

Forward-Looking Information Disclosure as a Risk Factor in Accounting—The Case of Poland



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Abstract Contemporary accounting faces a full range of challenges in addressing the growing need for information from financial statements. Non-financial information disclosures are becoming increasingly common and important. Especially for the largest Polish companies its' disclosure is a legal obligation. Among non-financial information, forward-looking disclosures might be considered crucial, as they are bound with a certain level of risk for both the entity and the recipients of the financial statement. In this paper the problem of risk in accounting will be analysed from the perspective of the forward-looking disclosures. This paper aims to investigate the relationship between the type and range of forward-looking information disclosures and the problem of risk in the accounting system, which is an emerging research area on Polish ground. The main goal of this paper is to present the general concept of forward-looking information disclosures and their associations with risk factors. The research method applied in the theoretical part of the paper is a critical analysis of the available literature and law regulations on the topic. The paper also features an empirical part which examines the forward-looking information in financial statements of companies quoted on the Warsaw Stock Exchange. There is a very limited number of studies that cover forward-looking disclosures in Poland. Therefore, a preliminary study conducted in this paper might serve as a basis for an extended research. The study bases on the content analysis method, which along with the usage of text analysis software is a widespread tool in international studies. General results indicate a relatively low level of forward-looking information disclosures, which could indicate an aversion towards risk in accounting. However, a variation of results among industries may be observed.

Keywords Risk in accounting · Non-financial information · Forward-looking information

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1 Introduction

Conducting an economic activity is inherent and commonly associated with the risk borne by entrepreneurs. Dynamic changes in business practice cause some shifts in the assessment of the scope and degree of relevance of various risk types. At the same time, economic entities face greater social awareness and wider dimension of accountability than only narrowly understood economic processes implemented by them. This, in turn, forces those entities to focus more on their image in order to reduce the risk of losing good reputation.

The accounting system plays a crucial role in the process of mitigating risk in business operations. It is the main source of information about the financial position of the entity. Sets of such information are presented by means of financial statements. However, in recent years, external users of such information are in practice increasingly interested in non-financial data, which lets them analyse the situation of entities in a broader context and identify less common areas of risk. Traditional financial information seems to be insufficient for rational decision making. Investors and other financial statement recipients require information connected to future plans of the companies. For this reason, the importance of reporting non-financial data is increasing, in particular the type, scope and way of presenting the forward-looking information. As much as risk is a hugely important concept in this area, its relationship with prospective data is not ambiguous. Forward-looking information can be a useful source of information for investors and can reduce the asymmetry of information. On the other hand however, such disclosures might inspire harmful responses from the competition and generate the risk of not fulfilling the committed plans. The research question in this article is associated with examining the scope of forward-looking information disclosures among Polish companies.

The authors would like to study and preliminarily assess the importance of forward-looking non-financial data on the example of companies quoted on the Warsaw Stock Exchange. The main aim is to analyse whether the scope of forward-looking information disclosure in Polish companies matches the level of disclosures observed in foreign studies. Empirical research was carried out on the basis of the content analysis method enhanced by text analysis software.

The conducted research constitutes the first stage of a multidimensional research evaluating the importance of forward-looking disclosures in the practice of enterprises in Poland. Main contribution of this paper is to implement idea of empirically researching the forward-looking information disclosures into Polish accounting studies. The intention of the authors is also to start the discussion around the phenomenon of prospective data disclosures in the light of the concept of risk.

2 Theoretical Background

2.1 Definition of Risk

Risk is inseparably bound to the decision-making process within various types of human activity (Renn 1998). It is often linked to the concept of uncertainty. For the first time, the distinction between these two concepts was introduced by A. H. Willett already in 1901 (Janasz 2009). Knight (1921) extended the interpretation of the terms ‘risk’ and ‘uncertainty’, emphasising the measurability of the former. Uncertainty can be defined as a state of the lack of knowledge whether a given statement about the future is true (Messiasz 2010). The concept of risk can be related to both positive and negative phenomena. However, in most cases it refers to negative consequences (Rosa 1998). Renn (1998) and Aven (2010) emphasise the diversity of approaches to the subject of risk. The literature often points to etymology of ‘risicum’ notion in the Latin language, translated as the probability of both positive and negative events, success or failure (Nahodko 2001; Thlon 2013). Other definitions of this concept can be indicated on the basis of law or management theory. Kelman (2003) draws attention to a certain regularity in defining risk. On the ground of exact sciences, definitions are precise and generally refer to risk measurement methods. On the contrary, social sciences consider risk in a specific context and relate it to the cultural factor. Table 1 presents exemplary risk definitions, with reference to the diversity of the approaches to define risk.

Two concepts of risk in the context of economic activity are specified in the literature: traditional concept of hazard (the classical Markowitz model) and risk concept as dispersion of outcomes (Markowitz 1952). In the first case, the risk is measured by an array of portfolio rates of return. In the second case, the risk is measured by the semi-variance from the assumed rate of return. As part of the basic risk division, the following can be distinguished: external risk, internal risk and random risk (Szczechankiewicz 2016).

From the economic entity’s operations’ perspective, one can indicate the following risk groups (Bizon-Górecka 2004):

- managerial,
- financial,
- organizational,
- technological,
- reputational.

