Corporate Governance And Propensity To Share Information: The Long-Run Effect

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Abstract

The optimal corporate governance system aims to give shareholders confidence that a company is managed efficiently, to create the highest possible profit and to preserve a firm's reputation. The aim of the research is to find out if the lower level of information asymmetry in corporate governance systems in the Polish listed companies implies higher rates of return for shareholders in the future.

We put forward a hypothesis that the impact of lower information asymmetry on company's performance is overestimated and in reality no long-run effect on the higher abnormal returns occurs. Taking into consideration the initial level of propensity to share information index we analysed future buy-and-hold abnormal returns achieved by 61 companies during the next 3 years.

Keywords: Corporate Finance and Governance, Information and Market Efficiency; Event Studies Asymmetric and Private Information

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1. Introduction

Information is a stream of data coming to an entity, which may be converted into a resource of knowledge to help in a decision making process. The optimal decision depends on the access to relevant information. To meet its role information should be complete, certain and symmetrical. Symmetry, in this case, means equal access to information for shareholders. However, in reality information asymmetry (the situation in which there are informed and uniformed entities) is the most common case.

The information asymmetry is rooted in the Agency Theory which explains problems arisen from the separation of ownership and management. They will appear wherever it is necessary to delegate rights.

The problem is also inevitable in corporate governance systems, where managers of the company (board of directors, project managers) are in possession of rather complete information on functioning of the company, which outside shareholders do not have.

As information asymmetry leads to ineffective decisions in corporate governance system, so an effective information policy should be implemented to provide easy and equal access to information not only to shareholders, but also for all stakeholders. The optimal corporate governance system aims to give shareholders confidence that their company is managed efficiently, to create the highest possible profit and to preserve a firm's reputation. In various codes of good practices in corporate governance, it is proposed to reduce the information asymmetry by placing certain information on the website of the company. As a result the website of the company becomes an essential tool for communication with internal and external, current and potential investors. In consequence, contributes to the reduction in the information asymmetry in corporate governance systems.

The aim of our research is to find out if a lower level of information asymmetry in the corporate governance systems in the Polish listed companies implies higher rates of return for their shareholders in the future. We focus particularly on the propensity to share information index which is the proxy for information asymmetry created by the company itself.

We put forward a hypothesis, that the impact of lower information asymmetry on company's performance is overestimated and in reality there is no long-run effect on the higher abnormal returns. We analyse 61 companies listed on the Warsaw Stock Exchange during the last 3 years. Taking into consideration the initial level of propensity to share information index (2008) we analyse future buy-and-hold abnormal returns achieved by the companies (2008-2012).

A literature review is provided in section 2. Section 3 contains the description of the propensity to share information index. Section 4 contains the description of the methodology of the event study, namely buy-and-hold-abnormal returns (BHAR) approach. Section 5 presents the analysis of long-run abnormal returns in companies with the lowest and the highest propensity to share information. In the last section we provide recapitulation of the most important issues.

2. Literature Review

Studies on the asymmetry of information require determining variables representing its level (proxies). In the literature, there are many approaches to the analysis of asymmetry of information in corporate governance systems.

Research in information asymmetry and corporate governance can lead to inconsistent results as there is not a single universal attempt to the problem, and research is conducted on different aspects of the relationship. For instance, there is not one established set of proxies for information asymmetry as well as for the level of corporate governance. Researchers use different proxies for these issues. As a result, the same variable is once applied as the proxy for corporate governance, but in other research as the proxy for information asymmetry. For instance, Aluchna et. al. (2005) applied the ownership structure, the share of inside ownership as the level of corporate governance, but in the research of Boumoshleh and Reeb (2009) the same indicators represent the level of information asymmetry.

Similarly Bøhren and Ødegaard (2003) on the basis of analysis of companies listed on The Oslo Stock Exchange stated that companies with a high number of inside shareholders are proven to have higher Q-Tobin index (which in their research is the proxy for company's performance). However, Huddart and Ke (2007) use a similar indicator (book-to-market ratio) as a proxy for information asymmetry in corporate governance systems i.e. between a firm's managers and other market participants who do not have access to additional private information (Huddart and Ke 2007). Black et al. (2006) regressed Tobin's Q against the result of their governance index. They found that this correlation is statistically highly significant.

