Voluntary disclosures on control system over financial reporting and corporate governance mechanisms: Evidence from Poland*

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Abstract

The paper presents the results of research on the mechanisms of corporate governance functioning on the Polish capital market. The purpose of this article is to identify the impact of selected internal mechanisms of corporate governance on the scope of disclosures on the control system over financial reporting. Disclosures were presented by public companies operating on the capital market with an insider model of corporate governance. The research covered 301 companies listed on the Warsaw Stock Exchange and their voluntary disclosures published in 2013. The results indicate that the scope of disclosures on the control system over financial reporting is positively correlated with the presence of audit committee and the share of independent supervisory board members in their total number. The obtained research results confirm the belief presented in the literature that in an insider model of corporate governance internal mechanisms affect the scope of voluntary corporate disclosures. In addition, research results indicate that the scope of voluntary disclosures depends on the size of the company.

Keywords: corporate governance, financial reporting, non-financial disclosures, accounting information system
JEL Codes: G34, M41

Introduction

Financial scandals from the beginning of the 21st century demonstrate how severe consequences may result from the lack of effective control system over the financial reporting process. The control system over financial reporting is as strong as its weakest link. It is important that the task range, competencies and responsibilities are properly allocated. It is also important that individual participants in corporate reporting chain *i.e.*, accountants, members of the board, internal auditors, supervisory board members (boards of directors), external auditors should be aware of the consequences of their malfunction.

The literature points out that, on the one hand, control system over financial reporting is to help ensure the integrity and accuracy of financial reporting and risk management, while on the other hand the control system is intended to improve transparency, timeliness and quality of financial reporting (Cappelletti 2009). Disclosures on this system are presented by public companies in the section of the annual report on corporate governance. It seems that the scope of in-

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formation on control system over financial reporting presented in annual reports of public companies is determined by the complexity of this system and the level of transparency of individual companies. At the same time, the scope of these disclosures depends on the management decisions therefore, the limited scope of information on control system over financial reporting presented in the company's annual reports does not necessarily mean that the system operates to a limited extent.

Disclosures on control system over financial reporting make it possible to obtain basic information about the organization of the system, the task of which is to ensure the reliability of financial reporting. At the same time, the question arises whether the scope of disclosures on the control system is determined by the mechanisms of corporate governance? This problem seems to be particularly important in the case of an insider corporate governance model specific to countries such as Germany and Poland. There is a significant concentration of ownership in this model, and an internal control mechanism plays a key role. Due to frequently identified relationships between managers and owners, there is a reduction in the agency problem. This reduces the transparency of companies and increases the risk of fraud associated with operations carried out by companies (Solomon 2007). In an insider model, supervision is exercised directly by shareholders, supervisory boards and loan providers. The large role of dominant shareholders and banks in an insider corporate governance model means that these institutions have access to the company's internal information or have access to publicly available information earlier than others (Aluchna 2006). In countries with an insider corporate governance model, the capital market is not the primary source of capital for companies, which is why there is a tendency to reduce the scope of disclosures. In particular, this applies to voluntary disclosures.

The purpose of this article is to identify the impact of selected internal mechanisms of corporate governance on the scope of disclosures on the control system over financial reporting in companies operating in the insider model of corporate governance.

The results indicate that the scope of disclosures on the control system over financial reporting is positively correlated with the presence of audit committee and the share of independent supervisory board members.

The results of the research presented in the article provide new knowledge on the mechanisms of corporate governance functioning on a relatively young Polish capital market. This market rapidly absorbs solutions for corporate governance, which in Western countries evolved over decades. The article presents the mechanisms of corporate governance affecting the scope of disclosures concerning control over financial reporting. As it is identified in the literature, an active supervisory board with independent members and committees functioning with-

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in the board are the determinants of corporate governance quality (Cohen/Hanno 2000; Ettredge/Johnstone/Stone/Wang 2011). The findings confirm that the high quality of corporate governance enhances transparency of companies' reporting (Balachandran/Faff 2015).

This is the first study on the identification of determinants of the scope of disclosures, which since 2009 public companies listed on the markets of European Union countries must prepare as a separate part of the annual report. The scope of the control system of financial reporting included in the study is in line with what the management board has declared in the annual report. Previous studies, which considered disclosures on the control system published by companies listed on the capital markets of EU countries, took into account reports prepared before 2009 (Deumes/Knechel 2008; Van de Poel/Vanstraelen 2011; Michelon/Bozzolan/Beretta 2015; Hooghiemstra/Hermes/Emanuels 2015). Most of the previous research regarding the system of control over financial reporting was conducted among companies listed on capital markets in countries characterized by an outsider model of corporate governance (e.g., Ge/McVay 2005; Krishnan 2005; Bronson/Carcello/Raghunandan 2006; Raghunandan/Rama 2006; Zhang/Zhou/Zhou 2007; Doyle/Ge/McVay 2007; Hoitash/Hoitash/Bedard 2009; Lin/Wang/Chiou/Huang 2014). This study was conducted among companies listed on the Polish capital market, which is an insider model of corporate governance. Importantly, empirical data comes from a period when in Poland there were no severe consequences for not creating an audit committee. Thus, establishing an audit committee and appointing independent members of supervisory boards was an expression of good corporate governance practice.

In this study, the entire population of Polish public companies was examined. The results may be a reference point for further research in the field of corporate governance conducted among companies listed in capital markets.

The first part of the paper presents legislative actions concerning the evolution of corporate governance standards undertaken at the beginning of the 21st century in Europe. The second part presents literature studies on the impact of various factors on the scope of disclosures presented by companies, including in particular the scope of disclosures on the control system over financial reporting. Part three provides information on the organization of the research. The fourth part contains descriptive statistics and the results of the regression analysis. Robustness checks are included in the fifth part. Part six contains conclusions and research limitations.

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Disclosures on the control system over financial reporting as a result of the evolution of corporate governance standards

The Sarbanes-Oxley Act was a turning point in the area of legislative changes in corporate governance. This Act required all publicly-traded companies in the United States to publish in their annual reports the internal control reports, comprising inter alia the assessment of the effectiveness of structures and procedures functioning within the framework of the control system over financial reporting. In turn, the Winter Report was the European response to the *Sarbanes-Oxley Act*. *A Final Report of the High Level Group of Company Law Experts on a Modern Regulatory Framework for Company Law in Europe* was delivered on 4 November 2002 (Winter/Hopt/Rickford/Garrido Garcia/Rossi/Schans Christensen/Simon 2002), and became the basis for the development of *the European Commission Communication Modernising Company Law and Enhancing Corporate Governance in the European Union – A Plan to Move Forward* (2003). As the European approach to corporate governance disclosures is often based on the "comply or explain" principle, the European Commission considers that in this approach, convergence in the area of disclosures on control system over financial reporting will be insufficient. *A Plan to Move Forward* indicated that all public companies will be required to include in their annual reports a statement about their corporate governance rules and practices including, *inter alia* information on their control system over financial reporting. The provisions contained in this plan have been implemented into the legal order of EU countries under *Directive 2006/46/EU*. In Poland the provisions of *Directive 2006/46/EU* are included in the *Regulation of the Minister of Finance of 19 February 2009 on current and periodic reporting*. Starting from 2009, companies listed on the Warsaw Stock Exchange were obliged to present in their management reports, in the section on corporate governance, disclosures on the control system over financial reporting. Significantly, it was not indicated what kind of information should be disclosed. Thus, the scope of these disclosures is voluntary. It should be noted that the *Sarbanes-Oxley Act*, unlike European regulations, requires disclosing the weaknesses or material deficiencies in control system over financial reporting. As the reporting practice shows, the scope of information disclosed in 2011 by public companies listed on European capital markets varies widely (Gad 2016).