The differences in the aspect of terminology are also worth remembering. Different classifications might specify the same category of risk in a different way (Kelliher et al. 2011). An important difference is that risk can be managed in contrast to uncertainty, which is not quantifiable and is a psychological category (Raczkowski and Tworek 2017). Various accounting instruments are adopted in the framework of risk management, in particular non-financial data reporting.

Table 1 Exemplary approaches to risk definitions

Approach	Definition	Author
By risk effects	Risk is a deviation from the expected value of the assumed goal	Gardner and Mills (1988: 212)
By probabilistic or statistical measures	Risk is a measurable probability of an impending event	Markowitz (1959)
By risk sources	The source of risk is inaccurate or incomplete information	Kreim (1988: 45)
By category of decisions made after completing goals	Risk is related to future events or results of decisions. The decisions made can lead to both unexpected losses and profits	Sierpińska and Jachna (1993: 232)
By the economic value	The possibility of events, or combinations of events, which can have a negative impact on the economic value of an enterprise as well as the uncertainty over the outcome of past events	Kelliher et al. (2011)
By human value	The possibility that human actions or events lead to consequences that affect the aspects of human value	Renn

2.2 Risk in Accounting

Risk is inherent to the decision-making process. In turn, it underlies all economic processes, particularly conducting business operations by economic entities and capital groups. Risk occurs whenever a choice is made between different actions requiring a correct analysis and assessment of multiple factors. When it comes to entities conducting economic activity, there is a two-fold analysis. The first of these is related to the assessment of the entity's situation and its prediction created by the managers of that entity. They can use all the available macro-, microeconomic and operational data sources. The management accounting system is of particular importance in this process.

As a part of the second type of analysis, external users, especially investors, assess the financial condition of the entity using primarily the data reported by it in the financial and non-financial statements. The financial statements are 'past' reports presenting the assets and financial results of operations in the reporting period. However, non-financial data may refer to both the past and current status, as well as future periods.

Entities (organisations) are perceived as a set of contracts concluded between various agents involved in the commitment and use of resources. These agents contribute negotiated resources in exchange for an entitlement to a share of resources. Sounder explains the accounting as 'a mechanism that is designed to support and sustain this system under the tensions of conflicting incentives.

Based on the accounting system, entities should identify risk factors and measure them in a timely manner. On the other hand, the functioning of the accounting system is also based on making the right choices and making decisions related to them. Therefore, the use of the accounting system is also subject to risk. Habelman (2014) draws attention to the issue of the impact of risk on the implementation of the accounting function.

Financial information disclosed in the financial statement is a crucial factor in identifying and limiting the risk for financial statements users. However, nowadays such data is insufficient and the scope of disclosures should be expanded (e.g. Cabedo and Tirado 2004). The problem of information asymmetry between internal and external users in the area of decision making process is becoming more visible (Greenwald and Stiglitz 1990). The concept of behavioral risk in companies can also be observed, which is a reaction to political, environmental and other kind of changes.

Non-financial information is of growing importance, as it allows the investor to assess the market position and entity's development possibilities. Non-financial data may relate to areas such as:

- entity's influence on the natural environment,
- employment policy, including trade union activities,
- organisation and functioning of internal control,
- top management, rotation of board members,
- cooperation with local communities,
- diversity policy.

Non-financial information fulfill a double role in accounting system. Primarily, they create an appropriate background for the analysis of financial data and enable broadening the scope of interpretation of its results. Moreover, they play an increasingly important role in identifying and reducing the risk of companies.

Altman et al. (2010) underline their importance especially for medium-sized and small non-quoted enterprises. Their research shows that non-financial information can be particularly important for creating credit risk model. Such kind of data can be effective predictors of companies' crediting possibilities.

The significance of non-financial information in reducing the risk in the area of law changing and environmental problems is also worth mentioning. Obligation to disclose data considering employment policy, diversity, as well as environmental issues might be an incentive for managers to create positive image of companies and to limit image and behavioral risk. The example of such process is implementation of obligatory disclosures concerning environmental issues (Strojek-Filus et al. 2017).

However, non-financial information can also have a negative impact as far as risk is concerned. It is mainly connected to voluntary disclosures, which might be used

by managers to improve marketing image of company. The specifics of non-financial information, which is difficult to compare and easy to relativise might also lead to misleading the financial statements users. This shows the ambiguity in the connection between those disclosures and risk. Non-financial information (especially forward-looking) might reduce the risk but at the same time can cause it both for company and for reports' users. Forward-looking information might be crucial for credit institution as indicators (Bulletin of Department of Banking and Finance, Georgia 2018). Such indicators can promote the identification of emerging risks and tend to be more predictive of future performance.

2.3 Forward-Looking Disclosures

Non-financial data disclosed by the companies within the management report can be divided by their time perspective into forward-looking information and historical information, also known as backward-looking information (Hussainey 2004). Backward-looking information can be defined as a description of events related to past performance of the entity. Thus, the backward-looking information presented in the report concerns the already executed events and their results, and they are not burdened with the risk of uncertainty of their fulfilment. Forward-looking data, on the opposite, considers future activity of the entity and future forecasts (Aljifri and Hussainey 2007). It covers, inter alia, future investment activities, forecasted revenues of the entity, sales plans, planned actions in the area of improving the sales offer (Orens and Lybaert 2013). These examples mentioned are projections, which implies that they are burdened with a high degree of risk. Investors, who constitute a large group among recipients of financial statements, tend to consider the prospective data very useful in their decision-making processes (Abed et al. 2016). An unquestionable difficulty when analysing forward-looking data is the lack of their unambiguous definition (Papaj 2017).

