National Accounting Review

NAR, 6(3): 333–351.
DOI: 10.3934/ NAR.2024015
Received: 29 February 2024
Revised: 21 June 2024
Accepted: 08 July 2024
Published: 12 July 2024

https://www.aimspress.com/journal/NAR

Research article

Techniques, objectives and motivations of creative accounting: evidence from the Czech Republic

Irena Honková* and Renáta Mysková

Institute of Economy and Management, Faculty of Economics and Administration, University of Pardubice, Studentská 84, 532 10 Pardubice, Czech Republic

* **Correspondence:** Email: irena.honkova@upce.cz; Tel: +420731187189.

Abstract: This research intended to identify the techniques and objectives and motivations of creative accounting in the Czech Republic and confirm the responses similarity between two groups of respondents. The views of 318 financial professionals were analyzed through a questionnaire. The statistical Friedman test was used for testing two hypotheses: (H1) There is no difference in the presented results in the techniques of creative accounting between groups of financial professionals (ACPA, CFO, Lender, CPA, and MBA); (H2) There is no difference in the presented results in the objectives and motivations behind creative accounting between groups of financial professionals. This paper shows that the most used techniques are holding open books to record additional sales, delaying shipments, recognizing revenue on partial shipments, and changing inventory values. Common objectives and motivations included reducing earnings volatility, supporting stock prices, increasing income or cash flow, and creating a consensus earnings forecast of analytics. Both hypotheses H1 and H2 were confirmed. The presented article is based on our own research. Using the information obtained, it will be possible for auditors and other authorities to focus on specific areas of creative accounting and its motivations.

Keywords: creative accounting; fraud; earnings management; earnings volatility; gain

JEL Codes: G32, M41, M48

1. Introduction

The main objective of financial reporting is to provide information about the wealth performance and financial health of a company. Although it is true that financial statements are likely to be the most effective way of conveying information to the public, it should be noted that, when reading reports, figures might not necessarily show a true and fair view and might be misleading (Ibanichika and Idendinihu, 2012). The freedom given by various accounting alternatives and legal and accounting rules can be used to create a certain image of a company's financial situation. This method allows the accounting professional to manipulate the information included in the financial statements to create a certain image of the financial situation of the enterprise, a practice called "creative accounting" (Safta et al., 2020).

The term "creative accounting" started appearing in academic literature and business discussions in the early 20th century. During this period, companies began using various techniques to enhance their financial statements, often bending rules without outright fraud. In the early 21st century, the term gained wider recognition. Companies used creative accounting methods to manage earnings, reduce taxes, and improve financial ratios. There were several high-profile accounting scandals (e.g., Enron, WorldCom). These cases involved creative accounting practices that misled investors and regulators.

Creative accounting is a 21st-century phenomenon that has received increased attention after the worldwide economic crises and budget deficits (Abed et al., 2022). The issue of accounting manipulation has recently gained a lot of interest and attention. This is because of the global increase in scandals that hit several major corporations (Al-Hashimy, 2022).

Akpanuko and Umoren (2015) showed that 90% of all enterprises use creative accounting in the unfair reporting of their operations. Cohen and Zarowin (2010) believed that most enterprises hide their benefits. Creative accounting practices have begun being used intensively at the economic entity level, regardless of the size of the enterprise or of the industry in which they operate (Kuběnka, 2018).

It is obvious that creative accounting practices influence the quality of financial and accounting information reporting (Ababneh, 2019). On the other hand, referring to creative accounting, Vladu et al. (2017) added that no scientific method will allow anyone to discover or reflect the absolute accounting truth. Based on this evidence, the accounting profession continues to grapple with the issue of fairness, as it is in the service of its users, and neutrality, to answer objectively all parties that are interested in the operation and the results included in company reports.

1.1. Creative accounting, fraud, and earnings management

Creative accounting is a euphemism referring to accounting practices that might follow the letter of the rules of standard accounting practices but deviate from the spirit of those rules with questionable accounting ethics—specifically distorting results in favor of the preparer or the firm that hired the accountant (McBarnet and Whelan, 1999).

Creative accounting was mentioned in the Anglo-Saxon literature in the 1970s, being at first most frequently found in works related to company bankruptcy and in the work written by Watts and Zimmermann (1978).

The concept of creative accounting is usually used to describe the process that provides opportunities for manipulation, deceit, and misrepresentation (Cormier and Lapointe, 2006). Hussein et al. (2015) defined creative accounting as an accounting manipulation technique performed by

financial statement preparers who want to alter the message being sent. Al-Hashimy (2019) defined account manipulation as a method of manipulating accounting to exploit gaps in accounting standards and decisions on measurement and disclosure procedures.

Additionally, creative accounting can be defined as the art of calculating benefits (Griffiths, 1986), the art of making a balance (Sharma, 2020), and the art of saving money (Popescu et al., 2009). In a similar manner, Jameson (1988) defined creative accounting as a technique that considers the improvement of the information provided by shareholders. Thus, the economic entity presents to shareholders or potential shareholders certain financial statements constructed applying techniques capable of generating a more favorable image of the firm on the market but also the illusion of more attractive results than what is accurate. Defining creative accounting through a well-known practice, which is the result of smoothing, Sohn (2016) asserted that this practice is evident whenever profits exhibit a large fluctuation unjustified by the economic reality.

