash.

Sharing with stockholders excessive amount of money is not the only reason for share repurchases and not only signal of holding excessive cash. It seems that there are also other reasons. The results of several studies on stock repurchase reasons by different researchers are discussed in the paper of Wang and Johnson (2009). The managers repurchase shares for both internal and external reasons which are the following (Tsetsekos, Kaufman, and Gitman 1991; Grullon and Ikenberry 2000; Dittmar 2000; Wang and Johnson 2009; Hsieh and Wang 2009; Voss 2012):

1. transferring cash to shareholders,
2. changing the capital structure,
3. changing the ownership structure,
4. stabilizing share prices,
5. improving financial ratios (ROE, EPS).

There are many reasons for share repurchase. However, it is worthwhile noting that repurchasing shares in order, e.g. to change capital structure, might result in share prices rise: share repurchase 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. This is viable only for the company with good financial standing and good prospects. These two aspects (the

signal of positive effects of leverage and the diminished number of listed shares), even under constant demand, lead to an increase in market share price. It means that managers might achieve various results at the same time while repurchasing shares.

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 companies want to transmit to shareholders.

### Information Content Idea and Signalling Hypothesis

At the most fundamental level, the dividend irrelevancy theory of 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 agency theory and is connected with information asymmetry and signalling hypothesis. Agency theory was developed by Jensen and Meckling (1976). The main idea of agency theory is that agent (manager) and principal (owner) have got different scope of duties, different interests, and different attitude towards risk. 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. That is why there appears asymmetry in the information gained. Moreover, this asymmetric information has the impact on the investor decisions. Judging 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 signalling hypothesis was developed by Ross (1977) and Bhattacharya (1979). However, the best-known models are those of Bhattacharya (1979), Miller and Rock (1985), and John and Williams (1985). The signalling 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 signals that the firm will do better.

Agency theory suggests 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 (1980), Easterbrook (1984), and Jensen (1986) argue that if shareholders can minimize the cash management controls, it will be much harder for management to engage in unmonitored spending (e.g. invest in negative NPV projects). 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 (1984) and Jensen (1986) argue that managers are imperfect agents of investors and cash payout can mitigate agency conflicts.

Mutual contribution of the theories referring to information asymmetry 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 signalling 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. Ross (1977) develops models that show executives would use finance to transmit and validate information about their firms.

To disseminate information, executives announce their decision to the market in various ways, one of which is share repurchase announcements. Ofer and Thakor (1987) argue that share repurchase decisions reveal the managers' privately held information. Tsetsekos, Kaufman, and Gitman (1991) find that a majority of the responses of their surveyed were consistent with the signalling hypothesis. In the theory, the signalling hypothesis has become the predominant theory in explaining the causes and effects of share repurchase (Vermaelen 1981; Dann 1981; Asquith and Mullins 1986; Comment and Jarrel 1991; Ikenberry, Lakonishok, and Vermaelen 1995; Stephen and Weisbach 1998; Ofer and Thakor 1987).

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

- 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;

- investors must be convinced that this very tool possesses information content and helps to form investors' opinion on the situation of the company; it means that investor gaining information on managers' decisions and actions has the ability to forecast the actual magnitude of the specific tool and is ready to respond to the signal (usually by selling or buying shares which results 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.

### Information Conveyed to Investors

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 information and signal they transmit to shareholders. Information that might be conveyed through share repurchase program to the investors is following:

- internal – on current and prospect financial situation of the company (level of liquidity ratio, level of cash balance, level of debt–equity ratio, the level of ROE and EPS ratio),
- external – on discrepancy between intrinsic value and market value of shares.

If information is connected with financial situation, it usually conveys good news. It might mean that company announcing share repurchase has excessive cash. Deciding on transferring it to the investors 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 necessary cash flow from future operations (Bhattacharya 1979; Miller and Rock 1985; Vermaelen 1984). It might also mean that the company disposing cash makes its liquidity ratio lower, and still becomes safe and sound. Another aspect of share repurchase is that that not only liquidity ratio is changing but also debt–equity ratio is changing. The debt–equity ratio is increasing while share repurchase program is launched and the number of shares and the level of equity diminished. Without raising extra debt, share repurchases lead to increase in debt–equity

ratio. Rise in debt–equity ratio should be possible if company is able to gain positive effects of leverage. In addition, this is viable for the company with good financial standing and good prospects.

Share repurchase is 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 and Michaely 2004).

Grullon and Michaely (2004) analyze the consequences of a repurchase program for the future performance of a firm. They do not find that firms undertaking share repurchase programs experience a significant increase in earnings or profitability. However, they find that the systematic risk and the cost of capital of these firms decline after these events.

Stephen and Weisbach (1998) present evidence that both expected and unexpected cash flow are positively correlated with the levels of repurchases. Nohel and Tarhan (1998) examine the determinants of post-repurchase operating performance. Their result show that the improvement of post-repurchase performance occurs in low-growth (low-Tobin's-Q) firms. Share repurchase and future profitability is the subject of many studies (Penman 1983; DeAngelo, DeAngelo, and Skinner 1996; Benartzi, Michaely, and Thaler 1997; Grullon and Michaley 2004; Ikenberry, Lakonishok, and Vermaelen 1995; Ikenberry, Lakonishok, and Vermaelen 2000).

If information is connected with the discrepancy between intrinsic value and market value, it also usually conveys good news. Management by repurchasing their own shares signal to the market that their shares are undervalued and they have inside information supporting the higher value of their outstanding shares.

