Determinants of Accuracy in Disclosure of Information about Risk in Financial Statements of Listed Companies – Case of Poland

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ABSTRACT
Disclosures in financial statements enable the formulation of an overall view of the level of risk to which the presented valuation results are exposed. International Financial Reporting Standards (IFRS) introduce a number of requirements related to disclosure of information referring to risk. However, the scope of disclosures in financial statements may be larger or smaller, depending on the decision of a given entity. The article presents the results of empirical studies conducted on a sample of companies listed on the Warsaw Stock Exchange. The analysis included financial statements for the years 2010-2015. The method of analysing the content was used and the linear regression analysis was performed in order to determine the factors which increase the degree of accuracy of disclosed information about the risk of inappropriate valuation in a financial statement. The conducted empirical study indicated that companies disclose information about risk with a varying degree of accuracy, depending on many factors specific to the entities, such as the category of the auditor carrying out the audit of a financial statement and the number of areas of estimated valuation according to the management or the size of the company.

Keywords: Risk; Valuation; Disclosures; Financial statements; Index of disclosure.

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1. INTRODUCTION
Risk is understood as the possibility of an event occurring which will have an influence on the achievement of intended objectives [International Standards for the Professional Practice of Internal Auditing, 2010, p. 21]. In business activity, risk is the degree of uncertainty whether satisfactory or unsatisfactory results of the decisions made will be achieved [Sitkin, Pablo, 1992, p. 9]. In this context, risk is an objective phenomenon which cannot be eliminated from the economic reality [Ronek, 2007, p. 7]. A risk analysis is conducted more or less consciously before making any decision in the modern economy.
Values presented in financial statements, being a result of the process of valuation, are exposed to the inherent risk of distortions in the results. Accordingly, the framework of financial reporting provided by International Financial Reporting Standards (IFRS) requires performing obligatory disclosures related to the risk of inaccuracy of valuation. These disclosures may refer to (International Auditing Standard 540, §A121):

- key assumptions and other sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities,
- the range of possible outcomes and the assumptions used in determining the range,
- information regarding the significance of estimates to the financial position and performance of activity,
- qualitative disclosures such as the exposures to risk and how they arise, the entity’s objectives, policies and procedures for managing the risk, the methods used to measure the risk and any changes from the previous period of these qualitative concepts,
- quantitative disclosures such as the extent to which the entity is exposed to risk, based on information provided internally to the entity’s key management personnel, including credit risk, liquidity risk and market risk.

Disclosure of information should be regarded as a process in which data from the accounting system become generally available to broadly understood recipients of financial statements. Universal access to information is characteristic of listed companies in the case of which the process of disclosure is additionally regulated by the provisions of law regarding the capital market.

The article presents the results of empirical studies conducted on a sample of 78 companies listed on the Warsaw Stock Exchange. Within the time horizon of the study for the years 2010-2015, an analysis of disclosures referring to the risk of valuation inaccuracy in 468 financial statements was performed. All listed companies in the sample prepared statements in accordance with International Financial Reporting Standards (IFRS).

The method of analysing the content was used, an assessment of accuracy of disclosures was carried out with the use of disclosure index and a model of linear regression was prepared in order to determine the factors which increase the degree of accuracy of information about risk disclosed in financial statements.

2. LITERATURE REVIEW

In the literature, risk is treated as the degree of uncertainty, but the differences between the notions of risk and uncertainty should be clearly stressed, noting that risk can be measured, while uncertainty cannot. Risk is understood as a special form of uncertainty which can be translated into figures [Karmańska, 2008, p. 30]. From this perspective, risk is a measure of probability that the future will be different from what we predict [Head, Herman, 2002, p. 5].

Risk of inaccuracy of valuation increases due to the large-scale application of estimated valuation in accounting. In a dynamic environment it is difficult to determine whether the estimation can be considered as a sufficient approximation of reality [Mazur, Wyczołkowska, 2007, p. 24]. The main sources of risk in valuation are uncertainty of estimation demonstrated in making assumptions in the process of valuation on the basis of assessment of objectively existing, uncertain conditions, and
economic uncertainty related to the lack of possibility of quantification of a phenomenon without making significantly limiting assumptions.