Literature studies and hypotheses development

Although European corporate governance regulations require disclosures on control systems over financial reporting, they do not provide instructions on what information categories should be disclosed by the management or what should be the scope of these disclosures. The lack of such instructions means that the scope of these disclosures depends on the discretion of managers. As in-

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ternal control systems cannot be directly observed from outside, their disclosure is crucial for investors to make their own assessment on their effectiveness (Michelon et al. 2015).

Agency theory and signaling theory underlie the theoretical basis for the issues presented in the article. In light of the assumptions of agency theory the demand for information about a company's business results from the problem of information asymmetry and agency conflict between management and investors (Healy/Palepu 2001). Management discloses non-mandatory information to mitigate information asymmetry. The literature indicates that this asymmetry is considered one of the causes of financial scandals (Zalewska 2014). Disclosures on the control over financial reporting seem particularly valuable in this context, as their primary advantage is the reduction of agency problems (Deumes/Knechel 2008).

In signaling theory, it is assumed that the signal sender takes actions to generate signals which will allow the recipient to distinguish between low quality and high quality firms (Certo 2003). From the point of view of signaling theory, detailed disclosures on the financial reporting control system may be a signal sent by company managers that actions are taken to ensure the reliability of financial and non-financial reporting.

The results of empirical research indicate that corporate governance mechanisms are the factors that may motivate managers to increase the scope of disclosures (Lang/Lundholm 1993). The article attempts to determine the impact of selected corporate governance mechanisms on the scope of disclosures. The study was carried out on the capital market characterized by an insider corporate governance model, therefore these internal corporate governance mechanisms were taken into account, which are of key importance in this model from the point of view of the scope of disclosures presented by companies (Jaggi/Low 2000). Two categories of internal corporate governance mechanisms were taken into account. The first category concerns the ownership structure, the second describes the corporate boards. The results of research conducted in the world cited in the article indicate that both these categories have an impact on the scope of corporate disclosures.

Literature review shows that the level of corporate governance disclosures is positively correlated with the degree of separation of ownership from management (Bauwhede/Willekens 2008). The type of ownership is also important. Managerial ownership reconciles the interests of both the management board and owners (Jensen/Meckling 1976), and this in turn reduces the agency conflict (Eng/Mak 2003; Nagar/Nanda/Wysocki 2003). Managerial ownership is also negatively correlated with agency costs (Jensen/Meckling 1976). The reduction in agency costs is associated with a reduction in the need for publicly disclosed information regarding e.g. quality of the accounting system (Bronson et al.

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2006). The higher the level of managerial ownership, the less motivated the managers are to signal the quality of their accounting system to the environment, and thus less motivated to disclose information about the system of control over financial reporting.

Empirical studies indicate that managerial ownership has a negative impact on voluntary disclosures presented by companies (Eng/Mak 2003; Nagar et. al 2003). It was shown in the literature, that the scope of disclosures on control over financial reporting is negatively correlated with the level of managerial ownership. This was confirmed by studies conducted among Dutch companies (Deumes/Knechel 2008). It is therefore expected that:

Hypothesis 1. *The level of managerial ownership is negatively correlated with the scope of disclosures on the control system over financial reporting.*

Institutional investors, by monitoring the management board, play an important role in the corporate governance system (Shleifer/Vishny 1986; Bhojraj 2003). A large institutional investor, due to the size of their investment, is motivated to monitor the management board's activities (Shleifer/Vishny 1997). The presence of "demanding" investors, such as institutional investors, improves the quality of disclosures presented by companies (Dye 2001). The presence of an institutional investor in the ownership structure that monitors the quality of the company's financial reporting motivates managers to signal to this investor the quality of control system over financial reporting through voluntary disclosures (Bronson et al. 2006). Managers may also want to signal to the environment that the entrusting of capital to the company by an institutional investor was not accidental and the company has potential that may not be noticed by a less prepared investor. The disclosure of detailed information on the system of control over financial reporting, combined with having an institutional investor in the ownership structure are consistent signals that distinguish between low-quality and high-quality entities (Certo 2003). Signal sender status, in this case resulting from having an institutional investor in the ownership structure, determines the reliability of the signal (Cohen/Dean 2005). The results of empirical research conducted in the United States indicate the existence of a positive relationship between the participation of institutional investors in the ownership structure and the occurrence of voluntary disclosures on control system over financial reporting (Bronson et al. 2006). Within the framework of the research it is expected that:

Hypothesis 2. *The presence of an institutional investor in the ownership structure is positively correlated with the scope of disclosures on the control system over financial reporting.*

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Independent members of the supervisory boards (boards of directors) are expected to monitor the activities of management and will limit the managerial opportunism (Fama/Jensen 1983). The involvement of independent supervisory board members affects their ability to control management activities (Fernandez/Arrondo 2005) and makes it possible to effectively prevent financial fraud (Doyle et al. 2007). It is noted in the literature that the number of independent supervisory board members (directors) increases the scope of corporate disclosures (Lang/Lundholm 1993), including voluntary disclosures (Lim/Matolcsy/Chow 2007). Moreover, the higher the quality of supervisory board committees (measured by the number of independent members), the higher the level of transparency of corporate governance disclosures (Ştefănescu 2012). The greater scope of disclosures on the system of control over financial reporting may result from the desire to mitigate information asymmetry between the management board and independent members of the supervisory board and to signal to independent members of the supervisory board that information contained in the financial statements and which they receive in internal reports is reliable. It also seems that the greater scope of disclosures may result from the fact that in order to minimize agency costs, companies are taking steps to strengthen corporate governance, e.g. by appointing independent members of supervisory boards (board of directors) and increasing the scope of disclosures.

Better supervised companies are expected to have a better control system over financial reporting, and these companies may signal this by disclosing more information on the control system over financial reporting (Bronson et al. 2006).

As part of the research conducted among 128 companies listed in the United States, it was found that there is a positive relationship between the participation of independent audit committee members and the quality of the internal control system (measured by the number of reported weaknesses of the control system) (Krishnan 2005). A study conducted among companies listed in the 1990 s in the Netherlands found that voluntary disclosures on internal control systems and risk management (measured by the index of disclosures created by the authors) are positively related to the participation of independent directors on the board of directors (Deumes/Knechel 2008). Within the framework of the research it is assumed that:

Hypothesis 3. *There is a positive correlation between the share of independent members of supervisory boards in their total number and the scope of disclosures on the control system over financial reporting.*

From the point of view of both financial and non-financial reporting, the activities of the audit committee are of particular importance. The results of the research show that the presence of audit committees in the company positively in-

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fluences the quality of financial reporting (Bedard/Marrakchi/Courteau 2004). The presence of an audit committee also affects the scope of the voluntary disclosures. As demonstrated by research conducted among public companies in the USA, the presence of an audit committee has a positive impact on the level of disclosures of voluntary nature (Krishnan 2005). As it turns out, the scope of voluntary disclosures is affected by the size of the audit committee. M. Wang and K. Hussainey (2013) found, based on a study conducted in the UK, that the size of the audit committee has a negative impact on the level of voluntary forward-looking disclosures.