Dittmar (2000) finds that firms repurchase stock to take advantage of potential undervaluation. Brav et al. (2005) surveyed 384 financial executives to determine the factors that drive dividend and share repurchase decisions. The most fundamental explanation as to why companies repurchase their stock is that the company believes their shares are undervalued. When management repurchases stock solely on the basis of undervaluation, management is, in effect, sending a signal to the market that their current and future prospects (projected cash flows) are not accurately reflected in the price of the stock.

Ikenberry, Lakonishok, and Vermaelen (2000) show that firms tend to repurchase fewer shares if the stock price rises significantly in the year following the repurchase. This evidence is consistent with the belief that managers try to take advantage of undervalued stock prices. Share repurchase and undervaluation is the subject of many studies (Vermaelen 1981; Stephen and Weisbach 1998).

The common analysis of buyback as a signal is that it should be positive because the firm is demonstrating concern about the efficient use of its equity capital (Jensen 1986). Share repurchase shows that company avoids investing in projects wasting its free cash flow; this signals that future profit per share should increase. Managers having private information buy undervalued shares to signal good future prospects, which are not valued in the current price (Vermaelen 1984). If this is true, share repurchase might occur whatever the price and the changes in the stock price are. On the other hand, managers may also want to signal an abnormally depreciated stock price and support the shareholders' return. In the latter, buyback will follow decrease in the market price. The difference between these two hypotheses is tiny (Bruslerie 2013). The first is directed more toward the future and the latter looks at the past (Benartzi, Michaely, and Thaler 1997). The first implies that the future earnings should improve after share repurchase announcement (Grullon and Michaely 2004) while the latter means that repurchase is to be the impulse to support the price (Ginglinger and Harmon 2007).

### 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.

TABLE 1 Reasons for Share Repurchase Indicated by Polish Companies Listed on WSE

Year	(1)	Reasons				
		(2)	(3)	(4)	(5)	(6)
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

NOTES Column headings are as follows: (1) number of companies that started share repurchase, (2) cash distribution, (3) undervaluation, (4) incentive system for employees, (5) capital group restructuring, (6) no reason indicated. Adapted from [www.gpwinfostrefa.pl](http://www.gpwinfostrefa.pl)

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.

The total number of companies that started repurchasing their shares amounts to 209. It is almost half of the companies listed on WSE. It is also important to mention that 60 companies announced share repurchase program without implementing it.

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 on 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.

If the reason of share repurchase program is revealed, to most common announced reason of shares repurchase is incentive pro-



gram 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 does not change. Nevertheless, 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. However, 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 restructuring of their capital group. It is connected with mergers and acquisitions. It mostly occurs when repurchase of shares is used to pay for the acquired company. Occasionally, it refers to the shares remained after the mergers of the companies.

Only 7% of all companies indicates undervaluation as the reasons for the share repurchase. These companies state that 'current situation on the financial markets does not reflect the actual value of the company.' All of these companies are willing to repurchase their share using procedure that results in share redemption. 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 ratios (ROE, EPS).

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

### Conclusions and Results

On carrying out the research for the selected listed companies, I found that only few companies are willing to announce the share repurchase reason. However, the most commonly announced reason is associated with changes in the ownership structure. Only 15% of companies that carried out the share repurchases announced reasons associated with signalling theory (cash transfer and undervaluation).

About 70% of all companies that started share repurchase in the years 2005–2012 do not announce any reason to the market. One

might also conclude that managers not revealing the reasons for share repurchase are given a wide leeway to take decision on allocation and usage of repurchased shares at their convenience. They can do whatever they want with repurchased shares without giving to investors any grounds for their behaviour. Companies at the same time give the wide leeway to the investors for they expect investors themselves assign information content to share repurchase according to their knowledge. In addition, for share repurchase is associated with conveying good news, companies expect positive investors' reaction to the share repurchase announcement (even without showing the reason).

Yet, it is also possible to notice that although the reasons are not announced to the market and minority shareholders they are known to strategic investors. Then share repurchase programs let minority owners give up investing in the company without a sense of loss (because they are still supposed to believe it is a good news) and let strategic investors strengthen their voting power.

Because usually share repurchase is deemed as actions, bringing good news companies might try to engage this tool in activities, which signal their quality. Managers being under pressure to make profit and impress investors might try to deploy different techniques to affect market opinion (Jensen 2005). One of these techniques might be share repurchase program. It is especially true for companies that do not reveal the reasons for share repurchase and expect that investors themselves will assign good news to the share repurchase. It is also true for companies that announce share repurchase program without implementing it.

However, share repurchase is very costly signalling mechanism. Although announcing a repurchase program is costless (in a monetary sense), both overvalued and undervalued firms can announce their intentions to share repurchase. Companies announcing share repurchase program without implementing it put at risk their credibility. Moreover, the loss of credibility and reputation from not implementing a share repurchase announcement may be perceived as a cost associated with false signalling and investors' being misled (Chan et al. 2007). Whereas carrying out share repurchase is costly tool even in a monetary sense.

Launching share repurchase program might not be associated with current or perspective financial situation or real discrepancy between intrinsic and market value. It might depend on the managers' opinion and belief and sometimes on the managerial confidence. Overconfident managers tend to perceive their firms have

better financial prospects and are undervalued and therefore they launch a share repurchase program aiming to fixing the price discrepancy (Shu et al. 2013).

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 before and after repurchasing their shares. This might help companies to determine whether share repurchase is real signalling mechanism or just companies try to mimic other companies in good financial condition and take advantage of investors' goodwill. Yet another possible direction of research is to investigate the investors' reaction and changes in the stock prices. This, in turn, may help to determine whether undervaluation is the main factor that determines share repurchase, or whether share repurchasing is the factor determining the change in share prices.

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