The level of information asymmetry can be determined on the basis of a wide array of variables:

- share of inside ownership; based directly on the assumptions underlying corporate governance issues that arise from the Agency Theory (Boumosleh and Reeb, 2009; Becht and DeLong, 2004);
- analysts coverage (analysts following); number of analysts actively tracking company, its performance and stock, and publishing information about the company; the most widely used indicator (Brennan and Subrahmanyam, 1995; Cai et al., 2008; Clement and Tse, 2003; Ho and Harris, 2000; and many others);
- number of large shareholders (Allen, 1993);
- the difference between the financial results or stock forecast and the actually obtained data (Filbeck and Webb, 2001; Boumoshleh and Reeb, 2009);
- participation of institutional shareholders (such as insurance institutions, pension funds, etc.);
- the book value to market value ratio;

- the frequency of losses reporting;
- expenditure on research and development;
- and others.

However, the most widely applied variables associated with the level of information in corporate governance systems are: the share of inside ownership and the analyst coverage.

In this context, an interesting question appears. Will companies with higher propensity to share information achieve higher economic performance in the future? Is it profitable in the long-run to share information?

The analysis conducted by Boloş et.al. (2010) shows that in the situation, in which information is not shared proportionally between investors, an investor could decide to become the shareholder of the company if he has information that in the next period the company would develop investments, expand business activity, so earnings growth are to meet long-term shareholder interests. Moreover, research indicates, that there are situations of positive impact of information asymmetry on company performance and company value, but sometimes information asymmetry can also have a negative impact on company performance because investors' "expectations contrast ratio" is higher than the interest rate charged on the banking market.

The variables widely applied in various researches can differ (even in case of the same company) according to the sources of information asymmetry which are represented in these variables. Due to the above-mentioned fact, information asymmetry in corporate governance can be classified into: internal and external (Blajer-Gołębiewska 2010). External information asymmetry is created by investors (and potential shareholders) who are not interested in gathering information about the company. One of the indicators in this case is analyst coverage. Internal information asymmetry is created by the company and it can result from the managements' conscious decisions or from the lack of actions that could reduce the asymmetry. One of indicators of this class is the propensity to share information index.

The research in section 6 considers information asymmetry created by the company's management and the impact of the propensity to share information index on long-run abnormal returns.

3.Propensity to share information

Analysis of the behavior of companies' prices with the lowest and greatest information asymmetry has been carried out on a sample of companies that were the first and the last decile, of

all companies listed on the main trading floor of the Warsaw Stock Exchange, in order of rate lambda, the value of which was set on January 1st 2009.

Lambda stands for the propensity to share information and it is based on the selected set of information which each company's website should contain. Analyses of different codes of best practices in corporate governance (*Code of Best…*, 2007; *OECD Guidelines…,* 2005*; OECD Principles…,* 2004), indicates 18 of the most important pieces of information which should be included:

1. information about independent members on Supervisory Board,
2. annual reports,
3. articles of Association,
4. regulations of the Executive Board,
5. regulations of the Supervisory Board,
6. Executives and Supervisory Board members' CVs,
7. information about transactions with related companies, including customers and suppliers, shareholders and related entities,
8. information about company's transactions with large shareholders,
9. management statements about their relations with significant shareholders (holders of at least 5% of the total number of votes),
10. detailed information on the general meeting, which shall specify: time, place, agenda, draft resolutions, questions of the shareholders in matters covered by the agenda, etc.,
11. current and periodic information etc.,
12. information on dividend payments,
13. information on the types of shares,
14. risk management systems
15. information about compliance with codes of best practices in corporate governance,
16. information about the cost of the employee (management) motivation programmes,
17. English version of the website,
18. Search engine on the website.