However, there is no doubt that the creation of committees within the supervisory board strengthens the control function of corporate governance.

The managers, through disclosures on the control system over financial reporting, signal to the members of the audit committee the high quality of the accounting information system. Thus, the asymmetry of information between managers and the audit committee, which is the foundation of the signaling theory, is mitigated (Spence 1973). In the case of the audit committee, this seems particularly important as its members are required to take steps to ensure the reliability of the financial statements. Disclosures on the control system over financial reporting are a kind of accreditation regarding properties of the company (Certo/Daily/Dalton 2001), which in this case concern the quality of the accounting system.

The literature indicates that the presence of committees within the board of the company is positively correlated with the scope of corporate disclosures (Ştefănescu 2012). Within the framework of the research it is assumed that:

Hypothesis 4. *There is a positive correlation between the occurrence of audit committee within supervisory boards and the scope of disclosures on the control system over financial reporting.*

Organization of the study

Development of sample and data collection

The sample covered Polish public companies listed on the Warsaw Stock Exchange in 2013.

The companies listed on the Polish capital market were selected for the study because it is one of the largest capital markets in Central and Eastern Europe (https://fese.eu/statistics/). Good corporate governance practices are still taking shape in Poland. Changes, which have taken place in Western countries for decades, are taking place in Poland in a much shorter time. The obtained research results can be a benchmark for research conducted in countries with more and less developed corporate governance standards. The impact of corporate

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governance mechanisms on disclosures on the control system over financial reporting presented by Polish companies is a research gap.

The study included data from 2013 because it was assumed that four years since the introduction of the obligation for Polish companies to disclose information on the control system over financial reporting was a sufficient time for managers to comply with legal provisions. Importantly, the analysis of the scope of disclosures on the financial reporting control system presented in the years 2011–2013 indicates that if the management board once prepared disclosures on the financial reporting control system, they were not significantly modified in subsequent years. Therefore, it was decided that the analysis will be conducted using data from one year. One year was also taken into in the study by K. Van de Poel and A. Vanstraelen (2011) regarding disclosures on the system of control over financial reporting prepared by Dutch companies.

It is worth noting that the legislative changes regarding non-financial reporting introduced in recent years in the European Union, due to the Directive of the EP and Council 2014/95/EU, did not concern disclosures on the system of control over financial reporting, presented as a separate part of the report.

Some companies listed on the Warsaw Stock Exchange did not publish disclosures on the control system over financial reporting in their annual reports in 2013. Consequently, out of the whole population those companies were included which published disclosures on the control system in their annual reports. The companies which revealed that they did not have a formal system of control over financial reporting were excluded from the research group. The study excluded banks and social insurance institutions. Financial companies were also excluded from the sample in the research conducted by Y. Lin et al. (2014), R. Deumes and W. R. Knechel (2008). The econometric model created on the basis of such prepared data indicated the influence of independent variables on the dependent variable, however, the assumption about normal distribution of residuals from the regression model was not met. Based on the analysis of the histogram of the distribution of the dependent variable and Cook's distance extreme observations were excluded. First, 14 companies were removed, which disclosed more than 21 items of detailed disclosures on the system of control over financial reporting. In the regression prepared after excluding outliers, the model residuals did not have a normal distribution. Then 15 companies were removed, which disclosed more than 19 items of detailed disclosures on the system of control over financial reporting. In the regression prepared on the basis of updated data, the model residuals have a normal distribution. Therefore, the key condition of linear regression was met. Finally, the model includes data from 301 public companies.

The data were hand-collected and manually coded. The analysis presented in the article was conducted using the SPSS and Gretl programs.

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Model specification and measurement of variables

Dependent variable (SD)

There are different methods for measuring the scope of disclosures in the literature on the control system over financial reporting. Disclosure indexes are constructed for this purpose. The research conducted by H. V. Bauwhede and M. Willekens (2008), used the Deminor Rating of disclosure on corporate governance to measure the scope of disclosures in the corporate governance area. This index consists of six categories of disclosures and is prepared by a private rating agency, i.e. Deminor Rating. The Internal Control Disclosure Index was used in the research on the scope of disclosures conducted by R. Deumes and W. R. Knechel (2008). This index consisted of six elements. G. Michelon et al. (2015) to measure disclosures on control over financial reporting used the elaborated Total ICS Disclosure Score. They developed a two-dimension scheme (classification matrix) to collect information on the disclosure. R. Hooghiemstra et al. (2015) measured the scope of disclosures on the system of control over financial reporting using an index consisting of seven elements.

It should be noted that the above mentioned disclosure indexes cover differentiated corporate governance issues which are not always directly related to the control system over financial reporting.

In this study, the scope of disclosures (SD) is measured by the number of detailed disclosure items about the system of control over financial reporting presented by the surveyed companies. First, a list of all detailed disclosure items on the control system over financial reporting was prepared. As a result of the study, over 150 specific items of disclosures were identified (see Appendix 1). In the next stage, a detailed analysis of the content of disclosures on the system of control over financial reporting presented in the annual reports of the surveyed companies was conducted as well as the coding of the results of tests in the zero-one system was made, where 1 indicated that the company disclosed the given specific item and 0 that it did not disclose such item. In the study, all items of detailed disclosures had the same weight. A person who was not involved in the study verified the method of data encoding on a sample of 15 randomly selected companies.

The method of measuring dependent variable used in the study allows the quantification of disclosures on the control system over financial reporting presented by the companies.

It should be emphasized that this is the first such detailed examination of the scope of the control system over financial reporting. Other research groups focused on several (Hooghiemstra et al. 2015; Deumes/Knechel 2008; Van de Poel/Vanstraelen 2011) or a dozen or so (Michelon et al. 2015) disclosure items on the control system over financial reporting.

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It should be emphasized that in the studies carried out so far, the authors analyzed the disclosures contained in the annual report and not in its separate part, which results from the fact that during the research they performed, it was not obligatory to separate the disclosures on the control system over financial reporting. One of the weaknesses of such research, i.e., the identification of mechanisms of the control system over financial reporting by the researchers themselves in the annual report, is that the researchers include in the study the mechanisms that the management of a given company does not treat as a part of the control system over financial reporting.

The study was limited to one fragment of the annual report, which was not regulated by law, devoted to the control system over financial reporting. The idea was that the scope of disclosures should depend on the management board's decision.

In the research process, four independent and four control variables were identified.

Independent variables (MO, INI, ISBM, AC)

The managerial ownership (MO) variable was measured as a total share of management board in the ownership structure. An analogous method of measuring this variable was used, among others, by K. Van de Poel and A. Vanstraelen (2011) in the study on disclosures on internal control and accruals quality.

The institutional investor (INI) variable was measured in a zero-one system, where 1 means that an institutional investor is in the ownership structure of a given company, while 0 means that there is no institutional investor in the ownership structure. In the study, institutional investors are understood as: insurance companies, pension funds, investment funds, banks, funds managed by banks. Usually, the share of institutional investors in the ownership structure is small, while their mere presence in the ownership structure may affect the scope of disclosures. In the study on corporate reporting, the share of institutional investors in the ownership structure using the zero-one system was used by, among others M. Kachouri and A. Jarboui (2017).

