SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2023
ORGANIZATION AND MANAGEMENT SERIES NO. 186

STRATEGIES AND PREMISES OF EARNINGS MANAGEMENT IN PUBLIC COMPANIES LISTED ON THE WARSAW STOCK EXCHANGE – THE RESULTS OF SURVEY RESEARCH

Michał COMPOREK

University of Lodz, Faculty of Economics and Sociology; michal.comporek@uni.lodz.pl,
ORCID: 0000-0002-1402-2505

Purpose: The paper's main aim is a holistic presentation of genuine motives, strategies and patterns of earnings management phenomenon in public companies listed on the Warsaw Stock Exchange.
Design/methodology/approach: The survey was carried out among 124 finance managers and public companies' accounting services representatives from the Polish capital market. The research sample selection was random (exhaustive testing); the survey was conducted in June-August 2023.
Findings: During the research, it turned out that 29% of respondents admitted to implementing EM practices in firms they represent. Interviewees declared the use of various accrual-based and real EM instruments in a complementary way. The dominant EM strategies proved to be income smoothing and avoidance of earnings reduction, while the main reasons for EM implementation respondents included creating the image of a more profitable company (compared to the largest competitors), meeting market analysts' expectations regarding the level of reported financial result and showing better development prospects for the company.
Research limitations/implications: This paper allows for identifying the level of willingness to implement earnings management practices among executives of public companies and, as well as measuring the awareness of finance managers and representatives of accounting services regarding the possibilities of using particular instruments and techniques of accrual-based and real earnings management in business practice.
Originality/value: This study fills a gap in the literature regarding the accounting data quality reported among listed companies in Poland. Most studies on the issue of earnings management focus on estimating the scale and scope of the practices mentioned above using specific regression models. Empirical research based on survey techniques in which respondents professionally responsible for financial reporting in listed companies would present their views or experiences regarding earnings management is rarely seen.

Keywords: accrual-based earnings management, real earnings management, public companies, survey research.

Category of the paper: research paper.

1. Introduction

A holistic approach to the issue of earnings management (EM) is reflected in the statement that this phenomenon includes practices aimed at the intervention in the accounting process to demonstrate the achievement of the desired economic results and, on the other hand, an integrated set of instruments for its implementation, which results in the inability to demonstrate the level of earnings known to the management, and at the same time which would normally be reported in the company's financial statements. This concept arose from the increasing importance of reported accounting data and the relationship between reporting and the market capitalization of enterprises and is reflected, among others, in assumptions: the agency theory (Jensen, Meckling, 1976), the contract theory (Hart, 1988), the signal theory (Ross, 1977) or the threshold management theory (Burgstahler, Dichev, 1997). Thanks to the use of appropriate accounting policy instruments and operational activities, it will be possible to present the company's financial situation in the intended way in the eyes of selected groups of its stakeholders.

The paper's main aim is to present the results of empirical research on a multi-aspect analysis of the EM phenomenon on the Polish capital market, conducted among finance managers and representatives of financial and accounting services of public companies listed on the Main Market of the Warsaw Stock Exchange (WSE). The adopted research approach allowed the analysis of the prevailing objectives, motives and techniques of accrual-based and real EM practices, including the consequences of its implementation in the SARS-CoV-2 post-pandemic period. The following hypotheses operationalized the presented research aim:

- H.1. In public companies listed on the WSE, accrual-based- and real EM strategies are used on the principle of complementarity.
- H.2. The dominant EM strategy, emphasizing the final results from the enforcement of these activities, is the income smoothing technique.
- H.3. According to the assumptions of the agency theory, the core prerequisite for implementing EM practices in public companies is the desire to maximize the personal benefits for management staff.

Despite the attempts to explain and expand the existing knowledge about the EM, unified and universal concepts that sufficiently reflect this phenomenon's motivations and implementation paths have not evolved. Moreover, it is increasingly noticed that most empirical research focuses on the aetiology of earnings manipulation in a fragmentary manner (Jansen et al., 2012). Therefore, the scope of research presented in the paper includes important and current issues. On the one hand, in light of the accounting scandals of recent years, EM practices have become interesting from the perspective of diverse discussions regarding the quality of financial statements; on the other hand - transparency and the nature of decisions made to increase the company's value. Furthermore, a closer look at real EM matter or trade-off analyses concerning the Polish capital market is a segment of theoretical and empirical studies that has not been fully explored scientifically. Finally, most studies on the issue of shaping financial results in listed companies in Poland focus on estimating the scale and scope of EM using specific regression models. Empirical research based on survey techniques in which respondents professionally responsible for financial reporting in public companies would present their positions, views or experiences regarding such a "sensitive" issue is rarely seen. Hence, the paper will significantly contribute to the current knowledge on the point of EM in the Polish capital market.

2. Earnings management phenomenon – outline of the subject matter

The concept of EM is related to the accrual principle, which requires recognizing the financial effects of economic operations when they occur, ignoring the period when monetary assets are received or paid. The implementation of the accrual principle and the resulting matching principle is accompanied by a certain degree of freedom that managers have in recognizing revenues and profits as well as costs and losses. EM practices are based on accounting policy instruments that affect the size and structure of the financial result. The use of discretion and flexibility in selecting accounting policies provides the opportunity to choose the desired solutions in terms of accounting data shaping, but only within the limits set by the accounting law.

There are many definitions of EM in the scientific literature (see: Schipper, 1989; Healy, Wahlen, 1999; Leuz et al., 2003; Mulford, Comiskey, 2005; Walker, 2013; Bachtijeva, 2021). Diverse terminological approaches to EM point out that this phenomenon can be considered from the perspective of the reporting purposes set by managers (Dechow, Skinner, 2000; Piosik, 2013; Grabiński, 2016, Artienwicz et al., 2020; Strakova, 2021), techniques for earnings manipulation (McKee, 2005; Roychowdhury, 2006; Toumeh, Yahya, 2019; Bachtijeva, Tamulevičienė, 2022), the impact of EM on the company's value (Sankar, Subramanyam, 2001; Gunny, 2010), the transparency of the relationship between financial statements and the economic results (Parfet, 2000; Ronen, Yaari, 2008; Wójtowicz, 2010), etc.