Taking into account all above-mentioned factors made it possible to build a lambda ratio that was used to determine the degree of asymmetry of information provided by the company.

Running the company's website and publishing such information on it is not obligatory according to Polish Law. However the Warsaw Stock Exchange recommends it in its "Codes of Best Practice" (2007).). It was recommended for companies to run their website in Polish and English version from January 1st, 2009 and to include on it information relevant for investors. The

research in websites of companies listed on the WSE shows that they did not fully respect this recommendation (table 1).

As a result, the number of relevant to investors data provided on a voluntary basis on company's website (on January 1st, 2009) designates the lambda i.e. companies propensity to share information in the corporate governance system. In other words, the propensity to share information index is the ratio of information relevant to investors to the whole set of information on each company's website, where $\lambda \in \langle 0,1 \rangle$.

Table 1. Average propensity to share information indices for 289 companies listed on the Warsaw Stock Exchange by sectors

Sector	propensity to share information index
Banking	0.78
Oil & Gas	0.74
Telecom	0.69
Construction	0.67
Electroengineering	0.65
Other Industries	0.65
Retail	0.65
Chemicals	0.64
IT	0.62
Media	0.62
Developers	0.61
Services – other	0.61
Food	0.60
Hotels & Restaurants	0.59
Wood & Paper	0.59
Metals	0.58
Finance – other	0.57
Building materials	0.56
Wholesale	0.56
Energetics	0.50
Light Industry	0.40

Source: Blajer-Gołębiewska, 2010.

The highest average propensity to share information in the case of companies listed on the Warsaw Stock Exchange occurred in the Banking sector (0.78), and in Oil & Gas sector (0.74). The lowest average propensity to share information was found in the Light Industry sector. That means that on average companies in the Banking and Oil & Gas sector put the highest amount of information on their websites and companies in the Light Industry sector – the lowest.

4. Event study and buy-and-hold-abnormal returns (BHAR) approach

"Buy-and-hold abnormal return" is a tool used by the event study, the method that can help to assess the impact of certain events relating to a company on the company's share price (Gurgul, 2006) . This method involves calculating abnormal returns by comparing actual returns on shares and expected returns. To calculate the expected rates of return it is required to use some model, which enables evaluating the returns. The models used in event studies are: mean-adjusted return model, market-adjusted return model, market model, CAPM model, Fama and French three factor model, reference portfolio model or matching with control firms model. "Buy-and-hold abnormal return" (BHAR) indicates what is the rate of return on shares which are purchased at the beginning of the analysis period and kept until the end of the abnormal return's measurement period – adjusted for the expected rate of return during this period (Mitchell and Stafford, 2000).

In this study Rosen's BHAR abnormal return is used, in which the actual rate of return on shares is adjusted by dividing it by the rate of return on the stock index:

where:

R_{it} – the return on the share on the day t,

$R_{index,t}$ – the return on the stock index on the day t (Rosen, 2006).

From the BHAR values obtained that way the value of 1 is subtracted. Therefore the positive BHAR values mean that the share prices are relatively higher than market average value while negative BHAR values mean relative loss.

The research was based on an analysis of the lambda values for about 289 companies listed on the Warsaw Stock Exchange, hence the analysis performed for the first decile was applied to 31 companies with the highest values of the coefficient lambda, while the tenth decile consisted of 30 companies with the lowest values of the coefficient lambda. The share prices and the value of the WSE Index come from the archive of Stooq.com service. Share prices published on this site are adjusted for the impact on the valuation of such operations as splits, pre-emptive rights issuing or, dividend payments.

The method used in this analysis is the BHAR method according to the formula used by Rosen (Rosen, 2006). Reference day for abnormal returns determination is December 31st, 2008, the last day on which companies were not obliged to comply with stricter information disclosure rules. The abnormal returns were determined for the next 12 quarters following the reference date. The

expected rates of return were obtained using the market-adjusted model, where the index used to adjust the actual rates of return on shares of the companies to achieve abnormal rates of return, was the Warsaw Stock Exchange Index.