The independent supervisory board members (ISBM) variable reflects the share of independent members of supervisory boards in their total number. A similar variable in research on disclosures on the control system over financial reporting was used by, among others J. Krishnan (2005), Y. Zhang et al. (2007), M. Ettredge et al. (2011), G. Michelon et. al (2015).

The audit committee (AC) variable refers to the appointment of members of supervisory boards to an audit committee. Variable takes values: 0, 1, where 0 – no audit committee within the supervisory board; 1 – a separate audit committee. An analogous variable was used in the study conducted by M. Kachouri and A.

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Jarboui (2017) on the relationship between corporate governance efficiency and corporate reporting. The variable regarding the appointment of the audit committee within the supervisory board was also used as part of the study on disclosures in the area of corporate governance conducted by M. Ettredge et al. (2011).

Public companies listed on the Warsaw Stock Exchange have been obliged to appoint an audit committee since 2009 for supervisory boards of more than five members. It should be emphasized, however, that in Poland, a few years after the introduction of the "hard law" regulations regarding the appointment of the audit committee, this obligation was not universally fulfilled. Research results indicate that in 2011 most public companies listed on the Polish capital market did not appoint an audit committee. The audit committee was also not appointed by some companies whose supervisory boards consisted of more than five members. In turn, some companies reduced the number of supervisory board members so as not to be forced to set up an audit committee. In some companies, an audit committee was appointed, although due to the small number of supervisory board members, the companies were not obliged to do so (Adamska/Bohdanowicz/Gad 2017). This was due to the lack of severe sanctions for failure to establish an audit committee. Therefore, it seems that in the years between 2009 and 2013, in practice, the statutory obligation to set up an audit committee was rather a good practice. The situation changed in 2017 in connection with the implementation of the provisions of Directive 2014/56/EU into national regulations. From this year, the obligation to establish an audit committee has depended on the size of the company, in addition, severe penalties have been introduced for failure to appoint an audit committee. Research results indicate that the appointment of an audit committee under the pressure of sanctions introduced in 2017 did not translate into the scope of non-financial disclosures (Gad 2019). Therefore, it seems that after implementing the guidelines of Directive 2014/56/EU into national provisions, the establishment of this committee ceased to be an expression of the quality of corporate governance. The study assumed that the establishment of an audit committee by a given company in 2013 is a manifestation of the quality of its corporate governance.

Control variables (LBS, SIZE, TQ, BIG4)

The variable regarding ownership concentration is measured as the size of the largest block of shares (LBS). Similarly, this variable was measured in the study on disclosures on the control system over financial reporting (Michelon et. al 2015; Van de Poel and Vanstraelen 2011; Deumes and Knechel 2008) and in the study concerning disclosures in the letters to shareholders (Hadro/Klimczak/Pauka 2017). The results of previous research indicate that the level of concentration negatively affects the level of disclosure on corporate governance (Bauwhede, Willekens, 2008). As a result, the largest block of shares (LBS) con-

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trol variable, is expected to have a negative impact on the scope of disclosures on the control system over financial reporting (SD).

The size of the company (SIZE) is measured as the natural log of total assets. Similarly measured variable was used in research on disclosures on the system of control over financial reporting conducted, inter alia, by J. Krishnan (2005), Y. Zhang et al. (2007), K. Van de Poel and A. Vanstraelen (2011), R. Hooghiemstra et al. (2015).

The positive relationship between the scope of disclosures (SD) and the size of the company (SIZE) has been noted in the literature. Those managing large companies are trying to attract financial analysts and investors. Both financial analysts and investors report greater demand for information in the case of large companies (Schipper 1991). Research conducted on the Polish capital market confirms that the better quality of the "investor relations" tab exists in larger companies (Aluchna 2015). It is expected that this control variable will have a positive impact on the scope of disclosures (SD).

Tobin's Q ratio (TQ) was calculated as the total market value of the company to the book value of the company's assets. This article uses the Tobin's Q ratio (TQ) formula used, among others by I. E. Brick and N.K. Chidambaran (2010). The literature indicates that the higher level of firm performance measured using Tobin's Q (TQ) is associated with higher levels of non-financial disclosures (Taylor/Vithayathil/Yim 2018). Therefore, it is expected that the Tobin's Q ratio (TQ) will be positively correlated with the scope of disclosures on the financial reporting control system (SD).

The big four audit firms (BIG4) variable takes values: 0, 1, where 0 – a firm auditing financial statements is not in the "Big Four"; 1 – a firm auditing financial statements is in the "Big Four" (Deloitte, Ernst & Young, KPMG, PricewaterhouseCoopers). This variable was similarly measured *inter alia* by Y. Zhang et al. (2007), and U. Hoitash et. al (2009) in their studies on the financial reporting control system.

The literature indicates that the "Big Four" auditing firms are perceived as entities which provide the best accounting practices to the company. They have a positive impact on the scope of disclosures regarding control over financial reporting (Krishnan 2003). The study expects that the scope of disclosures on the control system over financial reporting (SD) will be positively correlated with the audit of financial statements by the "Big Four" auditing firms (BIG4).

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Results

Descriptive statistics

Public companies disclosed an average of 9.16 of detailed disclosure items on the control system over financial reporting (SD). The minimum number of detailed disclosure items was one, while the maximum was 18. These results indicate that the disproportionate scope of disclosure is significant. The average share of board members in the ownership structure (MO) was 17 %. Importantly, the maximum share of board members in the ownership structure (MO) was as much as 90 %. There was an institutional investor (INI) in the ownership structure of the majority of the surveyed companies. The average share of independent members of supervisory boards in their total number (ISBM) was about 30 %. There were companies in which the supervisory boards did not have any independent member. Most of the companies had no audit committee within their supervisory boards (AC). The largest block of shares (LBS) in the surveyed companies was on average 42 %. The natural logarithm of assets (SIZE) was on average 12.43. The average Tobin's Q (TQ) value was 0.86. The financial statements of the majority of surveyed companies were not audited by the "Big Four" audit firms (BIG4) (see Table 1).

Table 1. Descriptive statistics

		SD	MO	INI	ISBM	AC	LBS	SIZE	TQ	BIG4
N	Important	301	301	301	301	300	301	299	299	301
	Lack of data	0	0	0	0	1	0	2	2	0
Mean		9.16	0.17		0.29		0.42	12.43	0.86	
Dominant				1		0				0
Standard deviation		3.64	0.24		0.19		0.21	1.46	1.39	
Minimum		1	0.00	0	0.00	0	0.04	8.15	0.00	0
Maximum		18	0.90	1	1.00	1	1.00	17.29	16.67	1

where: SD – scope of disclosures; MO – managerial ownership; INI – institutional investor; ISBM – independent supervisory board members; AC – audit committee; LBS – the largest block of shares; SIZE – the natural log of assets; TQ – Tobin's Q; BIG4 – The "Big Four" audit firms.

Source: Author's own compilation based on SPSS.

The correlation coefficients were calculated using Spearman's rank correlation coefficient. The scope of disclosures on the control system over financial reporting (SD) was significantly, positively correlated with the share of independent members of supervisory boards in their total number (ISBM) ($p<0.05$), presence of audit committee within the supervisory board (AC) ($p<0.01$), their assets (SIZE) ($p<0.05$) and audit of financial statements by audit firms from the "Big

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Four" (BIG4) ($p<0.05$). No correlation was established between the scope of disclosures on the control system over financial reporting (SD) and the managerial ownership (MO), the presence of institutional investors in the ownership structure (INI), the largest block of shares (LBS), Tobin's Q ratio (TQ) (see Table 2).