Risk results from difficulties in predicting whether future and uncertain events will be much worse or much better than expected or occur more frequently or less frequently than expected by the entity. Risk related to estimated valuation resulting from the uncertainty of the assumptions regarding the future causes general risk of reflecting the economic and financial situation of a given entity presented in the financial statement to become higher. The recipients of the statements should be aware of that danger for the sake of appropriate interpretation of the results.

Estimation of values is inextricably linked to the application of specific models of valuation or using the assistance of an expert specialising in valuation of certain assets. However, even the valuation performed by specialised external entities may give varying results depending on the assumed principles and assumptions. The reasons for uncertainty related to the reliability of valuation may be, among others [Zieniuk, p. 89]:

- the length of the period covered by the forecast,
- the number and complexity of significant assumptions made in the valuation,
- the high degree of subjectivity of assumptions and factors used in the valuation,
- the high degree of uncertainty regarding the existence or results of the assumed future events,
- the lack of objective data with the simultaneous application of highly subjective factors.

In the case of fair value, international standards suggest that the input data on which the valuation is based contain assumptions regarding risk, such as the risk related to a particular valuation technique and the risk related to the input data in the selected valuation technique [IFRS 13, Appendix A]. This does not cover all possible types of risk which can be encountered during estimated valuation. However, it facilitates an adjustment of the estimated result in a way that allows to take uncertainty into account.

Measurement of risk of different financial categories may require estimation on the basis of their risk scale values with the use of variability measures, security measures or value-at-risk concept [Nowak, 2013, p. 166]. These methods enable determining the threshold of the variable exposed to risk, simultaneously informing about the maximal possible change of a given value caused by exposing to unforeseeable events and conditions.

The risk of material distortion is higher with significant, non-routine transactions and in the case of issues which require judgement and which are usually linked to the necessity of determining estimated values. Therefore, risk becomes higher when:

- the principles of accounting regarding the estimated values may be subject to different interpretations,
- the required judgement may be subjective or require making assumptions about the results of future events [International Auditing Standard 540, §A121].

It is also assumed that material distortion grows when significant positions resulting from estimations are included in financial statements [Kwasiborski, Lachowski, 2011, pp. 112-114].

Admittedly, there are estimated values which are characterised by relatively low uncertainty of estimations but the risk of significant inaccuracy may exist even when the method of valuation and assumed input data are well-defined. The examples of estimated values linked to low or high uncertainty of estimations are shown in Figure 1.
Concluding the above considerations regarding the risk of values estimation, the interrelations should be underlined according to which the higher the risk:
- the higher the level of dependence of estimations on the judgement,
- the higher the sensitivity of estimations to changes of the assumptions,
- the valuation technique used is less-favoured,
- the longer the period covered by the forecast,
- the less available the reliable data from external sources.

Distortion of estimates raises the issue of accountability to stakeholders for the information published in financial statements. This issue is widely commented, particularly in the United States, where stakeholders may seek compensation for decisions made on the basis of forecasts published by the companies. In consequence, clauses are introduced exempting the companies from accountability for actions of persons and institutions based on the presented forecasts [Krasodomska, 2010, pp. 55-56].

In practice, determining estimated values involves taking into account the level of risk related to distortion of a given reporting position. The level of this risk has also an impact on the procedures of auditing financial statements by statutory auditors with the objective of confirming reliability of a financial statement. An integral part of the audit will be therefore determination of the risk of significant distortion of estimated values.
and appropriate reaction to the level of determined risk, to which particular attention will be paid in further considerations.

The importance of the problem of values estimation risk is also proved by the obligation of appropriate disclosures regarding the risk in financial statements introduced in international regulations, particularly in reference to:

- the subjective assessments made by the management while applying the accounting policies [IAS 1, § 122],
- the main assumptions made by the management about the future and the basic sources of uncertainty of values estimation at the balance sheet date which may lead to significant adjustments to the carrying amounts within the next financial year [IAS 1, § 125].