Disclosing prospective data is sometimes faced with criticism, as it involves risk derived from the uncertainty of predicting the future. Incorrect or imprecise forecasts might impose unfavourable decisions taken by the recipients of reports and eventually leading to lawsuits (Hail 2002). Thus, the disclosure of prospective data, the use of which may prove detrimental to investors, may involve very high compensation costs in the event of lost court proceedings. Potential high costs associated with misleading forecasts are undoubtedly one of the key factors discouraging companies from disclosing prospective information (Celik et al. 2006).

An interesting solution aimed at encouraging entities to disclose forward-looking information is the safe harbour statement clause. It is a tool widely used in the United States (Baginski et al. 2004). The safe harbour clause allows to protect the company from liability for losses resulting from decisions taken under the influence of unfulfilled prospective information. In practice, the safe harbour clause is a statement of the company's management board, in which it informs that the data on future activities of the entity presented in the financial statements involves risk due to its

particularity and therefore the entity is not liable for the eventual outcome of the forecasts. In addition, the management board ensures that it has made every effort to reliably inform the recipients of reports on future intentions, however, taking into account the rapid changes observed in the business environment, it will never be able to ensure their full attainment. The proposal to introduce the clause reminiscent of the safe harbour statement within Polish accounting was first proposed by Krasodomska (2014), but so far it has not become a common solution among Polish companies.

Another argument against the publication of prospective data is competition. The forward-looking data disclosed in the financial statements are an object of interest not only of investors but also of competitors. It can be exceptionally dangerous that with an easy access to forward-looking information they could gain knowledge of the investment plans of the entity and its plans for the future. This may be used against the company (Healy and Palep 2001). As a result, companies have to balance between the benefits of universal access to prospective data and the risk of harmful endeavours of the competitors.

Business activities of the 21st century cannot rely solely on historical data, effective investment decision-making must be supported by data concerning the future (Wang and Hussainey 2013). The data presented in the reports must adapt to the dynamic economic environment, which cannot be achieved basic on classic backward-looking information (Kieso and Weygandt 1995). As the research results show, investors are more willing to invest their funds in transparent companies, considering a large number of disclosures to be a determinant of their integrity, reliability and professionalism (Bujaki et al. 1999; Amir and Lev 1996). Credibility is another important feature associated with disclosing forward-looking data, as it manifests efforts to reduce the information gap and provide the recipients with high quality information. This, together with expressing the entity's focus on the future, constitutes a useful tool for building positive reputation (Hammond and Slocum 1996; Helm 2007; Francis and Schipper 1999).

All the presented considerations demonstrate that forward-looking information disclosures are a multidimensional subject and its relationship with the concept of risk is ambiguous. Taking into account the Polish perspective of forward-looking information disclosures, the scope of disclosures is not legally regulated and it depends solely on a voluntary decision of the company. At the same time it is worth mentioning that Poland implemented the assumptions of Directive 2014/95/UE into Polish accounting system which main aim is to establish a certain minimal legal requirement for the extent of the non-financial information. However, these regulations do not apply to the scope of forward-looking information disclosures. Lack of an institutional factor enhances the significance of the planned research. It aims to contribute to the Polish financial system by presenting the scope of forward-looking information disclosures among Polish companies which are associated with a certain level of risk. A particularly important subject is the freedom of disclosures which allows investigating whether the companies are willing to disclose data that could generate risk. It will be the first such research on the ground of Polish accounting. The main goal of the authors is to present general trends in forward-looking disclosures in

Poland and to start a discussion about the companies' approach to the risk associated with such disclosures.

3 Research Design and Methodology

3.1 Sample and Data Collection

Empirical studies of forward-looking information disclosures relate to the analysis of the scope of published management report, also referred to as management board commentary. As it has been emphasised in the introduction, no comprehensive empirical studies have been carried out on the scope of prospective data disclosures in Poland. The results of surveys conducted abroad indicate that within the framework of management reports, prospective data contribute to around 15–20% of the volume of the report (Bujaki 1999; Clatworthy and Jones 2003). As a part of foreign research, it has been noted that companies definitely prefer to disclose positive forward-looking information, thus increasing the number of potentially interested investors.

In our study, the research sample consisted of 63 management reports of companies quoted on the Warsaw Stock Exchange. Companies, which have been selected in research, represent the largest business sectors: chemical industry, mining and metallurgy, banks, energetics, fuel industry, pharmacy and biotechnology, IT companies and plastic industry. They were chosen for a research sample. The reporting period was the year 2016. At the time of preparing the source materials for research, this was the most up-to-date data. The acquired source materials came from the official websites of the companies and were posted in the investor relations section. Since this is the first research covering forward-looking information in Poland, it has been decided to conduct a single country research.