5. BHAR rates for companies with the lowest and highest information asymmetry

Research on the issue of information asymmetry suggests that it may have a significant impact on the economy. However, it seems that the long-term impact on the prices of companies, and thus, the wealth of shareholders, is limited. To analyse this problem the lambda ratio was used, indicating the depth of asymmetry for a specific company (Blajer-Gołębiewska, 2012), which was used to rank the companies from those least subjected to the phenomenon of asymmetry (the highest lambda), ending with the companies which were the least eager to reveal much information about themselves (the lowest lambda).

For all companies ordered in such a way Table 2 shows the results of abnormal returns BHAR, relative to the reference date which was December 31st, 2008, for the first decile of companies with the lowest degree of asymmetry. Results for subsequent quarters are positive, but statistically insignificant, so they are not significantly different from zero. This means that the results are scattered and random. Therefore, it cannot be concluded that over the next three years an extraordinary propensity to disclose information could positively influence the share prices of these companies.

Table 2. BHAR rate for companies with the greatest lambda

Quarter	Average value (%)	p-value
1	7.1242	0.179
2	9.2328	0.178
3	11.0548	0.121
4	3.7219	0.615
5	11.3377	0.245
6	10.6208	0.303
7	5.5728	0.603
8	7.7472	0.558
9	13.7787	0.423
10	13.6750	0.519
11	9.6724	0.636
12	10.4947	0.666

Source: own calculations.

Table 3 shows the results of abnormal returns BHAR, in relation to the reference date which was December 31st 2008, for the last decile of companies, ranked according to the propensity to disclose information. While by most of the period the BHAR values were statistically insignificant, the first two quarters indicate positive results for these companies, and the 11th quarter is negative. It could mean that, initially, the companies' reluctance to disclose their secrets was appreciated by investors, but later investors decided that investing in these companies is not advantageous.

Table 3. BHAR rate for companies with the lowest lambda

Quarter	Average value (%)	P-value
1	**15.3521**	**0.017**
2	**13.1126**	**0.044**
3	14.7121	0.122
4	0.7893	0.922
5	3.0576	0.716
6	0.3374	0.963
7	1.1049	0.897
8	-4.8018	0.528
9	1.1851	0.928
10	-7.6593	0.554
11	**-20.7576**	**0.039**
12	-15.4132	0.248

Source: own calculations.

However, the results may be only indirectly related to the propensity to disclose information. Table 4 presents the distribution of industries' representatives in both deciles - companies with the largest and the smallest inclination to share information. It may be noted that while some industries are poorly represented in both deciles, or similarly represented in both deciles, there are some industries which are particularly strongly represented among the companies disclosing information: banks and construction companies, while among companies non-disclosing there are many companies involved in wholesale trade and light industry (Table 4).

Table 4. The percentage of companies from various sectors in the first and tenth decile companies, in order of lambda

sector	high lambda	low lambda
IT	16	17
Banking	19	0
Electroengineering	6	0
Wholesale	3	13

Media	3	3
Developers	3	3
Services - other	3	7
Construction	19	7
Wood & Paper	3	0
Chemicals	6	7
Oil & Gas	6	0
Metals	3	7
Food	3	7
Telecom	3	3
Hotels & Restaurants	0	3
Light Industry	0	13
Finance - other	0	3
Building materials	0	3
Retail	0	3

Source: own calculations.

Thus the asymmetry of information can affect companies' performance, but only indirectly. Companies in certain industries have a higher propensity than others to disclose information. Therefore, the average performances of companies disclosing or non-disclosing information are influenced rather by the results of certain industries, but not by the behaviour of specific company.

Table 5. BHAR rates for Banks sample

Quarter	Average value (%)	P
1	-26.3844	0.022
2	-24.8446	0.017
3	-6.6831	0.509
4	0.0840	0.996
5	-8.2369	0.350
6	-7.7356	0.322
7	-12.3393	0.156
8	-8.6303	0.429
9	-6.2060	0.581
10	-11.3005	0.280
11	-11.6039	0.303
12	-18.4188	0.229

Source: own calculations.