The standards also introduce the obligation of disclosures which allow to assess the risk related to using the categories of fair value in valuation. Appropriate disclosures allow to assess the method of valuation used and the degree of reliability of the input data, facilitating determination of the impact of valuation on the financial result with the use of unobservable data (level 3), that is data that present the highest risk [Janowicz, 2011, p. 274]. The range of information about the risk related to valuation of financial instruments is also wide. Pursuant to the provisions of IFRS, disclosures regarding credit risk, market risk and liquidity risk, as well as disclosures of objectives, policies and risk-management processes are required [IFRS 7, § 31 et seq.]. Information disclosed in such a way should provide the stakeholders with the knowledge about the most important risk factors which may impact the distortion of the image of an entity resulting from using estimations in valuation. In order to determine how the result of estimated value may change depending on consideration of new circumstances, the entities may conduct the so-called sensitivity analysis. It may lead to preparing result scenarios ranked depending on risk preferences, e.g. from pessimistic to optimistic. The analysis may also indicate to which factors the estimated value is more or less sensitive.

An aware user of reported information who wants to assess the accuracy of valuation performed by an entity needs additional disclosures – above all, about the adopted methods of valuation, the assumptions and the degree of estimation uncertainty. Such information is at least partially provided by additional information to the financial statement. At this point, however, doubts arise as to whether the disclosures made in the additional information about the methods of values estimation really allow for the valuation process to be traced and considered reliable.

The degree of accuracy of the disclosures of information is the subject of numerous empirical studies described in the literature. Their objective is usually suggesting a reliable increase or decrease in the scope of disclosures, analysing obligatory and optional disclosures, or finding companies which fulfil reporting obligations in exemplary fashion in order to promote good practice. The studies also concentrate on economic consequences of disclosures while attempting to determine the impact of disclosed information on the behaviour of shareholders, the competitive position of companies and the protection of the interests of the investors. There are also magazines dedicated to corporate disclosures and their consequences. They include, among others, International Journal of Disclosure and Governance and Corporate Governance: Disclosure, Internal Control & Risk Management Abstracts.

Among research problems related to disclosures of information it is worth mentioning several main trends regarding [Healy, Palepu, pp. 405-440]:

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the disclosure regulations (the necessity of regulating disclosures, disclosures subject to regulations, effectiveness of accounting standards, obligatory and optional disclosures),

- the role of statutory auditors and analysts (effectiveness of auditors in improving reliability of statements, effectiveness of analysts and intermediaries disclosing information, impact of disclosures on the results of financial analyses),

- the decision of the management board (factors determining the decisions about disclosed information, interrelations between disclosures and ownership supervision, the role of supervisory boards and audit committees in reference to disclosures),

- the effects of disclosures (reactions of investors to corporate disclosures, factors determining the assessment of the quality of disclosures, impact of the disclosures on the allocation of resources).

In the Polish scientific literature, the most prominent example of research on information disclosed in financial statements is work of the team under the supervision of G. K. Świderska [2010]. In this research, the time horizon of which covered the years 2005-2007, a range of disclosures in selected companies listed on the Warsaw Stock Exchange was analysed. The authors suggested an indicator of corporate disclosures of their own construction (Polish Corporate Disclosure Index, PCDI) which determines the level of accuracy of disclosures. The index takes into account elements recognised in the audit, such as mandatory and voluntary financial disclosures, relations with the environment and information from the reports on the activities of the board. The PCDI was defined by its creators as the first Polish disclosure index. Subsequently, the authors investigated the relations between the level of disclosures measured with the use of the PCDI and variables describing the degree of protection of the investors and the competitive position of the companies. The conclusion reached by the authors indicates also that a higher level of disclosures is linked to a better external evaluation of the company and level of its ownership supervision as well as a higher category of the auditor. However, no links were found between the level of disclosures and the market share of the companies and their profitability [Świderska, 2010, pp. 149-150].

The indicator is not the first index measuring the degree of accuracy of disclosed information. It is based on many constructions described in the world literature, such as the BCDI (Brazilian Corporate Disclosure Index). Its authors conducted research on 50 companies on the Sao Paulo Stock Exchange, which are a part of the BOVESPA index [Lopes, de Alencar, 2010, pp. 443-464].