The managerial ownership (MO) was positively, significantly correlated with the share of independent members of supervisory boards in their total number (ISBM) ($p<0.01$) and the largest block of shares (LBS) ($p<0.05$). The higher the level of managerial ownership (MO), the larger the share of independent members of supervisory boards in their total number (ISBM) and higher concentration of ownership (LBS). This may have resulted from the fact that owners who were also members of the management board wanted to increase the company's credibility by appointing independent members of supervisory boards. At the same time, managerial ownership (MO) is negatively, significantly correlated with the appointment of an audit committee within supervisory boards (AC) ($p<0.05$), the presence of an institutional investor in the ownership structure (INI) ($p<0.05$) and audit of financial statements by the "Big Four" audit firms (BIG4) ($p<0.01$). The higher the level of managerial ownership (MO), the lower the propensity to appoint an audit committee (AC) and the lower willingness to employ the "Big Four" audit firms (BIG4). This could be due to the fact that managerial ownership reduces the problem of agency. The principal does not need additional mechanisms to control the company. Managerial ownership (MO) is also negatively, significantly correlated with the natural log of assets (SIZE) ($p<0.01$). A higher level of managerial ownership occurs in smaller companies.

The appointment of the audit committee (AC) is positively correlated with the natural log of assets (SIZE) ($p<0.01$) and with the audit of financial statements by the "Big Four" audit firms (BIG4) ($p<0.01$). In companies where an audit committee was appointed auditing of financial statements is entrusted to the most reputable audit firms.

The existence of an institutional investor in the ownership structure (INI) is positively correlated with the natural log of assets (SIZE) ($p<0.01$), Tobin's Q ratio ($p<0.01$) and with the audit of financial statements by the "Big Four" audit firms (BIG4) ($p<0.05$). This means that institutional investors entrusted capital primarily to large companies and those whose financial statements are audited by the "Big Four" audit firms. The positive correlation between the occurrence of an institutional investor in the ownership structure (INI) and the Tobin's Q ratio (TQ) may result from the fact that institutional investors invest their funds in companies with high potential.

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The audit of financial statements by the "Big Four" audit firms (BIG4) is positively, significantly related to, among others the natural log of assets (SIZE) ($p<0.01$).

Table 2. Spearman – rank correlations among SD, independent and control variables

	SD	MO	INI	ISBM	AC	LBS	SIZE	TQ	BIG4
SD	1.00								
MO	-0.08	1.00							
INI	0.03	-0.12*	1.00						
ISBM	0.12*	0.23**	-0.01	1.00					
AC	0.16**	-0.14*	0.01	-0.02	1.00				
LBS	-0.02	0.15*	-0.09	0.04	-0.06	1.00			
SIZE	0.14*	-0.25**	0.22**	0.00	0.30**	0.09	1.00		
TQ	0.03	0.00	0.19**	0.07	-0.06	0.03	0.00	1.00	
BIG4	0.13*	-0.24**	0.13*	-0.03	0.21**	0.16**	0.49**	0.16**	1.00
† p < 0.1; * p < 0.05; ** p< 0.01									

where: SD – scope of disclosures; MO – managerial ownership; INI – institutional investor; ISBM – independent supervisory board members; AC – audit committee; LBS – the largest block of shares; SIZE – the natural log of assets; TQ – Tobin's Q; BIG4 – The "Big Four" audit firms.

Source: Author's own compilation based on SPSS.

Results of regression

In order to indicate the importance of the impact of individual internal mechanisms of corporate governance on the scope of disclosures on the control system over financial reporting, a multiple regression model was constructed. The prepared model explains changes in the scope of disclosures in about 6.3 %. This may result from the specificity of the dependent variable, which may be influenced by a number of factors. In the study on disclosures on the control system over financial reporting carried out by R. Hooghiemstra et al. (2015) the R-squared ratio was also low and ranged from 5 % to 16 % in individual models. The results of the model (see Table 3) indicate that when estimating the scope of disclosures on its base we are wrong of about +/- 3.54 detailed disclosure items on the average.

The dependent variable does not meet the requirements of a normal distribution. The deviation from the normal distribution of this variable is illustrated by a left skewness (skewness 0.277, kurtosis -0.208, $p<0.05$ in the Shapiro-Wilk test) (see Appendix 2).

In order to fully diagnose the model it is necessary to verify the assumption about normal distribution of residuals from the regression model. For standardized residuals, the average value is 0, and the standard deviation is 0.06. The

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Shapiro-Wilk test indicates the significance of p = 0.19>0.05, that is, the conformity of the distribution of residuals with normal distribution (see Appendix 2).

The dependence presented in the model is linear, since the value of statistics in the test for non-linearity (squares) is LM = 5.46 with the value p = 0.49>0.05 (the zero hypothesis: the relationship is linear). The results of the research indicate that the heteroscedasticity of residuals does not occur in the model. The value of the White's test for heteroscedasticity of residuals is LM = 43.38 with the value of p = 0.41>0.05 (zero hypothesis: heteroscedasticity of residuals does not occur). The DW statistic in the Durbin-Watson test is 2.03. The critical value d_u is 1.85. This means that $DW < 4 - d_u$ which indicates the lack of autocorrelation of model residuals. None of the model parameters introduces a collinearity into the model (VIF<10).

Table 3. Multiple regression of SD

Variable	Expected sign	Model	
N		301	
		Beta coefficients	VIF
MO	-	-0.03	1.33
INI	+	-0.07	1.02
ISBM	+	0.12*	1.07
AC	+	0.12*	1.13
LBS	-	-0.02	1.23
SIZE	+	0.12†	1.46
TQ	+	0.09	1.01
BIG4	+	0.06	1.43
Model		Values	
Adj. R^2		0.06	
F		3.49**	
Standard error of estimate		3.54	

† p < 0.1; * p < 0.05; ** p< 0.01; *** p<0.001
Predictors: (Constant), MO, INI, ISBM, AC, LBS, SIZE, TQ, BIG4
where: MO – managerial ownership; INI – institutional investor; ISBM – independent supervisory board members; AC – audit committee; LBS – the largest block of shares; SIZE – the natural log of assets; TQ – Tobin's Q; BIG4 – The "Big Four" audit firms.
Dependent variable: SD.
where: SD – scope of disclosures.

Source: Author's own compilation based on SPSS.

The results of the modelling show that the following independent variables are significant: the share of independent supervisory board members in their total number (ISBM) (p<0.05) and the existence of audit committee (AC) (p<0.05).

The results of the research have confirmed the hypothesis No. 3 (p<0.05) according to which there is a positive correlation between the share of independent

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members of supervisory boards in their total number (ISBM) and the scope of disclosures on the control system over financial reporting (SD). The results of the research confirm the impact of the quality of corporate governance, measured by the share of independent members of supervisory boards in their total number, on the scope of disclosures presented by public companies. The results obtained are in line with the results of research conducted by M. Lang and R. Lundholm (1993) and S. Lim et al. (2007). These results in particular, complement the existing research on disclosures on the system of control over financial reporting. This is the study of J. Krishnan (2005) and R. Deumes, W. R. Knechel (2008), who identified a positive correlation between the share of independent members of supervisory boards in their total number and scope of disclosures on the system of control over financial reporting in the United States and the Netherlands.