3.2 Content Analysis and Text Analysis Software

Empirical research covering the idea of the incentives for risk in reporting use three main methodological approaches which have been adopted in international studies (Elshandidy et al. 2018). We identified: questionnaires, disclosure indices and content analysis method (Beretta and Bozzolan 2004). The most common is manual or automated content analysis method which examines the number of sentences or words in a given report. Content analysis is a widely use research method for studying sources which might be in text, picture or audio format (Bryman and Bell 2011). The simplest and most objective form of content analysis bases on unambiguous characteristics of the text such as word frequencies or the page area devoted to one issue in the report. In European studies, the content analysis method has been

used by Beretta and Bozzolan (2004), Linsley and Shrivés (2006), Malafronte et al. (2016), Abraham and Cox (2007), Miihkinen (2012), Elshandidy et al. (2013, 2015). It is also worth mentioning that in the era of very fast new technologies development one could observe increasing popularity of automated content analysis over the manual content analysis. Among adoption of automated content analysis, literature differentiates three main approaches: the dictionary method, supervised learning and unsupervised learning (Bao and Datta 2014).

In the case of examining prospective data, the usage of content analysis method should start with the question about the scope of disclosures, population selection as well as the relevance of the context (Krippendorff 2004). Forward-looking disclosures as a type of voluntary narrative disclosures were measured as part of BMF's framework (Beattie et al. 2004). Forward-looking information disclosures and their connections with risk were object of a very limited number of empirical studies (Carlson et al. 2000; Robb et al. 2001; Shrivés and Linsley 2002; Hussainey et al. 2003; Beretta and Bozzolan 2008). They have become an inspiration for the authors of the article to conduct a similar research in Poland. This paper utilises the dictionary method, which relies on specific key words and counting the frequency of their occurrence (Kravet and Muslu 2013; Elshandidy and Neri 2015). The research tool used in the conducted research is text analysis software. The software largely replaces the manual analysis of disclosed data, and also due to the automation of the processes, reduces the risk of errors. Foreign scientists mainly use the Nudist or NVivo programmes for this purpose (Hussainey and Walker 2003; Al-Najjar and Abed 2014). In the presented paper, the studies were automated using W-Labs Professional Report Analyzer 2.0. The application identifies and examines data disclosures in management reports by implementing natural language processing and the content analysis method.

The input taken by the software includes a list of keywords that would be the basis for searching through the reports. Due to the lack of research on the empirical verification of forward-looking disclosures within the Polish literature, the key words list has been modelled basing on the foreign literature (Breton and Taffler 2001; Walker and Tsalta 2001; Abed et al. 2016). As the reports have been presented in the Polish language, the key words had to be adapted to the specificity of the language. Every effort has been made to avoid a literal translation from original languages and at the same time to adapt key words to the principles of the Polish language. Keywords used in the study are presented in a summary in Table 2.

The keywords presented in Table 2 were used to search for forward-looking disclosures. In contrast to the research carried out by Krasodomska (2014), it was not limited to analysing the table of contents. The automation of the study using dedicated software enables the study of extensive reports, which outputs more precise results.

The program divides management reports into sentences. Next, it searches for the indicated keywords to determine in what percent of the sentences there appear references to the future activity of the entity. In order to limit the impact of repeated words in one sentence on the test result, an additional condition was introduced to the software that if a keyword appears more than once in the examined sentence, it

Table 2 List of forward-looking information

List of forward-looking questions
Anticipate, projections, expect, coming financial years, coming months, coming year, the future, future, future plans, future plans, future intentions, probable, possibilities, possible, probably, goal, future goals, forecasted goals, forecasted, forecast, to forecast, forecasts, coming, is coming, hope, intend, intentions, we intend, intention, we look ahead, looks ahead, look into the future, looks into the future, we look to the future, look into the future with hope, we look into the future with hope, in the next period, perspectives, perspective, planned, soon, in the coming years, further development, establishing cooperation

will still be counted as one. This way, the influence of frequent repetitions of words in extended sentences has been limited, as management reports are often full of such sentences.

This method of course may result in slight discrepancies between actual values and achieved results, nonetheless, the generated indices can be considered a close approximation of the substantial scope of disclosures. Moreover, it should be noted that basing on the literature, the fact of subjectivism of indices created by researchers of accounting does not eliminate the usefulness of this research method (Marston and Shrives 1991; Botosan 1997).

With reference to the calculated frequency of occurrence of prospective data, the FDI (prospective data disclosures index) has been formulated. It has been inspired by the research carried out by Aljifri and Hussainey (2007) on 46 companies quoted on the Dubai Stock Exchange. The FDI indicator used as part of the study has the form:

$$FDI = FD/TD \quad (1)$$

where: FDI—forward-looking data disclosure index in the management report (forward disclosure index); FD—sentences with prospective disclosures (forward disclosures); TD—total number of sentences in the management report (total disclosures).

Figure 1 explains the steps and procedures followed in calculation the disclosure scores.