According to Gowthorpe and Amat (2005), creative accounting at the individual level involves preparers altering accounting disclosures to create the reality they wish to have communicated to users of financial statements. Stubben (2010) defined creative accounting as a process by which accounting numbers are manipulated and, taking advantage of flexibility, measurements and information practices are chosen that turn synthesis documents from what they are into what managers want them to be. Zang (2012) declared that published synthesis documents are based on registers that have been delicately arranged or even substantially modified. This legitimate scam is referred to as creative accounting. The probability of detecting creative accounting depends on its size and the transparency of the budget (Milesi-Ferreti, 2004).

Creative accounting methods are not at all recent developments, but they have only begun to be more intensely debated in the 2000s, mainly because of the financial scandals that have arisen globally, whether directly or indirectly linked to manipulation and creative accounting. Similarly, the previous global crisis of the financial system was associated with creative accounting (Balaciu et al., 2009). Resorting to such techniques is carried out in compliance with the law, although moving far away from the basic purpose of accounting: providing users with a faithful image of the accounting statements. Both creative accounting and fraud occur mainly in times of financial difficulty for a company, and they intend to change the truth.

Creative accounting involves adjusting the accounting information, a process that is not considered to be illegal, but that certainly violates ethical standards. On many occasions, creative accounting and fraud are considered synonymous but there are numerous differences between them. From the perspective of those involved in setting up, checking, and controlling statements, it is necessary to distinguish the concept of creative accounting from the concept of fraud and to clarify the two. The lines between the two are blurred in many areas (Agostini and Favero, 2017).

Fraud is an act committed in ill faith that violates the law and has a negative character, while creative accounting complies with the law but not with the spirit of the law (Safta et al., 2020). Fraud is defined as the crime of cheating somebody to get money or goods illegally. Both academics and laymen alike define the notion of fraud in several ways, the most simplistic being that fraud is any crime committed for profit (Taherinia et al., 2018). Academics generally agree that fraud can ultimately be defined as the act intended to mislead or harm others, to gain an unfair or illegal advantage (Dechow et al., 2010; Dechow et al., 2012). Kothari et al. (2016) further simplified the notion as theft by deceit. Academics agree that fraud involves elements such as deceit and dishonesty (Jackson, 2018), and it typically involves senior management (Jiang et al., 2010). Moreover, unlike a mistake or an error, fraud

is deliberate, intentional, and most of the time involves the intentional concealment of the deed (Collins et al., 2017).

Jones (2011) defines methods of fraud as misappropriation of assets (inventory, cash, and other) and fictitious transactions (fraudulent financial statements), meaning one-off sales, cash, and inventory. As already said, the boundary between creative accounting and fraud is often unclear. The basic accounting equation is assets plus expenses equal income plus liabilities plus capital. Therefore, it is possible to maintain the symmetry within accounting but classify expenses as assets and loans as income. Creative accounting is legal. On the other hand, creative accounting may prove to be closer to fraud if the gateways from regulations are used to obtain advantages by certain categories of users of the accounting information to the detriment of others (Han et al., 2010).

Creative accounting is often used in tandem with outright earnings management. Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some shareholders about the underlying economic performance of a company or to influence contractual outcomes that depend on reported accounting numbers. Earnings management techniques to distort financial statement figures could involve claiming revenue growth that does not come with a corresponding growth in cash flows, reporting increased earnings that only occur during the fiscal year's final quarter, expanding fixed assets beyond what is considered normal for the company (industry), or exaggerating an asset's net worth by neglecting to use the correct depreciation schedule. Some authors believe that earnings management and creative accounting are synonyms.

1.2. Techniques of creative accounting

By observing the letter but not the spirit of the law, creative accounting techniques can be used to distort the values of the various categories of assets, liabilities, equity, income, and expenses with the intent to present favorable indicators of financial performance. Technically, one can manipulate income, expenses, assets, liabilities, and equity with the purpose of presenting a favorable image of the entity for various users. Jones (2011) provided four main strategies for exploiting the inherent flexibility of accounting: increasing income, decreasing expenses, increasing assets, decreasing liabilities, and increasing operating cash flow.

The tools to increase the income are premature sales recognition, increasing interest receivable, including non-operating profits, treating loans as sales, and swaps. Decreasing expenses is possible by using provision accounting, tax reduction, big bath or excessive one-year write-offs, decreasing expenses and increasing assets, increasing closing inventory, capitalizing expenses, lengthening depreciation lives, and being generous with bad debts. The tools to increase assets are as follows: enhance goodwill, enhance brands and other intangibles, revalue fixed assets, and mark-to-market. Decreasing liabilities relates to the techniques used in creative accounting for outcome smoothing (Falcon et al., 2019): choosing accounting methods, policies, and options and altering them; using accounting estimates and forecasts; making artificial transactions to manipulate the numbers written in the balance sheet in order to smooth the result; choosing transactions that would normally alter the image through the accounts; manipulation of business information; and the use of alternatives to recognize the elements of the financial standing and performance.

The practice of creative accounting usually includes overstating assets, high stocks, decreasing expenses, changing depreciation methods, or presenting provisions as assets (Remenaric et al., 2018).

Stangova and Vighova (2016) show the following practices as the most frequently used: targeted choice of several legal procedures (depreciation of property, the choice of the amortization of intangible assets, technical improvement of fixed assets, application of expenditures in the cost of tangible fixed assets, and deduction of tax losses) and failure to comply with legal procedures (depreciation of fixed assets, adjusting entries, and provisions).