Table 1 shows examples of research on accuracy of information disclosures from different thematic areas made in annual reports of companies. Each example indicates the sample size, the territorial scope of the research and the main conclusions. It should be noted, however, that the provided list is not a closed list, and the examples were chosen for the sole purpose of subsequent listing of characteristics of empirical studies on accuracy of disclosures.
Table 1. Selected research on accuracy of information disclosures

<table>
<thead>
<tr>
<th>Author</th>
<th>Number of companies (research sample)</th>
<th>Territorial scope</th>
<th>Main conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tower, Hancock, Taplin [1998, pp. 293-305]</td>
<td>60</td>
<td>Australia, Hong Kong, Malaysia, Philippines, Singapore, Thailand</td>
<td>Possibility to measure the level of accuracy of disclosures in different countries and to assess the degree of compliance with obligations resulting from IFRS. The authors point out the problem of many areas of disclosures which are not performed despite the obligation.</td>
</tr>
<tr>
<td>Street, Gray, Bryan [1998, pp. 11-48]</td>
<td>49</td>
<td>12 countries, among others, France, Canada, Switzerland</td>
<td>In the disclosed accounting policy numerous derogations from rules resulting from IFRS were found. The degree of compliance of the adopted solutions amounted to only 75%. The authors repeated the research in the subsequent years.</td>
</tr>
<tr>
<td>Abd-Elsalam, Weetman [2003, pp. 63-84]</td>
<td>72</td>
<td>Egypt</td>
<td>On the basis of the analysis of disclosures, an increase in the degree of compliance of adopted solutions with IFRS was observed.</td>
</tr>
<tr>
<td>Palmer [2008, p.847-870]</td>
<td>150</td>
<td>Australia</td>
<td>The degree of accuracy of disclosures in the reports of the companies depends on the size of the audit firms performing the audit.</td>
</tr>
<tr>
<td>Karim, Ahmed [2005, pp. 2-23]</td>
<td>188</td>
<td>Bangladesh</td>
<td>The degree of accuracy of disclosures depends on the size of a given entity, its profitability and the size of the audit firm.</td>
</tr>
<tr>
<td>Kurniawanto, Suhardjanto, Bandi, Agustiningtisih [2007, pp. 255-270]</td>
<td>200</td>
<td>Indonesia</td>
<td>Board size has no effect on corporate risk disclosure, while the proportion of independent members in the board affects corporate risk disclosure.</td>
</tr>
<tr>
<td>Rajhi [2014, pp. 1-6]</td>
<td>118</td>
<td>France</td>
<td>None of the French enterprises belonging to the NYSE Euronext discloses information fully in compliance with IFRS. The appointed indexes of accuracy of disclosures allow for comparisons to be performed in the subsequent analysed years.</td>
</tr>
<tr>
<td>Świderska et al. [2010, p. 149]</td>
<td>48</td>
<td>Poland</td>
<td>A higher level of disclosures is linked to a better external evaluation of the company and a higher degree of its ownership supervision as well as a higher category of the auditor and does not depend on the market share of the companies and their profitability.</td>
</tr>
</tbody>
</table>

Source: Own elaboration.

Indicators of disclosures constructed in the mentioned studies refer to the level of accuracy of information of different character, both from mandatory and voluntary disclosures in the annual, quarterly and current reports and information resulting from relations with analysts. In the research on measuring accuracy of disclosures, approaches may be distinguished based on:

- the construction of simple zero-one indicators used primarily in the analysis of voluntary disclosures; these indicators take value „1” when given information is
disclosed and „0” in the opposite case [Beuselinck, Deloof, Manigart, 2008, pp. 607-639],

- the computer analysis of the content of financial statements and other reports provided by the companies [Gruning, 2011, pp. 485-519],
- the analysis of topics which are disclosed in financial statements in a given country on the basis of introduced regulations (an example of such an indicator is the CIFAR, which is used for the purpose of international comparisons) [Bushman, Smith, 2003, p.72].

The indicated research became an inspiration for creating an indicator which facilitates measurement of the level of accuracy of disclosures of information about risk presented in the financial statements of listed companies prepared in compliance with IRFS.