The results obtained also confirmed the hypothesis No. 4 ($p<0.05$) according to which there is a positive correlation between the occurrence of audit committees within supervisory boards (AC) and the scope of disclosures on the control system over financial reporting (SD). The research results supplement the current knowledge on the impact of the audit committee on company reporting. It should be noted that the institution of audit committees is relatively new in continental Europe. The literature indicates that the presence of the audit committee has a positive impact on the quality of financial reporting (Bedard et al. 2004) and the scope of non-financial reporting (Krishnan 2005; Wang/Hussainey 2013). The obtained results indicate that the quality of corporate governance, measured by the occurrence of an audit committee, has a positive impact on the scope of disclosures on the system of control over financial reporting.

The hypothesis No. 1, according to which the level of managerial ownership (MO) is negatively correlated with the scope of disclosures on the control system over financial reporting (SD), has not been confirmed. Most of the companies surveyed did not have managerial ownership.

The hypothesis No. 2 according to which the presence of institutional investor in the ownership structure (INI) is positively correlated with the scope of disclosures on the system of control over financial reporting presented by the management boards of public companies has not been confirmed either (SD). The obtained results are different from the results of research conducted by S. N. Bronson et al. (2006), who identified a positive impact of the presence of institutional investors in the ownership structure on the scope of disclosures on the system of control over financial reporting in the United States. It seems, therefore, that institutional investors on a relatively young Polish capital market do not have as much influence on the scope of disclosures as is the case of "experienced" capital markets. In the Polish corporate governance system, institutional investors are not as important as in Western countries.

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Research results indicate that the scope of disclosures on the system of control over financial reporting is positively, significantly correlated with the size of the company (SIZE). Large companies disclose more information on the system of control over financial reporting. The research results are in line with the research results on non-financial disclosures presented in the literature (Taylor et. al. 2018).

Robustness checks

An alternative method of measuring the dependent variable

It has been noted in the literature that despite many ambiguities regarding the optimum form of measuring the scope of disclosures, the preferred measurement units involve words, sentences, pages (Schroeder/Gibson 1990; Marston/Shrives 1991; Gray/Kouhy/Lavers 1995). T. Kravet and V. Muslu (2013) to measure risk disclosures used the number of sentences containing at least one word related to risk. In turn, J. L. Campbell, H. Chen, D. S. Dhaliwal, H. Lu and L. B. Steele (2014) for measuring risk disclosures used the total number of words. In this study, it was decided to use a measure consisting in measuring words within disclosures on the control system over financial reporting.

Table 4. Multiple regression of LD

Variable	Model
N	301
	Beta coefficients
MO	-0.04
INI	-0.03
ISBM	0.14*
AC	0.18**
LBS	-0.01
SIZE	0.11†
TQ	0.02
BIG4	0.04
Model	Values
Adj. R^2	0.08
F	4.14***
Standard error of estimate	156.40

† p < 0.1; * p < 0.05; ** p< 0.01; *** p<0.001
Predictors: (Constant), MO, INI, ISBM, AC, LBS, SIZE, TQ, BIG4
where: MO – managerial ownership; INI – institutional investor; ISBM – independent supervisory board members; AC – audit committee; LBS – the largest block of shares; SIZE – the natural log of assets; TQ – Tobin's Q; BIG4 – The "Big Four" audit firms.
Dependent variable: LD.
where: LD – length of disclosures.

Source: Author's own compilation based on SPSS.

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The minimum number of words presented as part of disclosures regarding the financial reporting control system was 31 words, while the maximum number was 1249 words. The companies disclosed an average of 282.98 words as part of disclosures on the control system over financial reporting.

The change in the method of measuring the dependent variable did not significantly affect the results of the research. The share of independent members of supervisory boards in their total number (ISBM) ($p < 0.05$) and the appointment of an audit committee (AC) ($p<0,01$) have a significant impact on the length of disclosures (measured by the number of words) (LD) (see Table 4).

An alternative method of measuring the Managerial ownership independent variable

In the additionally prepared econometric model, the method of measuring the managerial ownership independent variable (MO – alternative) was changed. In the new model, this variable was measured on a zero-one scale, where 0 – no managerial ownership; 1 – occurrence of managerial ownership. The change in the measurement of the managerial ownership variable did not significantly affect the research results (see Table 5).

Table 5. Multiple regression of SD – an alternative approach to measuring the Managerial ownership variable

Variable	Model
N	301
	Beta coefficients
MO (alternative)	-0.07
INI	-0.07
ISBM	0.12*
AC	0.12*
LBS	-0.03
SIZE	0.11†
TQ	0.09
BIG4	0.06
Model	Values
Adj. R^2	0.07
F	3.65***
Standard error of estimate	3.54

† p < 0.1; * p < 0.05; ** p< 0.01; *** p<0.001
Predictors: (Constant), MO (alternative), INI, ISBM, AC, LBS, SIZE, TQ, BIG4
where: MO (alternative) – managerial ownership; INI – institutional investor; ISBM – independent supervisory board members; AC – audit committee; LBS – the largest block of shares; SIZE – the natural log of assets; TQ – Tobin's Q; BIG4 – The "Big Four" audit firms.
Dependent variable: SD.
where: SD – scope of disclosures.

Source: Author's own compilation based on SPSS.

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An alternative control variable

In the next econometric model, the natural logarithm of market capitalization was used as a measure of the size of the company (SIZE – alternative). The level of market capitalization, as a measure of the size of the company, was used in a study conducted by R. Quick and D. Wiemann (2011) regarding the quality of corporate governance reports. The level of market capitalization was also used as a measure of the size of the company by U. Hoitash et al. (2009) in a study concerning disclosures on the system of control over financial reporting. It is expected that the natural log of market capitalization (SIZE – alternative) (reflecting the market value of the company) control variable will have a positive impact on the scope of disclosures. It seems that companies with high market value will try to maintain this value, and therefore they will be willing to disclose more information than companies with lower market value. Changing the control variable had no significant effect on the results obtained (see Table 6).

Table 6. Multiple regression of SD – an alternative approach to measuring a company's size

Variable	Model
N	301
	Beta coefficients
MO	-0.08
INI	-0.06
ISBM	0.12*
AC	0.14*
LBS	-0.03
SIZE (alternative)	0.04
TQ	0.07
BIG4	0.09
Model	Values
Adj. R^2	0.06
F	3.14**
Standard error of estimate	3.55

† p < 0.1; * p < 0.05; ** p< 0.01; *** p<0.001
Predictors: (Constant), MO, INI, ISBM, AC, LBS, SIZE (alternative), TQ, BIG4
where: MO – managerial ownership; INI – institutional investor; ISBM – independent supervisory board members; AC – audit committee; LBS – the largest block of shares; SIZE (alternative) – the natural log of market capitalization; TQ – Tobin's Q; BIG4 – The "Big Four" audit firms.
Dependent variable: SD.
where: SD – scope of disclosures.

Source: Author's own compilation based on SPSS.

In all these cases my results are robust to these alternative specifications.