1.3. Objectives and motivations of creative accounting

Jones (2011) presented the following motivations for creative accounting and, sometimes, fraud: personal incentives (increased salaries, bonus-related pay, shares and share options, job security, personal satisfaction); market expectations (meeting analysts' expectations, profit smoothing, the norm); special circumstances (manage gearing and borrowing, new issues, mergers and acquisitions, decrease regulatory visibility, new management team, waiting for the good times, and the belief that current regulations are incorrect but not illegal, so using creative accounting is acceptable).

Hollander Sanhueza and Morales Parada (2017), Remenaric (2018), and Feldman et al. (2010) described loopholes and subjectivity in international standards leading to creative accounting practices. Aharony et al. (2010) revealed the many regulations without adequate checks as a motivation for creative accounting. Most studies show that the degree of creative accounting depends mainly on human factors (e.g., chief executive officer, director, owners in family firms) either directly or indirectly (e.g., number of shareholders, board of directors, audit committee) or even depending on the gender of the auditors. The likelihood and speed of forced chief executive officer (CEO) turnover are positively related to a firm's creative accounting (Hazarika et al., 2012). The CEO's ability adds credibility to management forecasts, and that decreases creative accounting (Baik et al., 2011). Chiu et al. (2013) found that a firm is more likely to perform creative accounting when it shares a common director with a firm that is currently using creative accounting practices. Creative accounting is applied by new CEOs and is also greater in the CEO's final year (Ali and Zhang, 2015).

Stockmans et al. (2010) asserted that, when firm performance is poor, first-generation private family firms seem to have a greater incentive to use creative accounting. Controlling ownership is positively related to creative accounting. Studies found that the level of minority shareholders' protection in a country weakens this positive relationship (Bao and Lewellyn, 2017).

Lo et al. (2010) found that firms with a board with a higher percentage of independent directors are less likely to engage in creative accounting. The number of shareholder proposals received by firms is positively related to creative accounting practices, while the largest institutional owners are negatively related (Hadani et al., 2011). Creative accounting decreases if the audit committee has a high financial expertise status (Badolato et al., 2014). More socially responsible firms have higher financial reporting quality (Hong and Andersen, 2011). Rodriguez-Perez and van Hemmen (2010) showed that marginal increases in debt provide incentives for managers to manipulate accounting. Badertscher (2011) presented evidence showing the longer the firm is overvalued, the greater the amount of creative accounting practices it undertakes. Financial distress during a global financial crisis also leads to creative accounting (Habib et al., 2013). Massa et al. (2015) documented a significantly negative relationship between the threat of short selling and creative accounting practices. Mutuc et al. (2019) discussed the positive impact of expenses such as research or development on creative accounting (Gunny, 2010). Brandt et al. (2012) presented productivity growth at the industry level as a cause of creative accounting. Other factors influencing the degree of involvement in creative accounting include

debt, time, financial distress, threat of short selling, level of Corporate Social Responsiblity, research and development, and productivity growth. In a perfect world, there would be no need for creative accounting. However, when the result does not fulfill expectations, there may be several reasons why a company may wish to adopt creative accounting, with a range of personal incentives.

1.4. Objectives and research statements

This paper aims to explore creative accounting, namely a) its techniques and b) its objectives and motivations. The research intends to describe creative accounting in the Czech Republic.

The remaining part of the work is organized as follows. The chapter *Research methodology* describes the techniques used and the working data. The *Findings* section presents and comments on the results obtained from the search through the specialized literature. The *Conclusion* section highlights the main conclusions of the paper and contains future research directions on the research topic. Tables are included in a separate file.

By synthesizing the above-mentioned studies, ten research statements in the field of creative accounting techniques were created to find the most frequently occurring techniques, as follows:

A1: The companies use an optimistic estimate of useful life in depreciating their equipment.

A2: The companies adjust an amortization of their intangible assets to be small.

A3: The companies use their warranty liability as too small.

A4: The value of an ending inventory is understated to decrease tax.

A5: The companies purchase the tangible assets on credit. The loan interest is included in the costs.

A6: Books are held open for several days after the closing of the year to record additional sales in the previous year.

A7: Shipments close to the year-end are delayed, providing an increase in sales for the first quarter of the next year.

A8: Investments are sold to recognize a gain to offset a special charge arising from an asset write-down.

A9: Sales are recognized upon the shipment of goods to a company's sales representatives.

A10: Total order revenue is recognized even though only partial shipments were made.

The second section of the survey called for ten statements dealing with the objectives and motivations behind creative accounting. These statements deal with the objectives (to find the most frequent one) of creative accounting, whether creative accounting can help or hurt shareholders and what is their access to information, whether creative accounting has become more common over the past decade, and whether the campaign against creative accounting is necessary. They are synthesized from the above-mentioned studies, as follows:

B1: It is common for companies to make creative accounting activities, that is, to exploit the flexibility found in the application of accounting standards.

B2: A common objective of creative accounting is to reduce earnings volatility.

B3: A common objective of creative accounting is to support or increase stock prices.

B4: A common objective of creative accounting is to increase income or cash flow.

B5: A common objective of creative accounting is to meet the consensus earnings forecasts of analysts.

B6: Shareholders are sometimes harmed by creative accounting practices.

B7: Creative accounting can be helpful to shareholders.

B8: All shareholders have equal access to material financial information.

B9: The practice of creative accounting has become more common over the past decade.

B10: The campaign against creative accounting is necessary.