4 Results and Discussion

The first stage of the research was volume analysis of Management Commentaries. Table 3 presents basic data related to the volume of audited reports. As it was presented in Table 3, the largest volume of reports (management reports) measured in the number of pages was characteristic for banks, companies from the fuel, energy and IT sectors. The least extensive reports were published by companies from the plastics industry and those operating within pharmacy and biotechnology. Interestingly, the smallest coefficient of variation concerns the plastics industry, in which

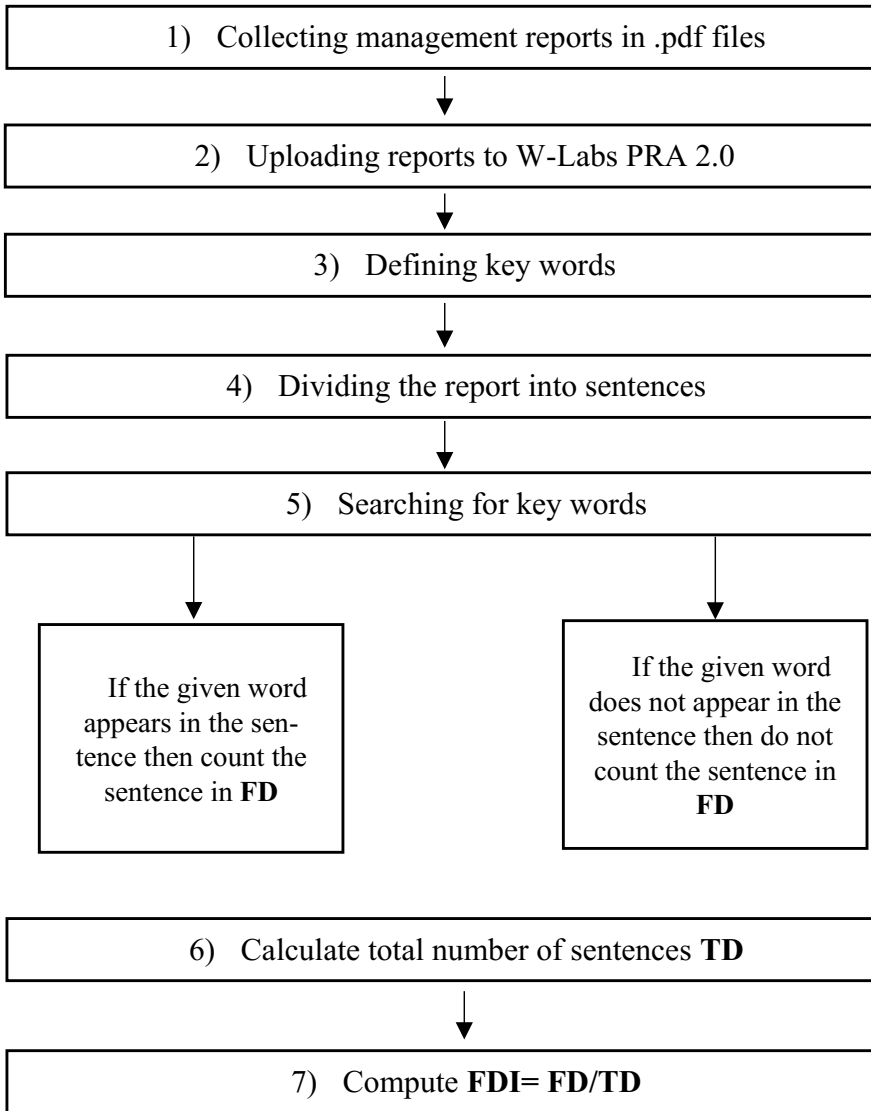


Fig. 1 Methodology for obtaining forward looking information disclosure index

Table 3 Management commentary—report volume analysis

Industry	N	Minimum	Maximum	Mean	Standard deviation	Coefficient of variation (%)
Chemical industry	6	20	104	79.50	30.31	38.13
Mining and metallurgy	7	41	124	73.00	36.46	49.95
Banks	12	49	198	107.83	40.46	37.52
Energetics	8	25	143	84.13	38.29	45.51
Fuel industry	3	58	174	126.33	60.70	48.05
Pharmacy and biotechnology	10	28	93	57.70	21.26	36.85
IT companies	10	29	141	60.50	33.87	55.98
Plastic industry	7	30	49	40.43	7.25	17.93

Table 4 Disclosure of forward-looking information

Industry	FDI disclosure	Minimum FDI	Maximum DFI	Standard deviation	Coefficient of variation
Chemical industry	7.13	2.88	8.96	2.29	32.12
Mining and metallurgy	5.91	4.10	8.93	1.75	29.61
Banks	8.33	6.66	9.77	0.96	11.52
Energetics	8.19	4.90	10.95	2.11	25.76
Fuel industry	6.78	6.33	7.45	0.59	8.70
Pharmacy and biotechnology	11.86	4.60	25.64	6.46	54.47
IT companies	7.26	4.82	11.72	2.40	33.06
Plastic industry	6.17	4.26	9.64	2.16	35.01

Notes data presented in %

the smallest volumes of reports are observed and, therefore, the smallest variability between them. The highest level of variation coefficient was observed in the IT sector.

Table 4 presents the results of the forward-looking information disclosures index (FDI) among Polish companies. The data indicate that the highest percentage of prospective disclosures occurs in the companies operating in the area of pharmacy and biotechnology. In the reports from this industry however, high coefficient of variation can be observed. This can lead to the conclusion that the high rate of disclosures does not apply to all entities under investigation.

The next industry in which a high level of prospective data disclosures has been observed are banks. What differs banks from the previously discussed companies

is a low coefficient of variation. This can be explained by legislative issues. Banks as public trust institutions are subject to very restrictive reporting rules that oblige them to maintain high standards of the presented reports. Due to the fact that these regulations apply to all banks, these entities have a very similar scope of disclosures, hence the low coefficient of variation.