Scott (2000) emphasized that EM practices can come in two forms: efficient earnings management, which improves the information value of the financial result, and opportunistic earnings management, which maximizes the utility function of management. Regardless of the assumed effect of operations aimed at shaping the financial result, EM activities can be implemented using two groups of instruments. The first are instruments covering strictly accounting choices and involving accrual reporting values modelling (consistent with the accrual-based EM concept). The second one considers economic instruments involving the creation or modification of real economic transactions to obtain the intended level of earnings (cohesive with the concept of real EM). As noted Roychowdhury (2006), real EM recognizes departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations. Activities consistent with the real EM concept differ from EM practices based on solutions that use flexibility in selecting accounting policies. Their characteristic features are more difficult and cost-intensive implementation, more common negative consequences of deploying, and a lower risk of detecting the intentionality of low-level reasons for the actions taken (Vladu, 2015).

The paramount strategies of EM, which consider the consequences of implemented earnings manipulation in the enterprise, include (Remlein et al., 2021):

- income smoothing, which involves the deliberate elimination of "ups" and "downs" in reported financial results by reducing and retaining profits in years of prosperity and their accounting use in periods of worse economic conditions;
- big bath, which consists of striving to increase reported profits in subsequent periods by charging items that may negatively impact the financial result in the future. At the same time, big bath practices worsen the poor economic results achieved in the financial period under consideration;
- window dressing, relating to all practices carried out shortly before the end of the financial year in order to improve selected positions of the company in the financial statement;
- avoidance of accounting loss, referring to the prospect theory, according to which investors evaluate information about a minimum profit more positively, as opposed to information about a minimum loss;
- avoidance of earnings reduction, relating to the belief that decreasing profits in several subsequent periods is generally perceived by the company's stakeholders as a basic signal of deteriorating financial standing.

All mentioned EM strategies can be implemented using a wide range of accounting techniques, the classification of which is difficult because each accounting method or estimate may have an integral connection with EM. A graphical presentation of the relationship between concepts, strategies and techniques of EM is depicted in Figure 1. It draws special attention to two important research perspectives. The first is the presumption that accrual-based- and real EM practices can be implemented on the principles of complementarity and substitutability (Zang, 2012; Chen et al., 2012; Paulo, Mota, 2019). The second highlights that, due to their specificity, capital groups have wider opportunities to shape financial results than individual enterprises. In their case, the balance sheet policy can be approached on two levels, considering accounting solutions typical for a firm preparing financial statements on general principles and accounting practices applicable only within capital groups.

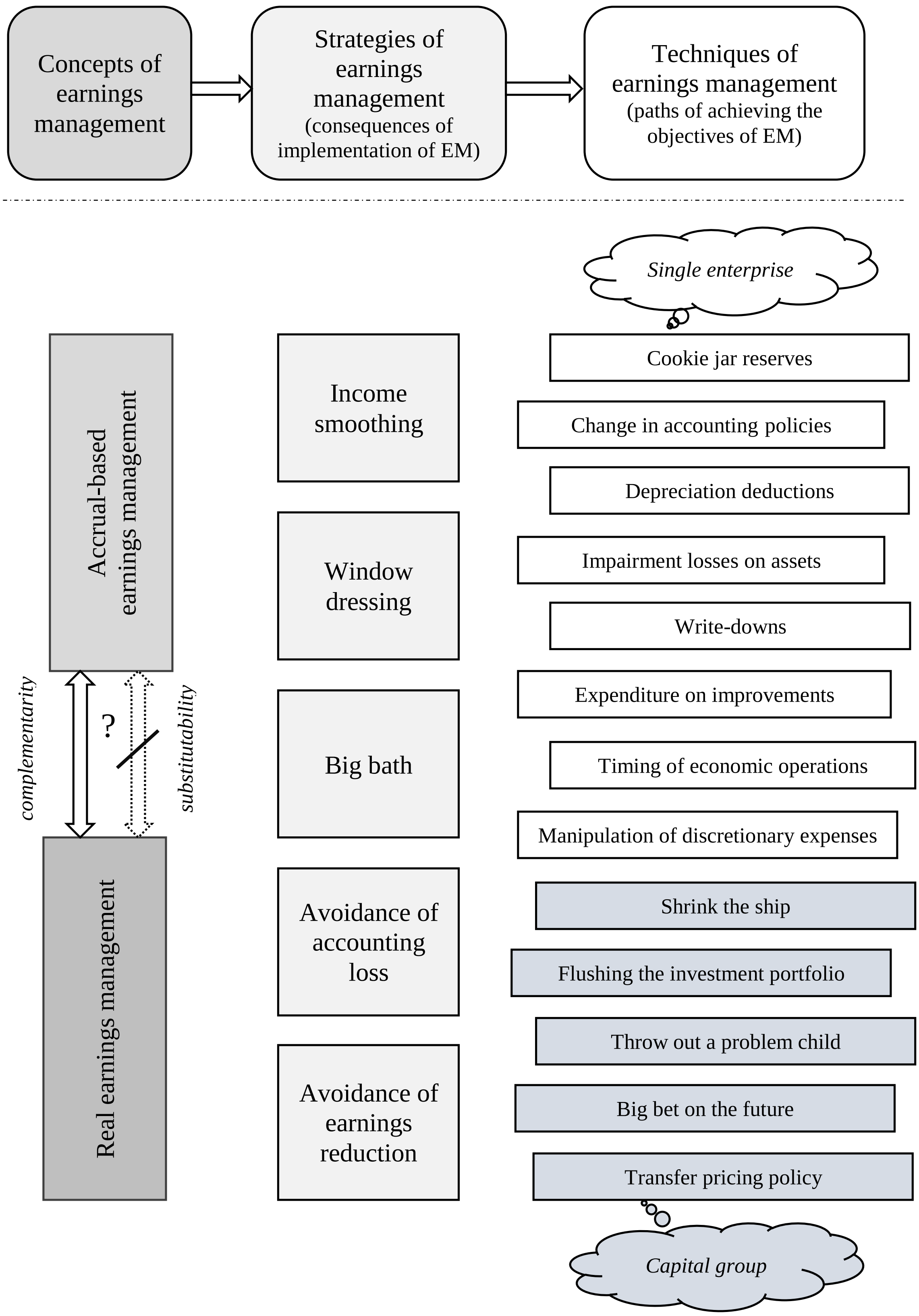

Figure 1. Selected concepts, strategies and techniques of earnings management in public companies.
Source: own elaborations.