The views of various financial professionals add significantly to the knowledge of financial numbers and creative accounting. Any single individual has a limited set of experiences. However, access to the collective experiences of financial professionals from a variety of different occupations can greatly enhance the quality and content of this investigation. As different groups of financial professionals, with seemingly different interests, participate in this research, it is also examined whether opinions differ across these groups in the two areas under study. For this reason, the following hypotheses were established (and further confirmed):

H1: There is no difference in the presented results in the field of techniques of creative accounting between groups of financial professionals.

H2: There is no difference in the presented results in the field of objectives and motivations behind creative accounting between groups of financial professionals.

Using the information obtained, it will be possible to focus on specific areas of creative accounting and its motivation.

2. Materials and methods

To provide some context for the survey, the Survey Introduction Letter was sent to each of the surveyed financial professionals in the Czech Republic. The letter was individually addressed. A total of 318 finance professionals completed the qualitative and quantitative survey. The questionnaires were distributed during the autumn of 2023. The survey respondents included chief financial officers or comparable senior financial positions, e.g., controller (CFO), commercial bank lenders (Lender), certified public accountants (CPA), and accounting academics (ACPA). Some advanced Master of Business Administration (MBA) students who were working part-time as accountants and were enrolled in advanced elective courses in accounting and finance were also surveyed. The respondents, organized by occupational groups, are included in Table 1.

Table 1. Occupational groups and number of respondents.

Profession	Abbreviation	Number of respondents
Accounting academics	ACPA	54
Chief financial officers	CFO	51
Commercial bank lenders	Lender	45
Certified public accountants	CPA	78
MBA students with accounting work experience	MBA	90
Total		318

A variety of means were used to complete the survey questionnaire data. In some cases, the author used their contacts to obtain survey responses. This was especially true with the accounting academics. That explains the very high response rate of nearly 50%. The 51 responses from CFOs were obtained from 780 questionnaires sent to companies. Here, the response rate was far lower but rather typical for surveys that do not rely on personal connection: 6%. A combination of mailings and direct contact were used to obtain the responses for the lenders and CPAs.

The statements arose from the synthesis of the literature review in the previous chapter. The survey comprised two sections: techniques (statements A1–A10) and objectives and motivations (statements B1–B10). Respondents were asked to indicate their degree of agreement or disagreement with each statement using the following choices: 1, Definitely yes; 2, Yes; 3, No; 4, Definitely no. In addition to the numerical choices made by survey respondents, space also was provided on the questionnaire to add written comments. The results are reported as averages by creative accounting technique and group and as weighted averages by creative accounting technique for the five above-mentioned categories of respondents. In statistics, confidence intervals provide a range of values within which a population parameter (such as a mean or proportion) is believed to lie. For a 95% confidence interval, it is the mean ± 1.96 times the standard deviation. This range represents the "limits" within which it is confident that the true parameter value exists.

Both H1 and H2 hypotheses, defined at the end of the *Literature Review* chapter, are tested using the Friedman test. The Friedman test is a non-parametric statistical test developed by Milton Friedman (Friedman, 1937). Like the parametric repeated-measures ANOVA, it is used to detect differences in treatments across multiple test attempts. The procedure involves ranking each row (or block) together and then considering the values of ranks by columns. The Friedman test is used for one-way repeated measures analysis of variance by ranks. The given data $\{x_{ij}\}$ is a matrix with rows (the blocks), columns (the treatments), and a single observation at the intersection of each block and treatment, and the ranks within each block are calculated. If there are tied values, the test assigns to each tied value the average of the ranks that would have been assigned without ties, and replaces the data with a new matrix $\{r_{ij}\}$ where the entry r_{ij} is the rank of x_{ij} within block I (Friedman, 1937):

$$\sum_{i}\sum_{j} R_{ij} = \frac{IJ(J+1)}{2}. \tag{1}$$

The test statistic is given by Friedman (1937):

$$Q = \frac{12}{IJ(J+1)}\sum_{j=1}^{J}\left(\sum_{i=1}^{I} R_{ij}\right)^{2} - 3I(J+1). \tag{2}$$

The probability distribution of Q should be obtained from tables of Q specially prepared for the Friedman test. If the p-value is significant, appropriate post hoc multiple-comparison tests can be performed. The null hypothesis for the test is that the means are equal. The alternate hypothesis for the test is that means are not equal.

3. Results and discussion

3.1. Techniques of creative accounting

The most common technique of creative accounting is delaying shipments close to year-end to provide an increase in sales for the first quarter of the next year (statement A7, average value 1.13). On the contrary, the least used technique is investments that are sold to recognize a gain to offset a special charge arising from an asset write-down (statement A8, average value 3.67). Statements A1–A5 deal with costs, while statements A6–A10 deal with sales. The following are brief comments that

are summarized in the following *Discussion* chapter. The average ranking of the A1 statement ("Companies use an optimistic estimate of useful life in depreciating their equipment") of 2.87 places this within the flexibility afforded by accounting standards. However, accounting standards assume that the judgments about the amounts are reliable. With an average ranking of 3.12, respondents feel that technique A2 ("The companies adjust an amortization of their intangible assets to be small") goes within accounting standards and do not generally consider it to be in creative accounting reporting. The classification of 2.62 places technique A3 ("The companies report their warranty liability as too small") in the limits of accounting standards flexibility, not extending to creative accounting reporting. However, the ACPAs and CFOs seem to tend to reject this statement more.