Similar trends can be seen in the fuel industry. The lowest coefficient of variation, demonstrating low diversity of prospective disclosures, was observed in that area, though it is characterised by low average value of prospective data (only 6.78%). The lowest scope for presenting forward-looking data was observed in case of mining and metallurgy as well as in companies related to plastics. The obtained results can be explained by conditions resulting from the particular features of those industries.

Taking into account the adjustment processes and the desire to create an ever better image, the companies from the financial sector, such as banks and technology-related companies such as pharmacy and biotechnology, IT and energy, are the leaders. On the other hand, there remain companies related to plastics, mining and metallurgy, which, due to the decrease in popularity of delivered goods and services, do not pay much attention to disclosing data related to future operations. That appears to be fully justified considering the uncertainty of the further development of these industries.

The presented research is undoubtedly of preliminary nature. In the future, both the sample and the research period will certainly need to be extended. Nevertheless, it should be noted that even a relatively small research sample gives the opportunity to make some preliminary conclusions. Firstly, the relatively low percentage of disclosed prospective data is significant (the maximum result obtained is 11.86%, whereas the international studies reported the prospective data disclosure rate at 15–20%). The low scope of prospective data disclosures in Polish companies can be explained primarily by the high risk associated with this type of disclosure (both from the point of view of possible economic losses—in case of claims caused by the lack of a safe harbour clause and taking into account the risks associated with harmful behaviour of competition), and finally, it should be taken into account that the non-financial data disclosure, in particular prospective information, is not a very popular topic in Poland. It could be said that Polish companies are just learning the principles of non-financial reporting, which may also explain the results obtained. An interesting observation was the analysis of the coefficient of variation, which may lead to a question about issues of the prospective disclosure legislation. This, as shown on the example of banks, may reduce the variability within the reports published by entities.

5 Conclusion

The disclosure of prospective data can undoubtedly be considered one of the new challenges which modern accounting faces. Despite the arguments for both disclosing them and against doing so, one can hardly disagree with the statement that a changing business environment requires an increasing amount information, emphasising the

importance of informing about future intentions. A major issue related to forward-looking information is undoubtedly the aspect of risk, which has been discussed both on the theoretical level and on the example of Polish companies' practices. Arguably, the modern world's economy expects from accounting as an information system a greater 'commitment' from its current and potential tools, particularly supported by advanced technology, in the process of risk mitigation.

Changes in the reporting of both financial and non-financial data and the increase in the importance of the latter indicate the need to take into account new or less common risk areas. In the opinion of the authors of this paper, this process will intensify the evolution of the structure and scope of the accounting system. Until now, risk research and management was mainly related to insurance (risk-based and simultaneous risk-bearing) and banking operations. Currently, it is also considered with regard to entities operating in other sectors. This is a very dynamically developing area of accounting theory.

In the opinion of many theoreticians and practitioners, risk management becomes a standard that requires proper adaptation in the accounting system of economic entities. Research carried out in this paper follows this trend. As indicated in the paper, the issue worth considering is the introduction of tools aimed at mitigating risk, such as utilising the safe harbour statement clause. Another very important issue is the increase of significance of the management report as a crucial source of information about future plans of a company. Nowadays investors rely not only on traditional financial statement, but they also expect additional data—non-financial information and forward-looking information. What is more, international studies also emphasise considering other communication events, such as conference calls or seminars for investors that have the potential to provide recipients with new information in non-traditional ways (Li 2010; Mayew and Venkatachalam 2012). It is worth noting that the area of accounting under study has recently started being implemented in Poland and the intention of the authors is its in-depth analysis in the subsequent stages of the research.

References

- Abed, S., Al-Najjar, B., Roberts, C.: Measuring annual report narratives disclosure. Empirical evidence from forward-looking information in the UK prior the financial crisis. *Manag. Audit. J.* **31**(4/5), 338 (2016)
- Abraham, S., Cox, P.: Analysing the determinants of narrative risk information in UK FTSE 100 annual reports. *Br. Account. Rev.* **39**(3), 227 (2007)
- Al-Najjar, B., Abed, S.: The association between disclosure of forward-looking information and corporate governance mechanisms: evidence from the UK before the financial crisis period. *Manag. Audit. J.* **29**(7), 578 (2014)
- Aljifri, K., Hussaainey, K.: The determinants of forward-looking information in annual reports of UAE companies. *Manag. Audit. J.* **22**(9), 881 (2007)
- Altman, E.I., Sabato, G., Wilson, N.: The volue of non-financial information in small and medium-sized enterprise risk management. *J. Credit Risk* **6**(2), 95 (2010)