3. RESEARCH METHODOLOGY

The main objective of the conducted research was to evaluate the accuracy of information about risk disclosed by the companies listed on the Warsaw Stock Exchange and to determine the factors which have an impact on the accuracy of the disclosures. On the basis of the theoretical considerations and the results of research found in the literature, the main hypothesis was formulated according to which: „The level of accuracy of disclosures of information about risk in financial statements of listed companies depends on the factors specific to entities”

The research on reporting practice of disclosures of information about risk was divided into four stages. The first stage consisted of the analysis of empirical studies evaluating the level of accuracy of disclosures of different types in terms of the possibility to implement selected solutions in the research on disclosures related to risk. Another step was the right selection of the research sample and the time horizon, taking into account the possible limitations of the research. Works related to this stage also include collecting empirical material which is the basis for further analyses.

In the second stage, a detailed analysis of the content of financial statements of companies selected for the research sample was conducted. Subsequently, with the use of a spreadsheet, appropriate data resulting from additional information in the analysed financial statements of the companies selected for the research sample were collected for each of the areas. The findings from this stage allowed to present summary information regarding disclosures about risk reported by the companies selected for the sample.

In the third stage of the research, an evaluation of the level of accuracy of the analysed disclosures in particular areas and years covered by the time horizon of the research was performed. The point evaluation became the basis for the construction of the disclosure index. The obtained results, with the use of statistical tools, were used to assess the direction of changes in the level of accuracy of reported information.

The last stage of the research was to establish possible connections between the level of accuracy of disclosures and other variables which characterise the analysed companies with the use of linear regression analysis. The obtained results became the basis for the verification of the formulated research hypotheses.

The research sample consisted of companies listed on the Warsaw Stock Exchange. The selection of listed companies, similarly to other research on the level of accuracy of disclosures, was dictated mainly by the heightened requirements with regard to reporting and availability of the reports which are made public. It should be also noted
that all listed companies, as public interest entities, must have their financial statements audited by a statutory auditor, and the audit opinion is also made publicly available. In determining the time horizon of the research, it was decided that the analysis will cover financial statements for the reference years 2010-2015. Such a research period makes it possible to observe certain trends and tendencies with reference to the level of accuracy of disclosures. In the year 2012, new reporting standards regarding disclosures of information were introduced (mainly IFRS 13 Fair Value Measurement).

The companies selected for the research were included in the indexes of the Warsaw Stock Exchange:

- WIG20 calculated since 16 April 1994 based on the value of portfolio with shares in 20 major and most liquid companies in the Main List,
- mWIG40 (successor of the MIDWIG index) calculated since 31 December 1997 and comprises 40 medium size companies listed in the Main List,
- sWIG80 (successor of the WIRR index) calculated since 31 December 1994 and comprises 80 smaller companies listed in the Main List.

The selection of companies from different indexes ensured the participation of both entities with a very high market capitalisation as well as medium and small entities in the research sample.

The research covered companies included in the indexes WIG20, sWIG40, mWIG80, which throughout the whole time horizon of the research were listed on the Warsaw Stock Exchange, and whose financial statements were prepared in compliance with IFRS. Due to the specific nature of their activity and different rules of accounting and financial reporting, the sample did not include banks, insurance companies and entities operating on the basis of rules on trading in securities, as well as rules on investments funds and management of alternative investment funds. The entities for which the financial statement was prepared without complying with the going concern principle or the statement received an adverse audit opinion, a qualified audit opinion or a disclaimer of opinion from the statutory auditor were also excluded from the sample.

As a result, 78 entities were selected for research from 140 preselected companies listed on the Warsaw Stock Exchange. In the time horizon of six years, it amounts to the total of 468 observations. The adopted research sample is comparable with the previous empirical studies on the level of accuracy of disclosures.

The information about risk disclosed in the financial statements were then quantified on the scale from 0 to 6, where: 0 means lack of information, and 6 means a very high accuracy of information.