Table 6. BHAR rates for Construction industry sample

Quarter	Average value (%)	p-value

1	13.7811	0.120017
2	16.7954	0.123837
3	3.9008	0.685452
4	-12.9829	0.159393
5	-5.6924	0.611168
6	-9.5210	0.411498
7	-16.3205	0.139369
8	-24.0000	0.060481
9	-29.9476	0.042866
10	-35.5330	0.023226
11	-42.6582	0.015880
12	-45.8160	0.013669

Source: own calculations.

Tables 5 and 6 show that during the analysis period the bank and construction industries showed negative abnormal returns in an overwhelming majority of periods (though often not statistically significant). Thus, the overall results were not affected by the phenomenon of information asymmetry, rather, the general situation in various sectors in the analysed period.

Table 7. BHAR rates for Wholesale sample

Quarter	Average value (%)	p-value
1	-5.9204	0.630667
2	-1.5477	0.917153
3	-6.8511	0.504584
4	-24.3317	0.007885
5	-13.3323	0.032222
6	-10.6416	0.054077
7	-14.6441	0.035777
8	-34.7429	0.009587
9	-28.0504	0.031633
10	-25.3702	0.075617
11	-33.5218	0.068312
12	-38.0373	0.025234

Source: own calculations.

Table 8. BHAR rates for light industry sample

Quarter	Average value (%)	p-value
1	-0.7244	0.842754

2	-2.0903	0.670094
3	25.4641	0.574926
4	-2.0804	0.942786
5	-1.8644	0.948384
6	-1.9752	0.915824
7	9.9612	0.800341
8	20.1684	0.486645
9	19.7405	0.426329
10	5.0768	0.846527
11	-15.0035	0.497247
12	0.8202	0.985027

Source: own calculations.

Similar results as in Tables 5 and 6 can be seen in Tables 7 and 8. Since these results do not differ noticeably, it can be concluded that for the event which was introduction by the WSE the new recommendation about information on companies websites, an approach of public companies to fulfil the disclosure obligations had no effect on their prices during the analysed period. For investors the current stock market situation was much more important in this period.

6. Summary and Conclusions

According to the research conducted, the hypothesis that the impact of lower information asymmetry on company's performance is overestimated and in reality no long-run effect on the higher abnormal returns occurs should not be rejected. The research shows that for the first decile of companies, i.e. companies with the highest propensity to share information, there is no long-term impact on the prices of companies, and thus, the wealth of shareholders. In the case of the last decile, i.e. companies with the lowest propensity to share information, initially, the companies' propensity to disclose information attracted investors, but after two quarters they decided that investing in these companies is not advantageous.

Moreover, it was found that companies in particular industries have a higher propensity than others to share information. The highest propensity occurs in the case of companies operating in the Banking sector, and the lowest propensity is in the case of companies in the Light Industry sector . The relation can be noticed not only in the number of companies with the highest propensity to share information indices, but also in the averages of the indices in each sector. It can be concluded, that, the average performances of companies disclosing or non-disclosing information are

influenced rather by the results of certain industries, but they do not result from the behavior of a specific company.

As the results obtained in BHAR analysis do not differ noticeably, it can be concluded, that the fact that a company's management was willing to share information and in fact reduced information asymmetry had no effect on prices of analysed companies in the long-run.

References:

1. Allen, F. (1993), "Stock Markets and Resource Allocation", in Mayera C. and Vivesa X. (Ed.), *Capital Markets and Financial Intermediation*, Cambridge University Press, Cambridge, pp. 81-108.

2. Aluchna M., Dzierżanowski M., Przybyłowski M., Zamojska-Adamczak A. (2005) *Analiza empiryczna relacji między strukturami nadzoru korporacyjnego (corporate governance) a wskaźnikami ekonomicznymi i wyceną spółek notowanych na GPW*, IBnGR, Gdańsk.