Empirical research in Poland on the EM phenomenon and the quality of reporting information is relatively scarce (Michalak, 2018). The studies mentioned above cover three main strands, including:

- research on the degree of shaping the financial result in connection with specific incentives (see: Brzeszczyński et al., 2011; Gajdka, 2012; Istrate et al., 2017; Cherkasova, Rasadi, 2017; Lizińska, Czapiewski, 2018; Valaskova et al., 2021);
- research on identifying factors influencing the scope of EM practices (Michalak et al., 2012; Piosik, 2013; Comporek, 2017; Piosik, Genge, 2020; Michalkova, 2021; Comporek, 2022; Lizińska, Czapiewski, 2023);
- analysis of the perception of the quality of reporting information disclosed by listed companies by company stakeholders (Cieślak, 2011; Błażyńska, 2015; Świetla, Zieniuk, 2017; Cygańska et al., 2019).

Most of the empirical analyses that focus on EM issues, which are prepared for the Polish capital market, are based on the use of econometric models enabling the extraction of individual subcategories of accruals and the determination of indicators illustrating abnormal levels of cash flows from operations, production costs or discretionary expenses. These procedures allow for a preliminary estimate of the scale and directions of activities aimed at the intentional manipulation of reporting data, although it should be emphasized that each of the EM models has its limitations. However, only some of the research represents questionnaire studies, by which it is possible to better recognize the specificity of EM and earnings quality in reporting entities. The most important conclusions from their execution are presented below.

Cieślak (2011) surveyed the opinions of employees dealing with accounting in small and medium-sized enterprises about accounting regulations and their postulated need to improve. The research sample consisted of 324 respondents, and its selection was purposeful. One of the aspects taken into account in the study was the respondents' opinions on assessing the quality of financial statements. Almost half of the respondents believed the published financial reports were as reliable as needed. However, the percentage of interviewees stating that they believed the financial statements were falsified was similar. Every fourth respondent considered that they had only heard about the falsification of reporting items more often than they had personally encountered these practices.

Piosik (2013) tried to answer whether employees of financial and accounting departments and managers can practically use EM techniques and strategies in business practice. The research sample included 42 enterprises and 23 capital groups. The obtained results of empirical research show that, in the opinion of the respondents, the most effective EM instrument is to conduct economic transactions on such terms as to ensure the achievement of the reporting goal. The study's authors also proved that frequently used EM techniques were the manipulation of depreciation and write-offs and the creation and release of provisions. Moreover, interviewees indicated that EM strategies aimed at a steadily growing profit (from period to period) and avoided showing losses were extensively implemented in their firms.

Piosik collected evidence that in the studied sample, there are positive relationships between the EM scale and the company's size (assessed from the perspective of generated revenues and employment). He concludes that employees of finance and accounting departments (both rank-and-file and those holding managerial positions) have a low awareness and insufficient knowledge of the possibility of shaping profits (losses).

Błażyńska (2015), researching 334 investors, asked respondents, among others, to point out the importance of individual elements of the financial statements. The surveyed investors indicated the following order of importance of the financial reports, namely: profit and loss statement (94% of respondents described it as decisive or important), statement of financial position (93% of respondents) and statement of cash flows (80% of respondents). The results of Błażyńska's study on satisfaction with the quality and the scope of financial statements revealed that only 8% of interviewees believed that the financial statement was complete, and as many as 78% had no clear opinion on this issue. Besides this, the respondents highlighted a lack of precise information in the financial statements about the company's forecasts of results, asset replacement plans, assumptions made when measuring fair value, estimation methods used, and transactions with the parent company, i.e. those areas of accounting that can be used during the implementation of EM practices.

Świetla and Zieniuk (2017) researched the scale of the use of accounting policy instruments in meeting the objectives of business entities or in deliberate falsification or blurring of the image resulting from financial statements. Based on the responses of statutory auditors, they collected evidence that companies operating in the Polish market tend to adapt their accounting policy regarding estimated valuation to the company's goals. However, most respondents agreed that the companies they audited do not use accounting policy instruments in the field of valuation to blur or falsify the company's financial standing deliberately.

Cygańska et al. (2019) conducted research evaluating Polish accounting students' ethical attitudes towards the EM phenomenon. In this study, the impact of gender, age and professional experience on the assessment of ethical attitudes of managers in the purposeful shaping of the reported income level was analyzed. The research showed that the specificity of both EM concepts (accrual-based EM versus real EM) determined the image of ethical attitudes towards accounting manipulations, whereby the accounting type of EM was assessed more critically than earnings manipulations by operating decisions.

3. Research methodology

The study presented in the paper is part of a broader research project, “Impression management or information preparation? Motives and paths of earnings management in the time of the COVID-19 pandemic”, aimed at in-depth analysis of the main premises for implementing EM practices in public companies and determining basic strategies for implementing the assumed objectives of aggregate-based and real EM. Moreover, the purpose of the project was to obtain answers to the questions of how earnings manipulation determines the quality of reported data and whether these practices are acceptable from an ethical point of view in the eyes of finance managers and employees of accounting departments of listed companies.