Another stage of the conducted research consisted of determining the connection between the level of accuracy of disclosures expressed with the use of the disclosure index and the explanatory variables accepted for research on the basis of theoretical considerations and the analysis of the previous empirical studies published in the domestic and international literature. The explained variable (Y) is the original disclosure index. In order to verify the statistical hypotheses, the regression analysis included the following explanatory variables:

X1 – The category of an auditor auditing financial statements of a company for a given year. It is a zero-one variable assuming the value of “1” for large, international audit entities (Deloitte, Ernst&Young, KPMG, PwC), or “0” for other, smaller entities authorised to audit financial statements.

X2 – The quality of ownership supervision, the board’s competences and investor relations expressed on the basis of assessments resulting from the research conducted by
the institute TNS Polska (Pentor Research International) for the purposes of the ranking “Giełdowa Spółka Roku” published by the journal “Puls Biznesu”. The variable assumes the value of “1” for companies which in a given year appeared on the list of enterprises distinguished in the listed categories, or “0” for companies which in a given year were not included in the ranking.

X3 – The number of important areas of estimated valuation in the assessment of the entity’s management. This indicator may be defined as the assessment of the complexity of issues related to disclosure of information about estimations and risk of distortion of the result of valuation according to persons responsible for preparing financial statements. Only those reporting positions which according to the management required using estimations and professional judgement were taken into consideration.

X4 – The application of new regulations of IFRS regarding disclosure of hierarchical levels and assumptions made during fair value valuation. It is a variable assuming the value of “1” for financial statements for reference years 2013-2015 prepared after new regulations entered into force, or “0” for financial statements for years 2010-2012.

Additionally, the control variables of the model are:

X5 – The size of the company measured with a natural logarithm from the balance sheet total. The natural logarithm was assumed for normalising the characteristic, the spread of which for the analysed companies lay between PLN 42 thousand and PLN 45 million.

X6 – The viability of the company expressed as return on assets (ROA), which is the ratio between the generated net profit or loss and the total assets.

No correlation was found between the explained variable (disclosure index) and individual explanatory variables. There was also no correlation between individual explanatory variables.

4. DATA ANALYSIS

The largest number of analysed entities identified risks described in IFRS, that is market risk which involves interest rate risk and currency risk as well as credit risk and liquidity risk. Some entities also present other types of risks, the percent frequency of occurrence of which in the analysed statements was shown in Figure 2.

Throughout the analysed period, the level of compliance with the reporting obligations concerning risk reporting increased. This was confirmed by the number of entities disclosing selected risk data for years 2010-2015, as presented in Figure 3.

In assessing the level of accuracy of disclosures about risk, information disclosed in both explanatory notes regarding risk management and other sections of the report were taken into account. Accuracy of information about the types of risk and their reference to the situation of the entities, information about the risk mitigating measures employed, the way of its identification and measurement, frequency and verification procedures as well as adopted strategy and the objectives of risk management were assessed. The resulting score-based assessment in the analysed years creates disclosure index, the basic statistics of which are shown in Figure 4.
Figure 2. Types of risks disclosed in the financial statements

Source: Own elaboration.

Figure 3. Number of entities disclosing risk-related information in their financial statements for years 2010-2015

Source: Own elaboration.

The value of index determines the accuracy of disclosed information about risk, taking into account all elements recognised in the research. The higher the value of the indicator for a given company, the more accurate the level of disclosures. The maximal value of the indicator is 6 points.
Table 2. Results of linear regression analysis

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>Number of obs. = 468</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>440.50213</td>
<td>6</td>
<td>73.4170217</td>
<td>F(6,461) = 58.79</td>
</tr>
<tr>
<td>Residual</td>
<td>575.726502</td>
<td>461</td>
<td>1.24886443</td>
<td>Prob &gt; F = 0.000</td>
</tr>
<tr>
<td>Total</td>
<td>2016.22863</td>
<td>467</td>
<td>2.17607844</td>
<td>R-squared = 0.4335</td>
</tr>
</tbody>
</table>

\[ R^2 = 0.4335 \]
\[ \text{Adj } R^2 = 0.4261 \]
\[ \text{Root MSE} = 1.1175 \]