The average ranking of technique A4 ("The value of an ending inventory is understated to decrease tax") of 1.59 indicates a conflict between this technique and accounting standards. Somewhat surprisingly, in technique A5 ("The companies purchase the tangible assets on credit"), the inclusion of loan interest in the costs appears to be less objectionable. The average ranking was 2.58 for this action. The technique A6 ("Books are hold open for several days after the close of the year to record additional sales in the year just ended"), with an average ranking of 1.27, is confirmed to be the technique of creative accounting. These are sales that belong in the next year and will make it more difficult to achieve profit expectations in the coming year. This activity has been a common target in SEC enforcement actions. The technique A7 ("Shipments close to year-end are delayed, providing an increase in sales for the first quarter of the next year") has the lowest value, 1.13, which might seem inconsistent with accounting standards. This technique is the domain of creative accounting reporting. The motivation here may be to reduce the volatility of earnings. Some CFOs note that, in many cases, this was difficult to prevent even if not desired. Technique A8 ("Investments are sold to recognize a gain to offset a special charge arising from an asset write-down") is not a violation of accounting standards. Its highest average ranking of 3.67 indicates that the respondent groups do not view this as potentially creative accounting reporting. Technique A9, which deals with a sale to a field representative, represents shifting the risk of ownership with an average ranking of 3.57. Technique A10 ("Total order revenue is recognized even though only partial shipments were made"), with its average ranking of 1.73, is consistently confirmed to be a technique of creative accounting. Where applicable, shipment is not normally the gold standard for revenue recognition.

Regarding the techniques of creative accounting, the statements presented in the previous chapter could be divided into two groups: costs (A1–A5) and sales (A6–A10). Regarding the first group statements, the most different answers are given by statements A7 and A8 (see below). Statements A1 and A2, which deal with depreciation and amortization, do not reveal the technique of creative accounting. This result does not correspond to those by Jones (2011) nor Remanarić et al. (2018). Jones (2011) showed a strategy of increasing assets by lengthening lives or enhancing goodwill, brands, and other intangible assets. Also, according to Remenaric et al. (2018), the practice of creative accounting usually includes overstating assets and changing depreciation methods. Also, Stangova and Vighova (2016) showed the choice of the amortization of intangible assets as the most common technique of creative accounting. Depreciation as a tool of creation accounting was also shown by Repousis (2016), Palazzi et al. (2020), Lazo and Billings (2023), and Tassadaq and Malik (2015).

The answers to statement A3 on warranty liability do not show a concurring trend. However, provisions for liabilities were indicated as a tool of creative accounting by Remenaric et al. (2018) and Suer (2014). Statement A4, concerning the understated value of an ending inventory to reduce tax, on the other hand, proved to be a creative accounting tool. Also, Jones (2011) provided the strategy of

increasing assets by increasing closing inventory. Inventories were also presented by Lazo and Billings (2012), Lucchese and Di Carlo (2020), and Li et al. (2017). The answers to statement A5 on the deliberate use of the tax shield on purchased tangible assets also showed a similar tendency to that of statement A3. The research has confirmed this area as a significant technique: Abed et al. (2020), Akpanuko and Umoren (2015), Aureli et al. (2019), and Anderson et al. (2014). Goodwill was considered by Carlin and Finch (2011), Linsmeier and Wheeler (2021), and Cavero Rubbio et al. (2020).

The answers to the statements concerning the creative accounting technique in the field of sales (A6–A10) are as follows: The companies hold books open after the close of the year (A6), sales are recognized upon the shipment of the goods to a company's sales representatives (A7), and total revenue is recognized even though only partial shipments occur (A10). In contrast, the following creative accounting techniques are revealed: investments are not sold to recognize gains to offset a special charge arising from an asset write-down (A8), and sales are not recognized upon the shipment of goods to a company's sales representatives (A9). Also, Jones (2011) provides a general strategy for increasing income. The summary of creative accounting techniques is in Table 2.

Table 2. Creative accounting: techniques

Statement	Weighted Average	ACPA	CFO	Lender	CPA	MBA
A1.	2.87	2.89	2.67	2.90	3.10	2.89
A2.	3.12	3.18	3.33	2.95	3.10	3.08
A3.	2.62	2.98	3.00	2.33	2.30	1.83
A4.	1.59	1.36	1.60	1.57	1.50	1.86
A5.	2.58	2.71	2.47	2.20	3.20	2.69
A6.	1.27	1.08	1.00	1.10	1.00	1.86
A7.	1.13	1.03	1.07	1.19	1.20	1.19
A8.	3.67	3.74	3.93	3.48	3.50	3.75
A9.	3.57	3.63	3.90	3.00	4.00	3.63
A10.	1.73	1.72	1.67	1.38	2.33	1.83

3.2. Objectives and motivations behind creative accounting

The statements that deal with the objectives and motivations behind creative accounting are statements B1–B10 (Table 3).

Respondents agree the most with statement B1: It is common for companies to make creative accounting activities; that is, to exploit the flexibility found in the application of accounting standards. All objectives (B2–B5) are confirmed. The main objective is B5, to meet the consensus earnings forecasts of analysts, but the other objectives are significant because their values are similar (1.63–1.87). Regarding the impact of creative accounting on shareholders, it is confirmed that they were harmed (B6 and B7) and that shareholders did not all have the same access to information (B8). Furthermore, it is argued that creative accounting has been expanding in the last decade (B9) and that a campaign against creative accounting is needed (B10). The following are some brief comments from respondents that are summarized in the *Discussion* chapter.