The postulated subject of the research was to conduct survey interviews among representatives of all non-financial public companies listed on the Main Market of the Warsaw Stock Exchange (N = 335). The target group of respondents included finance managers, accounting employees and other professionals authorized by representatives of the company's management staff at the level of the owner, president/vice president, member of the management board, and general director. The selection of the research sample was random (exhaustive testing). The sample was taken from data from the Central Statistical Office and the Dun & Bradstreet business intelligence agency.

Ultimately, 124 respondents representing diverse public companies agreed to participate in the research. They were asked questions regarding, *inter alia*, such issues as:

1. How often did the respondents encounter accounting practices involving the use of freedom in balance sheet regulations to create a false image of the financial position of an enterprise?
2. How do respondents assess the general intensity of EM activities in the public companies they represent?
3. How do respondents estimate the intensity of particular EM tools (techniques) in the public companies they represent?
4. In which periods of the financial year are the practices related to earnings manipulation particularly intensified?
5. What are the most important objectives for EM implementation in the company they represent?
6. How do respondents perceive the importance of the main premises (motives) for EM activities in their company?

For clarity, it should be emphasised that the survey research was conducted in June-August 2023, and the Marketing Research Centre “CBM Indicator” was responsible for its implementation.

4. Empirical results

The first step of the empirical research was to ask how often respondents encountered accounting practices involving the use of freedom in balance sheet regulations to create a false image of the company's financial standing in their business practice. This research shows that more than half of the interviewees (56.5%) declared they experienced the mentioned practices occasionally, while every fourth respondent (27.4%) stated that they often encountered activities comprising the EM phenomenon (Figure 2).

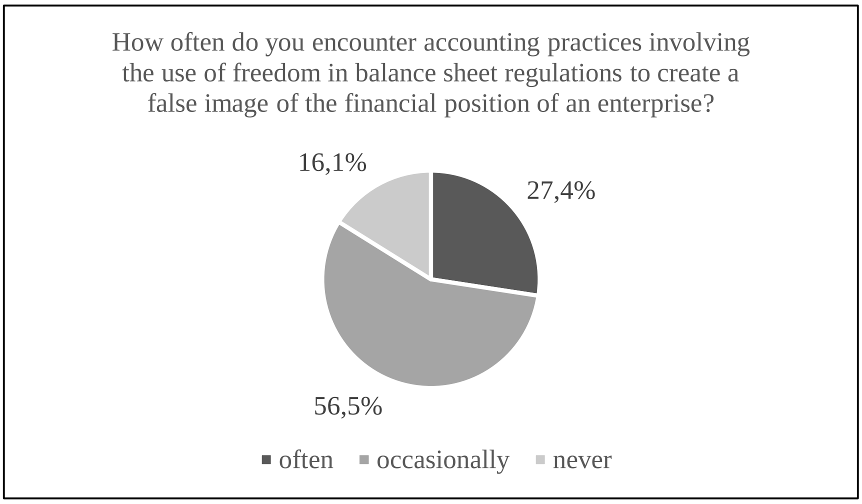

Figure 2. The structure of answers to the question regarding the frequency of encountering accounting practices allows to creation of a false image of the company's financial standing by respondents.

Source: own elaborations.

Interestingly, although the most interviewees declared that while performing their professional duties, they encountered accounting practices that allowed them to manipulate the company's financial standing, only 29% of respondents confirmed that EM activities are implemented in the company they represent (Figure 3). Moreover, only slightly over 3% of the respondents admitted that these operations are implemented frequently throughout each fiscal year. In further research, this group of respondents were asked for a closer characteristic of the specificity of EM activities in listed companies.

In the first instance, the peculiarities of the interdependencies between implementing accrual-based and real EM practices in public companies listed on the WSE were examined. It is worth emphasizing that 35 out of 36 respondents (97.2%) stated that accrual-based- and real EM strategies are used on the principle of complementarity in the firms they represent, thereby confirming the first research hypotheses. Similar conclusions regarding the relationships between varied EM concepts are included, among others, in studies by Matsuura (2008), Chen et al. (2012), and Hamza and Kortas (2019).

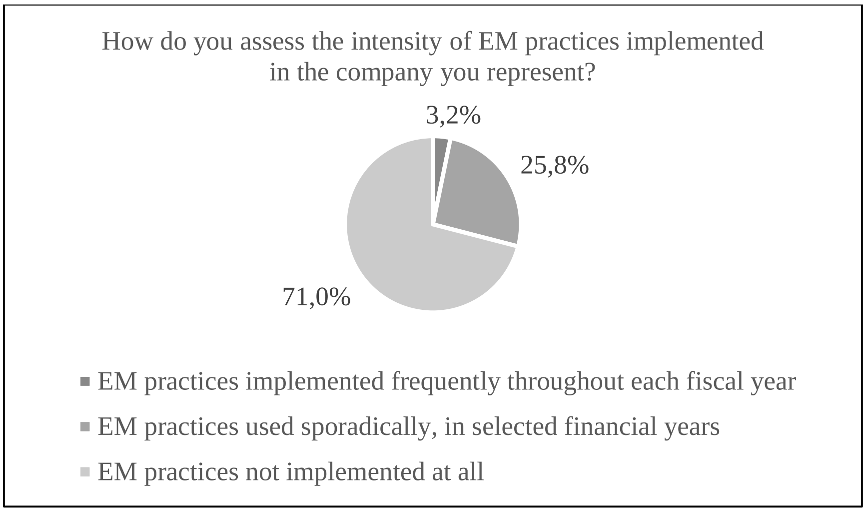

Figure 3. The structure of answers regarding the intensity of implementing EM practices in the companies the respondents represent.

Source: own elaborations.