<table>
<thead>
<tr>
<th>Y</th>
<th>Coef. (β)</th>
<th>Std. Err.</th>
<th>T</th>
<th>P &gt;</th>
<th>t</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(p-value)</td>
</tr>
<tr>
<td>X1</td>
<td>.7170935</td>
<td>.1241103</td>
<td>5.78</td>
<td>0.000</td>
<td>.4732016</td>
<td>.430484</td>
</tr>
<tr>
<td>X2</td>
<td>.2210004</td>
<td>.1066007</td>
<td>2.07</td>
<td>0.039</td>
<td>.0115168</td>
<td>.9238282</td>
</tr>
<tr>
<td>X3</td>
<td>.1401954</td>
<td>.0195757</td>
<td>7.16</td>
<td>0.000</td>
<td>.1017267</td>
<td>.1786641</td>
</tr>
<tr>
<td>X4</td>
<td>.0196004</td>
<td>.1053774</td>
<td>0.19</td>
<td>0.853</td>
<td>-.1874792</td>
<td>.22668</td>
</tr>
<tr>
<td>X5</td>
<td>.4052332</td>
<td>.0406498</td>
<td>9.97</td>
<td>0.000</td>
<td>.3253515</td>
<td>.485115</td>
</tr>
<tr>
<td>X6</td>
<td>.0107851</td>
<td>.004248</td>
<td>2.54</td>
<td>0.011</td>
<td>.0024373</td>
<td>.019133</td>
</tr>
<tr>
<td>_cons</td>
<td>-2.805216</td>
<td>.5309973</td>
<td>-5.28</td>
<td>0.000</td>
<td>-3.848692</td>
<td>-1.761741</td>
</tr>
</tbody>
</table>

Source: Own elaboration on the basis of the STATA 13.0 system.

Within the scope of disclosures related to risk there was an insignificant growth in the average level of accuracy of disclosures. This is primarily due to a systematic expansion of the section of additional information dedicated to risk management in the analysed entities and increasing the volume of the presented descriptive information. The level of fulfilment of reporting obligations in this area may be described as
satisfactory, especially as in the years 2014-2015 all entities in the sample disclosed to a greater or lesser degree information about risk. Accuracy of disclosures in individual financial statements in the research sample is different. The biggest problem is focusing only on interest rate risk, currency risk and liquidity risk in descriptive information. On the one hand, it ensures fulfilment of obligations resulting from IFRS 7, on the other hand, it decides about certain conventionality of this part of the statement. The extensive definitions of different types of risk increase the volume of explanatory notes without providing information allowing for assessment of the level of exposure to risk in a given entity. Linear regression analysis was conducted with the use of the STATA program in version 13.0. The results of the analysis are shown in Table 2.

For the purposes of verification of the statistical hypotheses, statistical significance $\alpha=0.05$ was assumed. The obtained results make it possible to determine significant interrelations between the level of accuracy of disclosures about risk ($Y$) and the category of the auditor ($X_1$), the number of areas of estimated valuation in the assessment of the management ($X_3$) and the size of the company ($X_5$). In the case of other explanatory variables no significant interrelations were found.

5. CONCLUSION

The presented conclusion about statistical significance of individual relations refers to companies which fulfil the described selection criteria for research sample. The method of selection of the companies for the research was not random. The sample included companies listed on the Stock Exchange in the years 2010-2015, preparing financial statements on the basis of IFRS, meeting additional requirements such as, among others, the lack of risk to continuity of operations and receiving an unqualified opinion from a statutory auditor. Lack of randomness of the sample does not entail limiting statistical verification tools to descriptive statistics. Similarly to other research of this type, it was assumed that regression models assume sampling error in the linear correlation equation of one variable to another, regardless of randomness or non-randomness of the sample [Świderska, 2010, p. 124]. Conclusion on the characteristics of this interrelation is then based on stochastic assumptions. The presented conclusion about the statistical significance of individual relations refers to all entities which meet the selection criteria for a non-random sample.

Positive verification of the hypothesis according to which „Auditing of financial statements by leading, international audit entities contributes to significantly increasing the level of accuracy of disclosures of information about risk” confirms at the same time that auditing estimations and related disclosures is an important stage of estimated values accounting in a broad sense. The impact of the auditing on the level of accuracy of disclosures and therefore on the final shape of the financial statement made available to the recipients was demonstrated. The interrelation between the higher level of accuracy of disclosures of the discussed scope and the choice of the auditor from international corporations according to the author should be explained by two factors. The first of them is the aforementioned high standardisation of auditing procedures. The second of them is the experience of the leading audit companies in auditing financial statements of listed companies.