- Amir, E., Lev, B.: Value relevance of non-financial information: the wireless communication industry. *J. Account. Econ.* **22**, 3 (1996)
- Aven, T.: On how to define, understand and describe risk. *Reliab. Eng. Syst. Saf.* **95**(6), 623 (2010)
- Baginski, S.P., Hassell, J.M., Kimbrough, M.D.: Why do managers explain their earnings forecasts. *J. Account. Res.* **42**(1), 1 (2004)
- Bao, Y., Datta, A.: Simultaneously discovering and quantifying risk types from textual risk disclosures. *Manag. Sci.* **60**(6), 1371 (2014)
- Beretta, S., Bozzolan, S.: A framework for the analysis of firm risk communication. *Int. J. Account.* **39**(3), 265 (2004)
- Beretta, S., Bozzolan, S.: Quality versus quantity: the case of forward-looking disclosure. *J. Account. Audit. Financ.* **23**(3), 333–375 (2008)
- Beattie, V.A., McInnes, B., Fearnely, S.: A methodology for analysing and evaluating narratives in annual reports: a comprehensive description profile and metrics for disclosure quality attributes. In: *Accounting Forum*, vol. 28 (2004)
- Bizon-Górecka, J.: Koszty w przedsiębiorstwie w ujęciu komplementarnym, „Rynek Terminowy” nr 2 (2004)
- Botosan, C.A.: Disclosure level and the cost of equity capital. *The Account. Rev.* **72**(3), 323 (1997)
- Breton, G., Taffler, R.J.: Accounting information and analysts stock recommendation decisions: a content analysis approach. *Account. Bus. Res.* **31**(2), 91 (2001)
- Bujaki, M., Zeghal, D., Bozec, R.: The disclosure of future oriented information in annual reports of Canadian corporations, Working Paper No. 44, University of Ottawa (1999)
- Bulletin of Department of Banking and Finance, Georgia, January (2018) <https://dbf.georgia.gov/sites/dbf.georgia.gov/files/related-files/document/January2018bulletin.pdf>
- Bryman, A., Bell, E.: *Business Research Methods*, 3rd edn. Cambridge Oxford University Press (2011)
- Carlton, S., Loftus, J.A., Miller, M.C.: Risk reporting: conceptual issues, regulatory approaches and voluntary disclosures. In: 23rd Annual Congress of the European Accounting Association (2000)
- Cabedo, J.D., Tirado, J.M.: The disclosure of risk in financial statement. In: *Accounting Forum*, vol. 28, Issue 2 (2004)
- Celik, O., Ecer, A., Karaback, H.: Disclosure of forward looking information: evidence from listed companies on Istanbul Stock Exchange (ISE). *Invest. Manag. Financ. Innov.* **3**(2), 197 (2006)
- Clatworthy, M., Jones, M.J.: Financial reporting of good news and bad news: evidence from accounting narratives. *Acc. Bus. Res.* **33**(3) (2003)
- Elshandidy, T., Neri, L.: Corporate governance, risk reporting practices, and market liquidity: comparative evidence from the UK and Italy. *Corp. Gov.: Int. Rev.* **23**(4), 331 (2015)
- Elshandidy, T., Shrivs, P.J., Bamber, M., Abraham, S.: Risk reporting: a review of the literature and implications for future research. *J. Account. Lit.* **40**, 54 (2018)
- Elshandidy, T., Fraser, I., Hussainey, K.: Aggregated, voluntary and mandatory risk reporting incentives: evidence from FTSE all-share. *Int. Rev. Financ. Anal.* **30**, 320 (2013)
- Elshandidy, T., Fraser, I., Hussainey, K.: What drives mandatory and voluntary risk reporting variations across Germany, UK, and US? *Br. Account. Rev.* **47**(4), 376 (2015)
- Francis, J., Schipper, K.: Have financial statements lost their relevance? *J. Account. Res.* **37**, 319 (1999)
- Greenwald, B.C., Stiglitz, J.E.: Asymmetric information and the new theory of the firm: financial constraints and risk behaviour, NBER Working Paper no. 3359, NBER Program: Monetary Economics (1990) www.nber.org/papers/w3359
- Gardner, M.J., Mills, D.L.: *Managing Financial Institutions*, p. 45. He Dryden Press, Chicago (1988)
- Hail, L.: The impact of voluntary corporate disclosures on the ex ante cost of capital for Swiss firms. *Eur. Account. Rev.* **11**(4), 741 (2002)
- Hammond, S.A., Slocum, J.W.: The impact of prior firm financial performance on subsequent corporate reputation. *J. Bus. Ethics* **15**(2), 159 (1996)
- Healy, P.M., Palepu, G.: Information asymmetry, corporate disclosure and capital markets: a review of the empirical disclosure literature. *J. Account. Econ.* **31**(1/3), 405 (2001)