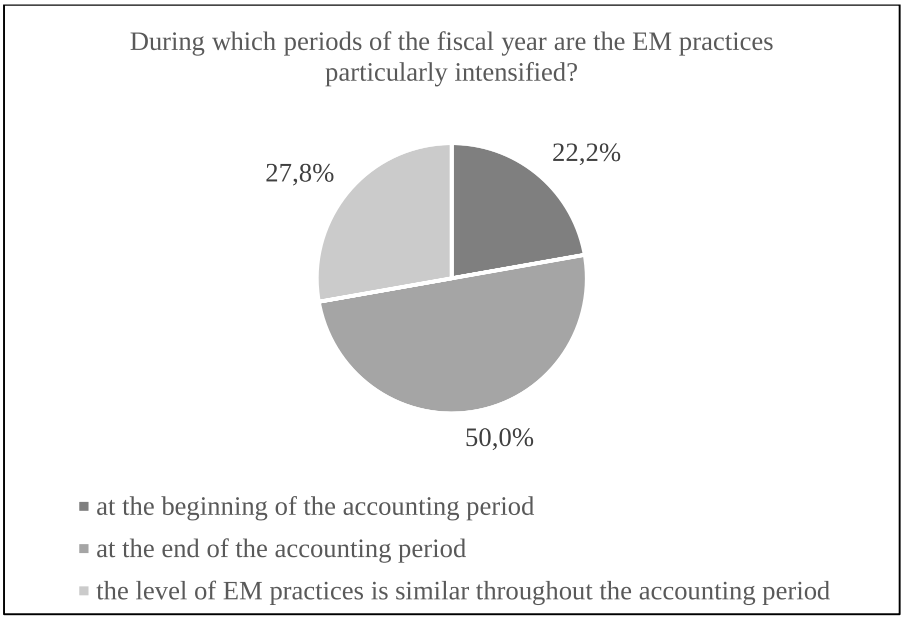

Figure 4. The structure of answers regarding the intensity of implementing EM practices in particular periods of the fiscal year.

Source: own elaborations.

Regarding the issue of the EM implementation period, half of the respondents declared that the intensification of the practice related to the intentional shaping of financial results occurred at the end of the accounting period (Figure 4). Approximately 28% of respondents stated that the EM severity is similar throughout the fiscal year, while about 22% of the interviewees indicated that the increase in EM practices is typical for the beginning of accounting years.

The next part of the empirical research concerns the most important objectives towards which the optics of EM practices implementation are directed (Figure 5). More than half of the respondents (55.6%) declared that earnings manipulation through EM activities is motivated to pursue income smoothing, consequently positively verifying the second of the research hypotheses. This strategy is based on manipulating the time profile of individual reporting items to make the reported profits less volatile. At the same time, the intended action of executives is to prevent excessive increases in the company's financial results in the long term. Nearly 39% of interviewees stated that avoiding earnings reduction is important in shaping the financial result. The premise for such an outlook is that, according to the prospect theory, investors value profits, losses, and their fluctuations differently (Artienwicz, 2018). The subjective feeling associated with the deterioration of the financial result by a given amount is stronger than the satisfaction with improving the result by the same amount. Every fourth respondent admitted that EM practices in the company they represent are taken for the broadly understood purpose of increasing profits. The reasons and motives for earnings manipulation upwards have a variety of backgrounds and range from the desire to meet analysts' expectations to incentives related to the realization of bonuses or maintaining a competitive position in the financial market (which was reflected in the further part of the research). Notably, a small percentage of interviewees stated that EM practices may be aimed at avoiding the avoidance of accounting losses or big baths. It should be added that respondents could select more than one item when answering this question.

In-depth empirical research also allowed for a preliminary identification of the most important premises (motives) for the implementation of EM practices in public companies (Table 1). The distribution of answers obtained by respondents shows that the dominant prerequisite for EM enforcement was an effort to create the image of a more profitable company compared to the largest competitors in the sector. Previous research has shown that public companies tend to disclose higher profits than the average in the sector to attract new investors (Dakhlallh, 2020). Nearly 95% of interviewees considered showing better development prospects for the company (which is explained, among others, in signal theory) and meeting market analysts' expectations regarding the level of reported financial results (which, in turn, is consistent with the assumptions of the thresholds theory) as a very important or quite important premise of EM implementation. On the other hand, according to respondents, EM practices are rarely motivated by opportunistic reasons (low motives; performance bonus) or financial strategies implemented in the company (dividend payment policy). Thus, the third research hypothesis set in the introduction of the paper was negatively verified.

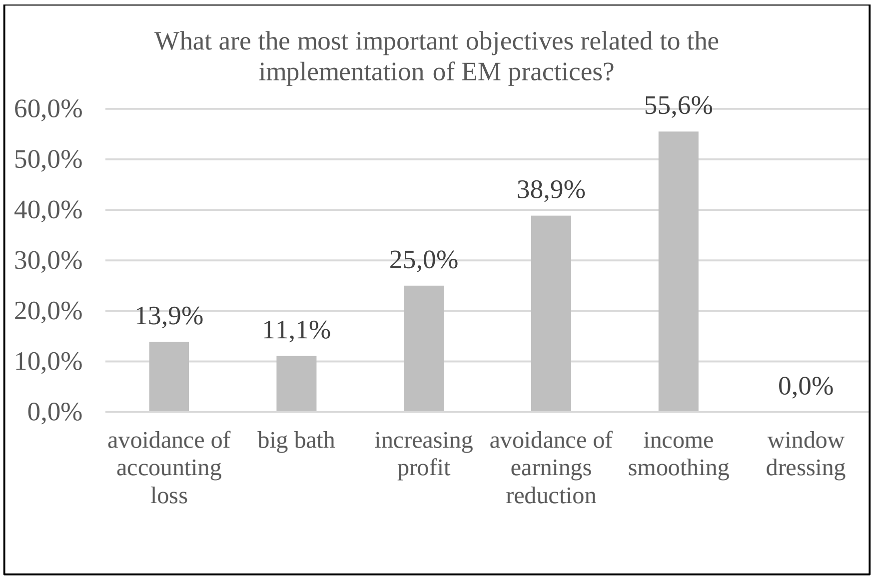

Figure 5. The share of respondents pointing to the most important objectives of implementing EM practices in public companies.

Source: own elaborations.