Rejecting the hypothesis according to which „The high evaluation of the quality of ownership supervision and relations with investors contributes to significantly increasing the level of accuracy of disclosures of information about estimated valuation” denies that the level of accuracy of disclosures from the analysed area
depends on the perception of the quality of corporate supervision of the company by the market participants. The conducted research on disclosures referred exclusively to information about estimated valuation disclosed in individual financial statements, the scope of which does not depend largely on the board’s decision, and the frequency of which results from the balance sheet law. The resulting conclusion does not reject the results of the previous research indicating the interrelation between the quality of corporate supervision and relations with investors and the level of accuracy of disclosures. It does indicate, however, that this connection is not as strong in the case of specific, selected reported information about risk.

Accepting the hypothesis according to which „The high complexity of the issues related to estimation of values according to the entity’s management determines higher accuracy of disclosures about estimated valuation” confirms the existence of relations between awareness of the board and persons responsible for estimated valuation accounting and the final product of the accounting system, that is the financial statement. According to the authors, an important issue is the lack of full awareness of the entity’s management and persons responsible for preparing financial statements about the real scale of using estimations in valuation. This may be due to the fear of admitting subjectivity of the valuation and related ambiguity of the obtained results.

The results obtained on the level of the control variables for which the size of the company and the profitability of the assets were assumed are logical and according to expectations and results of the majority of empirical studies analysing the accuracy of disclosures of different types of reporting information.

The results of the conducted linear regression analysis for the proposed model and the conducted statistical analysis leads to confirmation of the main hypothesis. The assumed regression model confirms that factors specific to the entity, such as the category of the auditor, the number of areas of estimated valuation in the assessment of the management and the size of the company have a significant statistical impact on the level of accuracy of disclosed information about risk.

The possibility of conducting further research leading to a more detailed conclusion should be stressed. Extending empirical material will allow to conduct analyses which take into account sector classification of the companies and to make comparisons regarding disclosures within its scope. There is also a possibility of expanding the assumed model by taking into consideration other factors which may influence the level of accuracy of the analysed disclosures. The prepared construction of the index, on the other hand, allows also to conduct research on a larger group of entities or its continuation in subsequent years. Further research should be therefore concentrated on building a system of fixed measurement of the index for subsequent reporting periods and expanding the scope of companies included in the research.

It should be also stressed that not only meeting the requirements resulting from IFRS was taken into account in the research, but also the level of accuracy of disclosed information. The level of accuracy of disclosures was assessed in the scale from 0 to 3 points. The value „0” meant lack of a given category of disclosures in the statement, and the subsequent assessments differentiated the level of accuracy. The assessments “0” occurred in the cases of few financial statements analysed for the research sample and referred only to 0.9% of the statements in the research sample. Hence, it may be concluded that in the vast majority of cases the companies meet the requirements of the disclosures about risk. The only difference is the level of their accuracy.
In the analysed financial statements much common content may be observed in the descriptive sections referring to, among others, the results of using estimated valuation and professional judgement or principles of risk management. Repeated content is, above all, the result of necessity of meeting the requirements resulting from IFRS, and similarities of descriptive information in the statements of different entities alone should not be judged negatively. They should be rather perceived as realisation of the idea of good practice in terms of reporting information. In many cases it may seem, however, that the numerous repetitions, and particularly extensive definitions of individual categories of valuation or types of risk that the companies are exposed to, aim to increase the volume of the annual financial reports. With the report expanded in such a way, there is a qualitative and quantitative restriction of information which refers to the current situation of a particular entity.

It should be ensured, however, that the convergence of disclosed content resulting from the guidelines does not overshadow the idea behind a financial statement, that is the presentation of financial and economic situation and the results of activity of a given entity. Persons preparing financial statements should try to place disclosed descriptive information within the specific nature of activity of a given entity whilst minimising universal content.

REFERENCES