Table 3. Creative accounting: objectives and motivations.

Statement	Weighted Average	ACPA	CFO	Lender	CPA	MBA
B1.	1.47	1.56	1.34	1.32	1.70	1.51
B2.	1.72	1.68	1.65	1.92	1.50	1.98
B3.	1.68	1.72	1.56	1.70	2.01	1.71
B4.	1.87	2.01	1.84	1.84	1.65	1.89
B5.	1.63	1.69	1.55	1.63	1.41	1.79
B6.	1.62	1.67	1.66	1.77	1.40	1.71
B7.	2.56	2.37	2.52	2.21	2.79	2.54
B8.	2.66	2.95	2.52	2.40	2.44	2.57
B9.	1.78	2.00	1.53	1.78	1.70	1.84
B10.	1.89	1.90	2.01	1.92	1.81	1.95

As for statement B1 ("It is common for companies to make creative accounting activities; that is, to exploit the flexibility found in the application of accounting standards") some ACPAs commented that where motivation exists, creative accounting is commonplace; not as much as in the past, but economic turn down represents a serious motivation. As for statement B2 ("A common objective of creative accounting is to reduce earnings volatility"), some ACPAs commented that this is true to the extent that meeting or exceeding expectations reduces volatility. As for statement B3 ("A common objective of creative accounting is to support or increase stock prices"), ACPAs agreed but commented that it does not mean that it is necessarily successful.

As for statement B4 ("A common objective of creative accounting is to increase income or cash flow"), ACPAs commented that it might be an overemphasized objective. As for statement B5 ("A common objective of creative accounting is to meet consensus earnings forecasts of analysts"), ACPAs agreed and commented that this is an unfortunate pressure on companies that did not exist before. As for statement B6 ("Shareholders are sometimes harmed by creative accounting practices"), some CFOs commented that only occurred when companies went outside the flexibility afforded by accounting standards. A CPA thinks that they probably hurt potential investors or those who were currently investing based on inflated earnings. As for statement B7 ("Creative accounting can be helpful to shareholders"), some ACPAs commented that mild creative accounting techniques aimed at reducing earnings volatility could be useful, but otherwise disagreed. Some CFOs commented that sustained earnings growth consistent with earnings expectations was better for shareholders than volatile swings quarter to quarter. A CPA agreed with this statement, but only in the short term. As for statements B6 and B7, respondents are in stronger agreement that creative accounting techniques could hurt shareholders (1.62) as opposed to helping (2.56). The questions were mutually exclusive, and so were the answers, as a test of the quality of filling out the questionnaire by the respondents.

As for statement B8 ("All shareholders have equal access to material financial information") some ACPAs commented that only if they were educated. As for statement B9, the respondents agreed that creative accounting has become more common over the past decade. Some ACPAs noted increased pressure on management to meet earnings to improve stock performance or to emphasize meeting analyst forecasts. A CPA explained that the requirements are to meet quarterly earnings estimates and manage the incredible volatility of the markets. As for statement B10 ("The campaign against creative accounting is necessary"), most respondents agreed and some of them commented. ACPAs agreed but noted that the campaign has gone overboard, to a point where leading practitioners are afraid to

exercise professional judgment. They referred that, if the CPAs would not take action, somebody else should, or that at best, the campaign would only slightly mitigate the practice. Some CFOs commented that using the flexibility afforded by accounting standards was prudent business and going beyond (abusive) was not. A CPA who did not agree with this statement commented that it was important for companies to play by the same rules, and it was inconceivable to believe that earnings would not fluctuate in ranges from year to year.

Regarding the objectives and motivations (B1–B10) behind creative accounting, all statements B1–B5 were confirmed, namely to exploit the flexibility found in the application of accounting standards, to reduce earnings volatility, to support or increase stock prices, to increase income or cash flow, and to meet consensus earnings forecasts of analysts. Al-Hashimy and Al-Hashimy (2019) presented reasons including the boost of shares, prices, taxes, and dividends. De Aquino et al. (2020) also showed the increase in expenditure and decrease in the amount of taxes that the business is required to pay to the government as reasons.

De Villiers and Sharma (2020) presented the primary motivation for publicly traded corporations driving up share values on the stock market. The objectives of the other studies were the following: to boost the share price in the stock market, to avoid paying taxes, the payment of dividends (Boerman, 2020), debt structure and financial distress, or encouraging investors to buy the shares of the company (Converse et al., 2019). Jones (2011) presented objectives and motivations behind creative accounting as personal and market expectations. Hollander Sanhueza and Morales Parada (2017), Remenarić (2018), and Feldman et al. (2010) described loopholes and subjectivity in international standards leading to creative accounting practices. Aharony et al. (2010) revealed the many regulations without adequate checks as a motivation for creative accounting. Abed et al. (2022) presented agency problems, executive rewards, share ownership schemes, and income smoothing as motivations behind creative accounting.

In addition, it has been confirmed that shareholders were harmed by creative practices (B6). Indeed, shareholders suffer because they receive distorted information about the market value of their shares, which is confirmed in statement B3. The statement B7 is contradictory; therefore, it also has opposite results. As already said, this question has a control function in the questionnaire. The answers to statement B8 do not agree that all shareholders have equal access to material financial information. According to the answers, the practice of creative accounting has become more common over the past decade (B9). On the other hand, it turns out that creative accounting has been around for a long time. Creative accounting was mentioned in Anglo-Saxon literature in the 1970s (Watts and Zimmermann, 1978). Creative accounting methods began to be more intensely debated in the 2000s, mainly because of the financial scandals. The last statement, B10, says that the campaign against creative accounting was necessary (B10), which would be an objective for further research (see below).