3. Becht M., DeLong B. (2004), "Why Has There Been So Little Blockholding in America?", http://delong.typepad.com/pdf/Blockholding.pdf.

4. Blajer-Gołębiewska, A. (2010), „Asymetria informacji w systemach nadzoru korporacyjnego na przykładzie polskich spółek giełdowych", in Kopycińska D. (Ed.), *Problemy gospodarowania w Polsce*, Wydawnictwo Katedry Mikroekonomii Uniwersytetu Szczecińskiego, Szczecin, pp. 182-192.

5. Blajer-Gołębiewska, A. (2012), *Asymetria informacji w relacjach inwestorskich. Perspektywa nadzoru korporacyjnego*, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk.

6. Boloş M., Tudor O., Cristian O. "Information Asymmetry Theory In Corporate Governance Systems", *Annals of Faculty of Economics*, 2010, Vol. 1, No. 2, pp. 516-522.

7. Boumosleh, A. S., Reeb D. M. (2009), "Inside Directors, Managerial Competition, and the Asymmetric Information Problem", *Social Science Research Network*, http://ssrn.com/abstract=674082.

8. Brennan M. J., Subrahmanyam A. (1995), "Investment Analysis and Price Formation in Securities Markets", *Journal of Financial Economics*, Vol. 38, No. 3, pp. 361-381.

9. Cai J., Qian Y., Liu Y. (2008), "Information Asymmetry and Corporate Governance", *Drexel College of Business Research Papers*, No. 02, http://ssrn.com/abstract=1082589.

10. Clement M. B., Tse S. Y. (2003), "Do investors respond to analysts' forecast revisions as if forecast accuracy is all that matters?", *Accounting Review*, Vol. 78, pp. 227-249.
11. *Code of Best Practice for WSE Listed Companies*, (2007), Appendix to Resolution No. 12/1170/2007 of the WSE Supervisory Board, http://www.corp-gov.gpw.pl/publications.asp.
12. *Code of Best Practice for WSE Listed Companies*, (2011), Appendix to Resolution No. 20/1287/2011 of the Exchange Supervisory Board, http://www.corp-gov.gpw.pl/publications.asp.
13. Filbeck G., Webb S. E. (2001), "Information Asymmetries, Managerial Ownership and the Impact of Layoff Announcements on Shareholder Wealth", *Quarterly Journal of Business and Economics*, Vol. 40, No. 2, pp. 31-48.
14. Gurgul H. (2006), *Analiza zdarzeń na rynkach akcji. Wpływ informacji na ceny papierów wartościowych*, Oficyna Ekonomiczna, Kraków.
15. Ho M. J., Harris R. (2000), "Brokerage analysts' rationale for investment recommendations: market response to different types of information", *Journal of Financial Research*, Vol. 23, No.4, pp. 49-58.
16. Huddart S. J., Ke B. (2007), "Information Asymmetry and Cross-section Variation in Insider Trading", *Contemporary Accounting Research*, Vol. 24, No. 1, http://www.caaa.ca/CAR/.
17. Mitchell M. L., Stafford E. (2000), "Managerial Decisions and Long-Term Stock Price Performance", *The Journal of Business*, Vol. 73, No. 3, pp. 287-329.
18. *OECD Guidelines on Corporate Governance of State-Owned Enterprises*, OECD, 2005, http://www.oecd.org.
19. *OECD Principles of Corporate Governance*, (2004), OECD, http://www.oecd.org.
20. Resolution No. 718/2009 of the Warsaw Stock Exchange Management Board dated 16 December 2009 (as amended) concerning provision by listed companies of reports on the application of corporate governance rules, http://www.corp-gov.gpw.pl/assets/library/english/publikacje/718_2009_eb_en.pdf
21. Rosen R.J. (2006), "Merger Momentum and Investor Sentiment: The Stock Market Reaction to Merger Announcements", *Journal of Business*, Vol. 79, No. 2, pp. 987-1017.
22. *The Combined Code on Corporate Governance*, http://www.ecgi.org/codes/all_codes.php.