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Conclusions

It should be noted that research on the system of control over financial reporting has so far been conducted mainly in countries characterized by an outsider model of corporate governance. In this article, the study was carried out in an insider model of corporate governance. In the outsider model of corporate governance, characterized by, among others a strong capital market, the scope of information presented by management boards of companies is determined primarily by the information needs of market participants (Jaggi/Low 2000). In the insider model of corporate governance, the demand for public disclosure of information is not as large as in the outsider model of corporate governance and depends on the managers' approach to disclosing information (Hooghiemstra et. al 2015). In this context, it seems valuable to identify internal mechanisms in an insider corporate governance model which affect the extent of disclosures on the control system over financial reporting. These disclosures should be clearly identified in the annual report. They reflect the management's concept of ensuring the reliability of the accounting information system. Importantly, their scope depends on management decisions.

The results of the analysis show that the share of independent supervisory board members (ISBM) and the presence of audit committee (AC) affects the scope of disclosures on the control system over financial reporting (SD). These results are consistent with research conducted by M. Lang and R. Lundholm (1993), J. Krishnan (2005), S. Lim et al. (2007). In the case of companies with audit committees and independent members of supervisory boards, the supervisory authority seems to exert pressure on managers to disclose comprehensive information on the control system over financial reporting. This is extremely important information for capital market regulators. The identified regularity may also arise from the fact that in companies where committees are set up within supervisory boards and independent members of supervisory boards are appointed, the control system over financial reporting is more extensive. In companies where there are task groups, so-called supervisory board committees, their members seem to be more prepared to supervise management activity than in companies where there are no committees. The obtained results may be related to the fact that the audit committee should assist the supervisory board to review at least annually, the internal control and risk management systems, to ensure that the main risks (including those related to compliance with applicable laws and regulations) are properly identified, managed and disclosed.

In the insider model of corporate governance, occurring, among others in Poland, supervision is implemented through internal mechanisms. Supervisory boards, including audit committees, acting for the benefit of shareholders (the principal) contribute to reducing information asymmetry between the agent (management board) and the principal (shareholders). Management is willing to

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disclose additional information so as not to be accused of *moral hazard*. The supervisory board may request all information from the management board which cannot refuse it. The problem is, however, that the supervisory board must be properly prepared to know what information to ask for and to assess it appropriately. If an audit committee is appointed, it consists of people with accounting and financial knowledge, while independent members of the supervisory board appear to be more objective. Properly prepared members of supervisory boards are able to verify information on the control system over financial reporting provided by the management board and assess whether the scope of these disclosures is adequate to the control system operating in the company.

To sum up, agency theory places the supervisory board as a key internal supervision mechanism whose main task is to watch over the interests of shareholders. The obtained research results are in line with the assumptions of this theory. In the case of relatively young capital markets, this corporate governance mechanism is of particular importance.

At the same time, the supervisory board verifies the information disclosed by the management board, thereby authenticating the signal sent to the environment by managers regarding specific company features, i.e. in this case, the qualities of the financial reporting control system. The signal in the form of disclosures on the control system over financial reporting must therefore be carefully considered. The supervisory board prepared in substantive terms is able to assess the quality of the accounting system and put pressure on managers to make disclosures on the control over financial reporting comprehensive.

Both the appointment of the audit committee and the share of independent members of the supervisory board in the total number of board members are an expression of the quality of corporate governance (Ettredge et al. 2011). Thus, research results indicate that the quality of corporate governance in an insider model translates into the scope of disclosures on the control system over financial reporting.

The results obtained indicate that not all variables which, according to the theory of the agency and the theory of signaling should affect the scope of disclosures, actually affect it. According to agency theory, the higher the level of managerial ownership, the lower the scope of disclosures. At the same time, according to the theory of signaling, the higher the level of managerial ownership, the less motivated the managers are to signal to the environment the quality of their accounting system as part of disclosures about the control system over financial reporting. In turn, according to the theory of signaling, the presence of a “prepared” investor in the ownership structure in the form of an institutional investor that monitors the quality of the company's financial reporting motivates managers to signal to this investor the quality of control system over financial reporting through voluntary disclosures. In the prepared model, the managerial

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ownership (MO) variable and institutional investor (INI) variable turned out to be insignificant. This may be due to the nature of the disclosures studied and the specificity of the relatively young Polish capital market.

The research tool developed as part of the research in the form of a list of detailed disclosure items about the control system over financial reporting may be used in subsequent surveys on corporate governance.

From the modelling point of view, the most important limitation involves the inability to verify the assumption that the dependent variable is normally distributed. However, while verifying the model, it was possible to confirm the lack of collinearity and the normal distribution of residuals.

The key limitation of the research results is the fact that they relate to the insider corporate governance model. In addition, the Polish capital market examined in the study is relatively young. Thus, subsequent studies conducted in the outsider corporate governance model or among public companies listed on Western European capital markets may not provide similar results.

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Appendix 1.

Disclosure category: Internal control system and risk management – general information

Examples of detailed disclosures: Principles of risk management associated with preparing financial statements; The benefits resulting from internal control and risk management; The unit (units) responsible for internal control; The tasks of individual units operating within a company related to the functioning of internal control and risk management; The concept of the three lines of defense related to internal control and risk management systems; Self-control of the correctness of one's own work, including the quarterly self-assessment process; Use of the COSO model for the construction and development of internal control.

Disclosure category: Organization of the accounting system

Examples of detailed disclosures: The principle of separation of functions (administration, implementation, authorization); Tasks and responsibilities are precisely defined; The principle of double control; The established disclosure committee, which controls individual financial and non-financial information prior to its publication; At the beginning of the year, accounting items and fragments of processes exposed to risk are selected and evaluated by external auditors for the effectiveness of the system; An independent department is set up in the company to ensure that the financial statements comply with the law and internal regulations.

Disclosure category: IT tools

Examples of detailed disclosures: Information on the use of IT tools for the needs of the system; Segment reporting is carried out on a separate IT system.

Disclosure category: Risk

Examples of detailed disclosures: Units responsible for risk management associated with the preparation of financial statements; Types of risks associated with the preparation of financial statements; Risks associated with the operation of the entity; Information on the creation of risk maps; So-called owners of risks are responsible for the management of identified risks; Information on the implementation of the risk management process in relation to financial reporting.

Disclosure category: The process of preparing financial statements

Examples of detailed disclosures: The entities responsible for the preparation of financial statements and supervision over these statements; Information on the compliance of financial statements with accounting policy; Information

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about the responsibility of the disclosure committee for the accuracy of the data contained in financial statements and their compliance with laws and regulations; Information about the solutions, compliant with the IFRS, adopted to avoid incorrect estimates; Internal division of responsibilities for preparing financial statements.

Disclosure category: Internal and external regulations

Examples of detailed disclosures: Information on internal regulations regarding the process of preparing financial statements; Information on external regulations on financial reporting; Information about tracking legislative amendments to financial statements and periodical reports; Unified accounting policy for the whole group; The accounting manual developed by the company applied throughout the group; Guide to internal control over financial reporting; Fair Play Code of Conduct.

Disclosure category: External audit

Examples of detailed disclosures: Information on auditing (reviewing) financial statements by an external auditor; The auditor selection process; Information on the use of the auditor's recommendations for improving internal control and risk management; The conclusions of the external audit are submitted to the supervisory board (the audit committee).

Disclosure category: The supervisory board

Examples of detailed disclosures: Information related to the implementation by the board of directors of the obligations arising from responsibility for financial statements; The tasks of the audit committee (the supervisory board) related to internal control and risk management, e.g., monitoring the financial reporting process and the independence of the auditor, supervisory board recommends adopting or rejecting financial statements; Assessment of the financial statement by the supervisory board; Assessment of the management report by the supervisory board.