3.3. Testing hypotheses

Two hypotheses (H1: There is no difference in the presented results in the field of techniques of creative accounting between groups of financial professionals; and H2: There is no difference in the presented results in the field of objectives and motivations behind creative accounting between groups of financial professionals) were tested. Both hypotheses were confirmed. Results are presented in Table 4 and discussed in the following chapter.

There is no difference between the results of groups of respondents neither in techniques nor in objectives and motivations. Therefore, this article does not focus on discussing the answers of

individual groups but averages them. On the contrary, Gadelha Dias et al. (2016) showed that the academic view on creative accounting differed from that of accounting professionals in general. Jiang et al. (2010) examined the association between chief financial officers and creative accounting because as the CFOs' primary responsibility is to financially report, they should play a stronger role than the chief executive officer. So how do the respondents generalize creative accounting? The opinion on creative accounting seems to be the same across accounting specialists and, according to the answers to the statements, it is an aversion to creative accounting (answers to statements B6–B10). Also, the results of Balanciu et al. (2012) showed that more than half of the respondents are risk-averse when it comes to changing accounting methods to ensure a better company result, and around 30% would not use these methods. Cernusca et al. (2016), however, stated in their research that more than 50% of university students would not tend to use creative accounting methods, but most practicing accountants do not oppose it and do not rule out such a possibility.

Table 4. Creative accounting: objectives and motivations.

	Hypothesis H1	Hypothesis H2
Testing criteria $\alpha = 0.05$ (1) (2)	5.36	7.08
Critical value (Kubanová & Linda, 2009)	10.68	10.68

4. Conclusions

Various accounting alternatives and legal and accounting rules can be applied to provide the freedom to create a chosen image of a company's financial situation.

This paper includes the author's research conducted via questionnaires. The survey respondents included chief financial officers or comparable senior financial employees, e.g., controller (hereafter CFO), commercial bank lenders (lender), certified public accountants (CPA), and accounting academics (ACPA). I also surveyed some advanced Master of Business Administration (MBA) students who had some experience with accounting and were enrolled in advanced elective courses in accounting and finance. A total of 318 finance professionals completed the qualitative and quantitative survey. The questionnaires were distributed during the autumn of 2023.

The research intended to identify the creative accounting techniques and objectives and motivations of creative accounting in the Czech Republic and confirm hypotheses about the similarity of groups of respondents.

As for the techniques for creative accounting, it was found that there is a conflict between real actions and accounting standards in practices such as holding open books, delaying shipments, recognizing revenue on partial shipments, and changing inventory values. On the other hand, amortization is not beyond accounting standards. Recognizing a gain from selling investments and recognizing sales upon the shipment of goods to sales representatives do not often lead to creative accounting reporting. Similarly, investments to recognize a gain and offset a special charge arising from asset write-down, and recognizing sales upon the shipment of goods to a company's sales representatives, are not typically associated with creative accounting.

As for the objectives and motivations, the research also examined these declarations: a common objective of creative accounting is to exploit the flexibility found in the application of accounting standards, reduce earnings volatility, support, or increase stock prices, increase income or cash flow, and meet the consensus earnings forecast of analytics. Shareholders could be harmed by creative

accounting practices and, on the contrary, creative accounting might not be helpful to shareholders. Shareholders do not all have equal access to financial information. The practice of creative accounting has become more common over the past decade. The campaign against creative accounting is necessary.

The tested hypotheses are presented. H1: There is no difference in the presented results in the field of techniques of creative accounting between groups of financial professionals. H2: There is no difference in the presented results in the field of objectives and motivations of creative accounting between groups of financial professionals. Both hypotheses were confirmed, meaning that all types of financial professionals have a similar view of creative accounting.

Using the information obtained, it will be possible to focus on specific areas of creative accounting and its motivation, which may be the first step in its reduction. Further research could focus on how to reduce creative accounting, which was confirmed by this research (B10). There are two possible ways to reduce it. First are environmental constraints (appropriate reward and incentive structures, better regulations and codes of corporate governance, and enhanced supervision) (Balaciu et al., 2012), and second is enforcement and ethics leading to better enforcement and code of ethics (Mulford and Comiskey, 2005).

However, when reviewing the possible solutions to creative accounting, it is necessary to take a long view and be realistic. By instituting enhanced controls and enforcement as well as increasing ethical awareness, it may indeed be possible to curb the worst excesses of financial manipulation. However, given the perennial nature of the problem, it is unlikely that creative accounting will ever be completely eliminated.

Use of AI tools declaration

The authors declare they have not used Artificial Intelligence (AI) tools in the creation of this article.

Acknowledgments

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of interest

All authors declare no conflicts of interest in this paper.

References

Ababneh TEA, Aga M (2019) The impact of sustainable financial data governance, political connections, and creative accounting practices on organizational outcomes. *Sustainability* 11: 5676. https://doi.org/10.3390/su11205676

Abed IA, Hussin N, Ali MA (2020) Piloting the Role of Corporate Governance and Creative Accounting in Financial Reporting Quality. *Technology Reports of Kansai University* 62: 5509–5514.