Table 1.
The importance of the main premises (motives) for implementing EM practices in public companies in respondents' opinion

Premise (motive)	The importance of premise (motive)			
	Very important	Quite important	Quite irrelevant	Completely irrelevant
maximizing personal benefits for management staff	5.6%	38.9%	52.8%	2.8%
reducing the tax burden in a given financial year	16.7%	55.6%	22.2%	5.6%
showing better development prospects for the company	16.7%	77.8%	5.6%	0.0%
creating the image of a more profitable company compared to the largest competitors	25.0%	69.4%	5.6%	0.0%
meeting market analysts' expectations regarding the level of reported financial result	19.4%	75.0%	5.6%	0.0%
protecting the company against excessive dividend policy	8.3%	44.4%	44.4%	2.8%
maintaining or increasing the company's creditworthiness	11.1%	61.1%	25.0%	2.8%

Source: own elaborations.

From an instrumental point of view, an important element of the research was the analysis of the accrual-based EM techniques widely used in public companies listed on the WSE (Table 2). According to the respondents, shaping financial results was implemented using a various spectrum of accounting practices. EM techniques related to the change of applied accounting policies involve the use of financial principles relating to such issues as accounting for the financial year, principles of valuation and depreciation of fixed assets (which was particularly noted by respondents), rules of asset inventory, inventory recording methods, principles of valuation of assets and liabilities, etc. The EM technique of manipulating depreciation and improvement expenditures focuses mainly on the possibility of distorting the categories of operating expenses. The general principles of recognizing depreciation methods state that they should most faithfully reflect how the enterprise consumes the asset's economic benefits. Another important EM technique, according to respondents, is controlling expenses for renovations and improvements of fixed assets. Improving a fixed asset involves its reconstruction, expansion, and modernization and increases its value in use. Therefore, the incurred expenditure increases its initial value, which becomes a new basis for determining depreciation write-offs. Additionally, if the conditions for recognizing a significant improvement of a fixed asset are met, costs are activated in the company. Analyses of Table 2 indicate other finding worthy of comment. Namely, in the business practice of public companies, accounting manipulations by creating and terminating provisions are prevalent. Creating provisions involving the appropriate division of net profit and allocating it to achieve specific company objectives usually occurs when the financial result is better than expected. This situation causes a reduction of the reported financial result for a given accounting year and its "shifting" to later years of worse economic conditions, in which the release of provisions will increase the reported financial profit (loss).

Table 2.
The use of particular accrual-based EM tools (techniques) in public companies in respondents' opinion

Accrual-based EM technique	Frequency of use		
	Frequent use	**Average use**	**Occasional or no use**
Creation and release of provisions	19.4%	58.3%	22.2%
Selection and change of the fixed asset valuation model	13.9%	72.2%	13.9%
Selection and change of depreciation and amortization methods	27.8%	63.9%	8.3%
Write-offs for permanent impairment of fixed assets	25.0%	19.4%	55.6%
Allowances for the value of inventory and/or receivables	19.4%	69.4%	11.1%
Controlling expenses for renovations and improvements of fixed assets	27.8%	55.6%	16.7%
Faulty presentation of R&D works	5.6%	16.7%	77.8%

Source: own elaborations.

The final stage of empirical research was aimed at a closer examination of the techniques of real EM implemented in public companies listed on the Polish capital market (Table 3). The obtained results of questionnaire research prove that nearly 14% of respondents admit that in public companies, a frequently implemented method of manipulating earnings is an abnormal reduction of discretionary costs, including SG&A expenses. The vast majority of interviewees (70%) declared that a common practice (average use) in the firms they represent is accelerated invoicing, i.e., recognizing revenues before they are realized (which can be strictly considered accounting fraud). Another important technique of real EM is the excessive acceleration of sales revenues and operating cash flows at the end of the period, resulting either from offering abnormal price discounts or adopting a very liberal policy of managing short-term receivables.

Table 3.
The use of particular real EM tools (techniques) in public companies in respondents' opinion

Real EM technique	Frequency of use		
	Frequent use	Average use	Occasional or no use
Abnormal reduction of SG&A expenses	13.9%	38.9%	47.2%
Abnormal reduction of R&D expenses	5.6%	19.4%	75.0%
Accelerated invoicing and manipulation of the revenue recognition period	5.6%	69.4%	25.0%
Structuring and timing of economic operations	2.8%	41.7%	55.6%
Acquisition or divestiture of subsidiaries	0.0%	5.6%	94.4%
Sales acceleration resulting from above-average discounts	2.8%	44.4%	52.8%
Sales acceleration resulting from the liberal deferred payment policy	2.8%	55.6%	41.7%

Source: own elaborations.

5. Summary

Transparency and credibility of reporting information are crucial in managing modern organizations. Financial statements should provide data that will be useful to a wide range of users and reflect current revenues and costs, unambiguously present the company's core activities' results, and illustrate direct links between reported profits (losses) and operating cash flows. However, economic practice shows that implementing EM activities can distort these features.

The survey research results among finance managers and representatives of accounting services emphasize the importance of EM practices in public companies listed on the Polish capital market. The existence of areas of free choice makes it possible to use accounting policy and economic transactions to manipulate the level of the reported earnings. During the research, it turned out that 29% of respondents admitted to implementing EM practices in firms they represent. Moreover, interviewees declared the use of various accrual-based and real EM instruments in a complementary way. The dominant EM strategies proved to be income smoothing and avoidance of earnings reduction, while the main reasons for EM implementation respondents included creating the image of a more profitable company (compared to the largest competitors), meeting market analysts' expectations regarding the level of reported financial result and showing better development prospects for the company.

The limited number of respondents willing to participate in the research causes the presented results of empirical analyses do not fill the condition of generalization and cannot be directly applied to all public companies listed on the WSE. However, it should be emphasized that the research sample size may be determined by the fact that the undertaken issue of earnings manipulation may be considered highly sensitive. Indeed, EM practices are perceived by many accounting theorists and practitioners as activities balancing on the verge of law.