Disclosure category: Data security and protection

Examples of detailed disclosures: Information on the safety and security of financial reporting data; Control of access to financial data.

Disclosure category: Internal audit

Examples of detailed disclosures: Operations of the internal audit which are involved in risk identification and evaluation of control mechanisms; Information

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on the subjection of the internal audit; The audit department provides the supervisory board and the audit committee with information on possible irregularities in the operation of the system; Annual audit plans (programs).

Group of disclosures: Managerial accounting

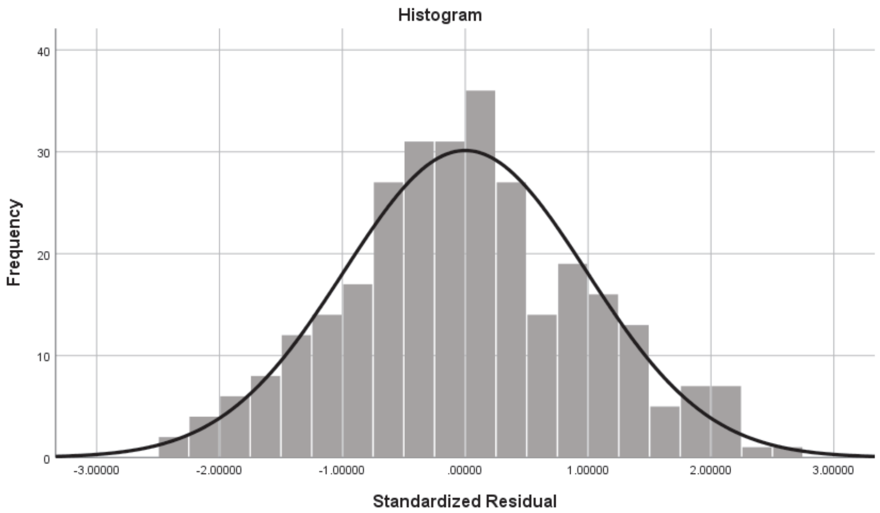
Examples of detailed disclosures: The budgetary control system as part of the control system over financial reporting; Information on the periodic review of the financial results, implementation of the strategy and operational plans.

Disclosure category: Other disclosures

Examples of detailed disclosures: Regular training for employees involved in financial reporting; Skills of employees of accounting departments are verified in the recruitment process; Employees have appropriate qualifications in the area of accounting.

Appendix 2.

Chart 1. Analysis of the normality of SD variable



Source: Author's own compilation based on SPSS.

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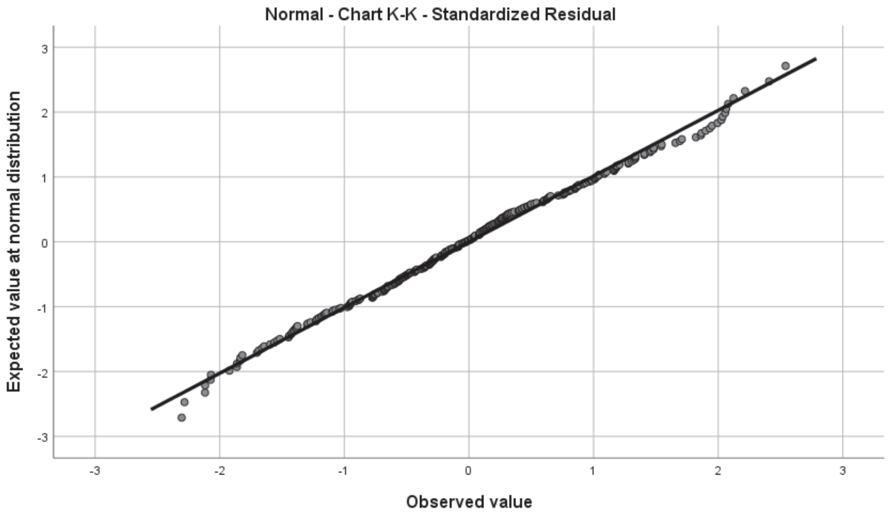
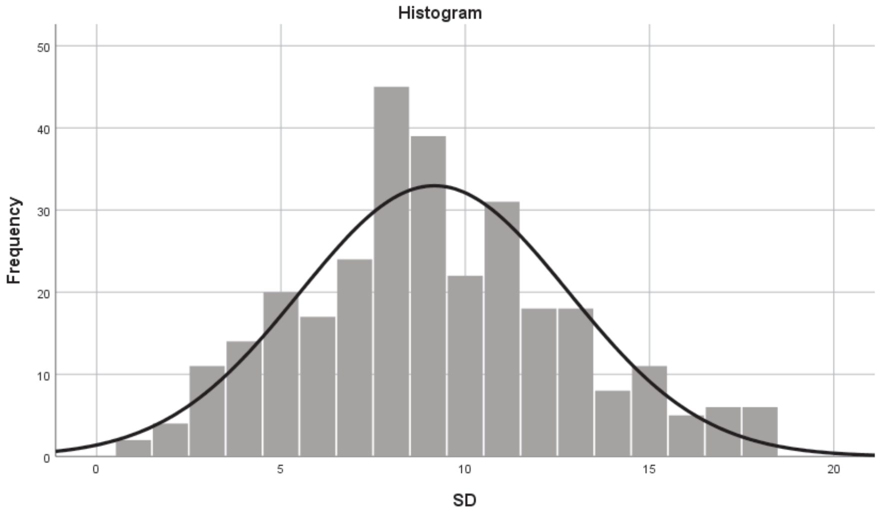
Chart 2. Histogram of SD variable



Source: Author's own elaboration based on SPSS.

Chart 3. Analysis of standardized residuals in terms of normal distribution



Source: Author's own compilation based on SPSS.

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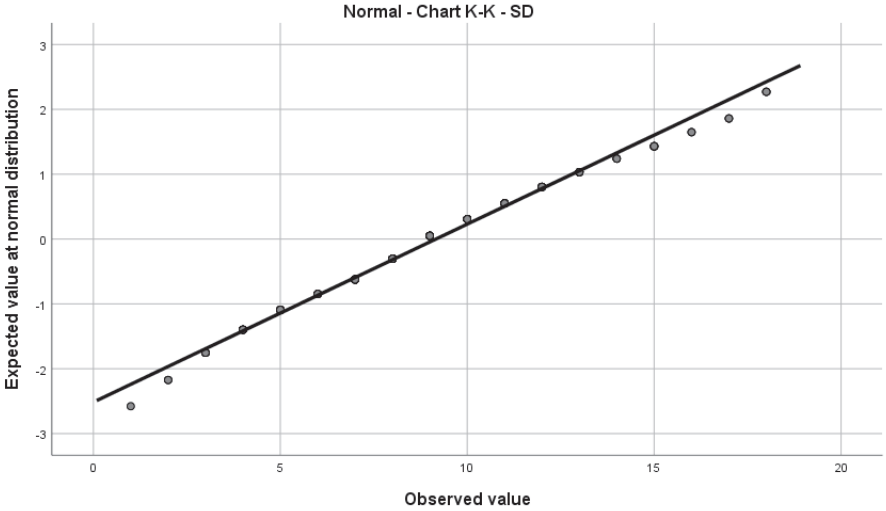
Chart 4. Histogram of standardized residuals



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