- Habelman, J.: Ocena ryzyka w rachunkowości na przykładzie Zarządu Morskich Portów Szczecin i Świnoujście SA, Zeszyty Naukowe Uniwersytetu Szczecińskiego nr 830, seria Finanse, Rynki Finansowe, Ubezpieczenia nr 70 (2014)
- Helm, S.: The role of corporate reputation in determining investor satisfaction and loyalty. *Corp. Reput. Rev.* **10**, 22 (2007)
- Hussainey, K.: A study of the ability of partial automated disclosure scores to explain the information content of annual report narratives for future earnings, Ph.D. thesis, Manchester University, Manchester (2004)
- Hussainey, K., Walker, M.: Undertaking large-scale disclosure studies when AIMR-FAF ratings are not available: the case of process leading earnings. *Account. Bus. Res.* (December 2003)
- Janasz, K.: Ryzyko i niepewność w gospodarce – wybrane aspekty teoretyczne, *Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania WNEiZ* nr 14 (2009)
- Kelliher, P., Wilmot, D., Vij, J., Klumpes, P.: A common risk classification system for the actuarial profession, Risk Classification Working Party, Version 3.3 (2011). [www.actuaries.org.uk/.../documents/discussion-paper-v33-final\(1\).pdf](http://www.actuaries.org.uk/.../documents/discussion-paper-v33-final(1).pdf)
- Kelman, I.: Defining Risk, "FloodRiskNetNewsletter", Issue 2 (2003). <http://www.ilankelman.org/abstracts/kelman2003frn.pdf>. 20 June 2018
- Kieso, D.E., Weygandt, J.J.: *Intermediate Accounting*, 8th edn, p. 25. Wiley, New York (1995)
- Knight, F.H.: *Risk, Uncertainty, and Profit*, Hart, Schaffner&Marx, Houghton, Mifflin Company. <http://www.econlib.org/library/Knight/knRUPO.html>
- Krasodomska, J.: Informacje niefinansowe w sprawozdawczości spółek, pp. 25–50. Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Kraków (2014)
- Kravet, T., Muslu, V.: Textual risk disclosures and investors' risk perceptions. *Rev. Account. Stud.* **18**(4), 1088 (2013)
- Kreim, E.: *Zukunftsorientierte Kreditentscheidung*, p. 45. Gabler, Wiesbaden (1988)
- Krippendorff, K.: *Content Analysis: An Introduction to Its Methodology*, 2nd edn, pp. 3–25. Sage, Thousand Oaks, CA (2004)
- Li, F.: Textual analysis of corporate disclosures: a survey of the literature. *J. Account. Lit.* **29**, 143 (2010)
- Linsley, P.M., Shrides, P.J.: Risk reporting: a study of risk disclosures in the annual reports of UK companies. *Br. Acc. Rev.* **38**(4) (2006)
- Markowitz, H.: *Portfolio Selection, Efficient Diversification of Investments*. Wiley, New York (1959)
- Markowitz, H.: *Portfolio selection*. *J. Finance* **7** (1952)
- Marston, C.L., Shrides, P.J.: The use of disclosure indices in accounting research: a review article. *Br. Account. Rev.* **23**(3), 195 (1991)
- Malafrente, I., Porzio, C., Starita, M.G.: The nature and determinants of disclosure practises in the insurance industry: Evidence from European insurers. *Int. Rev. Financ. Anal.* **45** (2016)
- Mayew, W.J., Venkatachalam, M.: The power of voice: Managerial affective states and future firm performance. *J. Finance* **67**(1), 1 (2012)
- Mesjasz, Cz.: Standardy zarządzania ryzykiem w przedsiębiorstwie. In: *Koncepcje zarządzania współczesnym przedsiębiorstwem*, A. Stabryła (red.), Fundacja Uniwersytetu Ekonomicznego w Krakowie, pp. 145–146 (2010)
- Miikinen, A.: What drives the quality of firm risk disclosure? *Int. J. Account.* **47**(4), 437 (2012)
- Nahodko: *Ryzyko ekonomiczne w działalności gospodarczej*. Oficyna Wydawnicza Ośrodka Postępu Organizacyjnego, Bydgoszcz, p. 21 (2001)
- Orens, R., Lybaert, N.: Disclosure of Non-financial information: relevant to financial analysts? *Rev. Bus. Econ. Lit.* **58**(4) (2013)
- Papaj, E.: The role of the narrative reporting in contemporary accounting, Globalization and its socio-economic consequences. In: *17th International Scientific Conference. Proceedings. Part IV* (2017)
- Raczkowski, K., Tworek, P.: What does risk management in an economy really mean? In: *Raczkowski, K. (ed.) Risk Management in Public Administration*, pp. 1–41. Palgrave McMillan, Cham (2017)

- Renn, O.: Three decades of risk research: accomplishments and new challenges. *J. Risk Res.* **1**(1), 49 (1998)
- Robb, S.W.G., Single, L.E., Zarzeski, M.T.: Non-financial disclosures across Anglo-American Countries. *J. Int. Account.* **10**, 71 (2001)
- Rosa, E.A.: Metatheoretical foundations for post-normal risk. *J. Risk Res.* **1**, 15 (1998)
- Shrives, P., Linsley, P.: Communicating risk to shareholders and other stakeholders: an empirical study, Copenhagen. In: 25th Annual Congress of the European Accounting Association (2002)
- Sierpińska, M., Jachna, T.: Ocena przedsiębiorstwa według standardów światowych, PWN, Warszawa, p. 232 (1993)
- Szczepankiewicz, E.: Wykorzystanie punktowej metody oszacowania ryzyka operacyjnego w instytucjach finansowych, *Studia Ekonomiczne, Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach* Nr 298 (2016)
- Strojek-Filus, M., Tkocz-Wolny, K., Wszelaki, A.: Ecological accounting in Poland—diagnosis of good and bad practices. In: 17th International Multidisciplinary Scientific GeoConference SGEM 2017, Conference Proceedings, 29 June–5 July, 2017, vol. 17, Issue 53 (2017)
- Thlon, M.: Charakterystyka i klasyfikacja ryzyka w działalności gospodarczej, *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, seria Ekonomia* **902** (2013)
- Wang, M., Hussainey, K.: Voluntary forward-looking statements driven by corporate governance and their value relevance. *J. Account. Public Policy* **32**, 26 (2013)
- Walker, M., Tsalta, A.: Corporate Financial Disclosure and Analyst Forecasting Activity: Preliminary Evidence for the UK, London, ACCA Research Report No. 67 (2001)