Acknowledgements

The paper is funded by the National Science Centre, Poland, under the research project "Impression management or information preparation? Motives and paths of earnings management in the time of the COVID-19 pandemic", no DEC-2022/06/X/HS4/01244.

References

1. Artienwicz, N. (2018). *Rachunkowość behawioralna.* Warszawa: CeDeWu.
2. Artienwicz, N., Bartoszewicz, A., Cygańska, M., Wójtowicz, P. (2020). *Kształtowanie wyniku finansowego w Polsce. Teoria – praktyka – stan badań*. Katowice: IUS Publicum.
3. Bachtijeva, D. (2021). Can creative accounting be equated with creativity and called positive? *Buhalterinės apskaitos teorija ir praktika, Vol. 24*, pp. 1-10, https://doi.org/10.15388/batp.2021.37.
4. Bachtijeva, D., Tamulevičienė, D. (2022). Comparing earnings management and creative accounting. A general review. *Zeszyty Teoretyczne Rachunkowości, Vol. 46, Iss. 2*, pp. 115-135, http://dx.doi.org/10.5604/01.3001.0015.8812
5. Błażyńska, J. (2015). *Użyteczność informacji finansowych sprawozdań finansowych*. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
6. Brzeszczyński, J., Gajdka, J., Schabek, T. (2011). Earnings Management in Polish Companies. *Comparative Economic Research, Central and Eastern Europe, Vol. 14, Iss. 3*, pp. 137-150.
7. Burgstahler, D., Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics, Vol. 24, Iss. 1*, pp. 99-126, https://doi.org/10.1016/S0165-4101(97)00017-7.
8. Chen, C.-L., Huang, S.-H., Fan, H.-S. (2012). Complementary association between real activities and accruals-based manipulation in earnings reporting. *Journal of Economic Policy Reform, Vol. 15, Iss. 2,* pp. 93-108, https://doi.org. 10.1080/17487870.2012.667965.
9. Cherkasova, V., Rasadi, D., (2017). Earnings Quality and Investment Efficiency: Evidence from Eastern Europe. *Review of Economic Perspectives, Vol. 17, Iss. 4,* pp. 441-468, https://doi.org/10.1515/revecp-2017-0023
10. Cieślak, M. (2011). *Podejście etyczne w rachunkowości a jakość sprawozdań finansowych*. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
11. Comporek, M. (2017). Strategie zarządzania zyskiem z perspektywy struktury własnościowej przedsiębiorstw przemysłowych. *Zeszyty Naukowe. Organizacja i Zarządzanie, Vol. 113*, pp. 35-51.

12. Comporek, M. (2022). Determinanty struktury kapitałowej a rachunkowe kształtowanie wyniku finansowego przedsiębiorstw. *Zeszyty Teoretyczne Rachunkowości, Vol. 46, Iss. 1*, pp. 9-27, https://doi.org/0.5604/01.3001.0015.7985
13. Cygańska, M., Artienwicz, N., Burchart, R. (2019). The ethical judgments of Polish accounting students regarding earnings management. *Zeszyty Teoretyczne Rachunkowości, Vol. 104(160)*, pp. 21-36, https://doi.org/10.5604/01.3001.0010.0998
14. Dakhlallh, M. (2020). Accrual-based Earnings Management, Real Earnings Management and Firm Performance: Evidence from Public Shareholders Listed Firms on Jordanian's Stock Market. *Journal of Advanced Research in Dynamical and Control Systems, Vol. 12*, pp. 16-27, https://doi/org/10.5373/JARDCS/V12I1/20201004.
15. Dechow, P.M., Skinner, D.J. (2000). Earnings Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators. *Accounting Horizon, Vol. 14*, pp. 1-26, http://dx.doi.org/10.2139/ssrn.218959.
16. Gajdka, J. (2012). Kształtowanie zysków w przedsiębiorstwach w kontekście kryzysu finansowego. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia, Vol. 51*, pp. 303-311.
17. Grabiński, K. (2016). *Determinanty aktywnego kształtowania wyniku finansowego w teorii i praktyce europejskich spółek giełdowych*, Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.
18. Gunny, K. (2010). The Relation between Earnings Management Using Real Activities Manipulation and Future Performance: Evidence from Meeting Earnings Benchmarks. *Contemporary Accounting Research, Vol. 27, Iss. 3*, pp. 855-888, https://doi.org/10.1111/j.1911-3846.2010.01029.x.
19. Hamza, S.E., Kortas, N. (2019). The interaction between accounting and real earnings management using simultaneous equation model with panel data. *Review of Quantitative Finance and Accounting, Vol. 53*, pp. 1195-1227, https://doi/org/DOI: 10.1007/s11156-018-0779-5.
20. Hart, O.D. (1988). Incomplete Contracts and the Theory of the Firm. *Journal of Law, Economics, & Organization, Vol. 4, Iss. 1*, pp. 119-139, http://www.jstor.org/stable/765017
21. Healy, P.M, Walhen, J.M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons, Vol. 13, Iss. 4*, pp. 365-83, https://doi.org/10.2139/s srn.156445.
22. Istrate, C., Georgescu, I., Carp, M., Robu, I.B., Leontina, P.B. (2015), Accruals earnings management in emerging markets under the transition to IFRS: The case of Romanian listed companies. *Transformations in Business and Economics, Vol. 14, Iss. 2A*, pp. 393-411.
23. Jansen, I.P.H., Ramnath, S., Yohn, T. L. (2012). A diagnostic for earnings management using changes in asset turnover and profit margin. *Contemporary Accounting Research, Vol. 29*, pp. 221-251, https://doi.org/10.1111/j.1911-3846.2011.01093.x.

24. Jensen, M.C., Meckling, W.H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics, Vol. 3, Iss. 4*, pp. 305-360, https://doi.org/10.1016/0304-405X(76)90026-X.
25. Leuz, C., Nanda, D., Wysocki, P.D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics, Vol. 69, Iss. 3*, pp. 505-527, https://doi.org/10.1016/S0304-405X(03)00121-1.
26. Lizińska, J., Czapiewski, L (2018). Earnings Management and the Long-Term Market Performance of Initial Public Offerings in Poland. In: A. Bem, K. Daszyńska-Żygadło, T. Hajdíková, P. Juhász (Eds.), *Finance and Sustainability: Proceedings from the Finance and Sustainability Conference* (pp. 121-134). Cham, Switzerland: Springer International Publishing, https://doi/org/10.1007/978-3-319-92228-7_11.
27. Lizińska, J., Czapiewski, L. (2023). Financial distress and accrual and real earnings management in Polish public companies. *Zeszyty Teoretyczne Rachunkowości, Vol. 47, Iss. 1*, pp. 79-97, https://doi.org/10.5604/01.3001.0016.2908.
28. Matsuura, S. (2008). On the Relation between Real Earnings Management and Accounting Earnings Management: Income Smoothing Perspective. *Journal of International Business Research, Vol. 7, Iss. 3*, pp. 63-77.
29. McKee, T.E. (2005). *Earnings Management: An Executive Perspective*. Ohio: Thomson.
30. Michalak, J. (2018). *Metody pomiaru i determinanty jakości informacji w raportach spółek giełdowych*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
31. Michalak, J., Waniak-Michalak, H., Czajor, P. (2012). Impact of mandatory IFRS implementation on earnings quality. Evidence from the Warsaw Stock Exchange. *Zeszyty Teoretyczne Rachunkowości, Vol. 68(124)*, pp. 63-82.
32. Michalkova, L. (2021). Earnings quality and accruals over company´s life cycle. *SHS Web of Conferences, Vol. 92*, pp. 1-10. https://doi.org/10.1051/shsconf/20219202043.
33. Mulford, C.W., Comiskey, E.E. (2005). *The financial numbers game: detecting creative accounting practices.* Toronto, ON: John Wiley & Sons.
34. Parfet, W.U. (2000). Accounting Subjectivity and Earnings Management: A Preparer Perspective. *Accounting Horizons, Vol. 14, Iss. 4*, pp. 481-488, https://doi.org/10.2308/acch.2000.14.4.481.
35. Paulo, E., Mota, R.H.G. (2019). Business cycles and earnings management strategies: a study in Brazilian public firms. *Revista Contabilidade & Finanças, Vol. 30, Iss. 80*, pp. 216-233, https://doi.org/10.1590/1808-057x201806870
36. Piosik, A. (ed.) (2013). *Kształtowanie zysków podmiotów sprawozdawczych w Polsce. MSR/MSSF a ustawa o rachunkowości*. Warszawa: C.H. Beck.
37. Piosik, A., Genge, E. (2020). Earnings management prior to mergers and acquisitions: The role of acquirers' ownership structures. Evidence from Poland. *Procedia Computer Science, Vol. 176*, pp. 1299-1311, https://doi.org/10.1016/j.procs.2020.09.139

38. Remelin, M., Strojek-Filus, M., Świetla, K. (2021). *Polityka rachunkowości grup kapitałowych.* Warszawa: CeDeWu.
39. Ronen, J., Yaari, V. (2008). *Earnings Management*. New York: Springer Verlag.
40. Ross, S.A. (1977). The Determination of Financial Structure: The Incentive-Signalling Approach. *The Bell Journal of Economics*, *Vol. 8, Iss. 1*, pp. 23-40, https://doi.org/10.2307/ 3003485.
41. Roychowdury, S. (2006). Earnings Management through Real Activities Manipulation. *Journal of Accounting and Economics*, *Vol. 42*, pp. 335-370, https://doi.org/10.1016/ j.jacceco.2006.01.002.
42. Sankar, M.R., Subramanyam, K.R. (2001). Reporting Discretion and Private Information Communication through Earnings. *Journal of Accounting Research*, *Vol. 39, Iss. 2,* pp. 365-386, http://www.jstor.org/stable/2672961.
43. Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons*, *Vol. 3, Iss. 4*, pp. 91-102.
44. Scott, R.W. (2000). *Financial accounting theory*. New Jersey: Prentice Hall.
45. Strakova, L. (2021). Motives and techniques of earnings management used in a global environment. *SHS Web of Conferences*, *Vol. 92,* pp. 1-9, https://doi.org/10.1051/shsconf/20219202060.
46. Świetla, K., Zieniuk, P. (2017). Polityka rachunkowości w praktyce jednostek gospodarczych w kontekście jej oceny przez biegłych rewidentów. *Zeszyty Teoretyczne Rachunkowości, Vol. 92, Iss. 1*, pp. 191-206, https://doi.org/10.5604/01.3001.0010.0998.
47. Toumeh, A.A., Yahya. S. (2019). A Review of Earnings Management Techniques: An IFRS Perspective. *Global Business & Management Research, Vol. 11, Iss. 3,* pp. 1-13.
48. Valaskova, K., Adamko, P., Frajtova-Michalikova, K., Macek, J. (2021). Quo Vadis, earnings management? Analysis of manipulation determinants in Central European environment. *Oeconomia Copernicana, Vol. 12, Iss. 3*, pp. 631-669, https://doi.org/10.24136/oc.2021.021.
49. Vladu, A. (2015). Managerial Preferences Between Accrual-Based versus Real Earnings Management. *Hyperion International Journal of Econophysics & New Economy, Vol. 8, Iss. 2,* pp. 409-417.
50. Walker, M. (2013). How far can we trust earnings numbers? What research tells us about earnings management. *Accounting and Business Research, Vol. 43, Iss. 4,* pp. 445-481, https://doi.org/10.108 0/00014788.2013.785823.
51. Wójtowicz, P. (2010). *Wiarygodność sprawozdań finansowych wobec aktywnego kształtowania wyniku finansowego*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.
52. Zang, A.Y. (2012). Evidence on the trade-off between real manipulation and accrual manipulation. *The Accounting Review, Vol. 87, Iss. 2,* pp. 675-703, https://doi.org/10.2308/accr-10196