Abed IA, Hussin N, Ali MA, et al. (2022) Creative accounting determinants and financial reporting quality: Systematic literature review. *Risks* 10: 76. https://doi.org/10.3390/risks10040076

Agostini M, Favero G (2017) Accounting fraud, business failure and creative auditing: A microanalysis of the strange case of the Sunbeam Corporation. *Account Hist* 22: 472–487. https://doi.org/10.1177/1032373217718871

Aharony J, Wang J, Yuan H (2010) Tunneling as an incentive for earnings management during the IPO process in China. *J Account Public Policy* 29: 1–26. https://doi.org/10.1016/j.jaccpubpol.2009.10.003

Akpanuko EE, Umoren NJ (2018) The influence of creative accounting on the credibility of accounting reports. *J Financ Report Accoount* 16: 292–310. https://doi.org/10.1108/JFRA-08-2016-0064

AL-Hashimy HNH (2019) The Role of Auditing Practices that Affect Accounting Standards and Taxable Income: A Study in Iraq. *J University Babylon Pure Appl Sci* 27: 244–258.

Al-Hashimy HNH (2022) A review of Accounting Manipulation and Detection: Technique and Prevention Methods. *Int J Bus Manage Invent* 11: 82–89.

Al-hashimy HNH (2019) Strategic Accounting in the Profitability of Construction Engineering Projects Management Companies in Iraq. *J Eng Appl Sci* 14: 941–944.

Ali A, Zhang W (2015) CEO tenure and earnings management. *J Account Econ* 59: 60–79. https://doi.org/10.1016/j.jacceco.2014.11.004

Anderson N, Potočnik K, Zhou J (2014) Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *J Manag* 40: 1297–1333. https://doi.org/10.1177/014920631452712

Aureli S, Giampaoli D, Ciambotti M, et al. (2019) Key factors that improve knowledge-intensive business processes which lead to competitive advantage. *Bus Process Manag J* 25: 126–143. https://doi.org/10.1108/BPMJ-06-2017-0168

Badertscher BA (2011) Overvaluation and the choice of alternative earnings management mechanisms. *Account Rev* 86: 1491–1518. https://doi.org/10.2308/accr-10092

Badolato PG, Donelson DC, Ege M (2014) Audit committee financial expertise and earnings management: The role of status. *J Account Econ* 58: 208–230. https://doi.org/10.1016/j.jacceco.2014.08.006

Baik BO, Farber DB, Lee SAM (2011) CEO ability and management earnings forecasts. *Contemp Account Res* 28: 1645–1668. https://doi.org/10.1111/j.1911-3846.2011.01091.x

Balaciu D, Bogdan V, Vladu AB (2009) A brief review of creative accounting literature and its consequences in practice. *Annales Universitatis Apulensis: Series Oeconomica* 11: 170.

Balaciu D, Bogdan V, Mester I, et al. (2012) Empirical Evidence of Romanian Auditors' Behavior Regarding Creative Accounting Practices. *Account Manage Inform Syst* 11: 213–238.

Bao SR, Lewellyn KB (2017) Ownership structure and earnings management in emerging markets—An institutionalized agency perspective. *Int Bus Rev* 26: 828–838. https://doi.org/10.1016/j.ibusrev.2017.02.002

Bernoth K, Wolff GB (2008) Fool the markets? Creative accounting, fiscal transparency and sovereign risk premia. *Scott J Polit Econ* 55: 465–487. https://doi.org/10.1111/j.1467-9485.2008.00462.x

Boerman SC (2020) The effects of the standardized Instagram disclosure for micro-and meso-influencers. *Comput Hum Behav* 103: 199–207. https://doi.org/10.1016/j.chb.2019.09.015

Brander M, Gillenwater M, Ascui F (2018) Creative accounting: A critical perspective on the market-based method for reporting purchased electricity (scope 2) emissions. *Energy Policy* 112: 29–33. https://doi.org/10.1016/j.enpol.2017.09.051

Brandt L, Van Biesebroeck J, Zhang Y (2012) Creative accounting or creative destruction? Firm-level productivity growth in Chinese manufacturing. *J Dev Econ* 97: 339–351. https://doi.org/10.1016/j.jdeveco.2011.02.002

Carlin TM, Finch N (2011) Goodwill impairment testing under IFRS: a false impossible shore? *Pac Account Rev* 23: 368–392.

Cavero Rubio JA, Amoros Martinez A, Collazo Mazon A (2021) Economic effects of goodwill accounting practices: systematic amortisation versus impairment test. *Span J Financ Account* 50: 224–245. https://doi.org/10.1080/02102412.2020.1778376

Cernusca L, David D, Nicolaescu C, et al. (2016) Empirical study on the creative accounting phenomenon. *Stud Univ Vasile Goldis Arad Seria Stiinte Economice* 26: 63–87. https://doi.org/10.1515/sues-2016-0010

Chiu PC, Teoh SH, Tian F (2013) Board interlocks and earnings management contagion. *Account Rev* 88: 915–944. https://doi.org/10.2308/accr-50369

Cohen D A, Zarowin P (2010) Accrual-based and real earnings management activities around seasoned equity offerings. *J Account Econ* 50: 2–19. https://doi.org/10.1016/j.jacceco.2010.01.002

Collins DW, Pungaliya RS, Vijh AM (2017) The effects of firm growth and model specification choices on tests of earnings management in quarterly settings. *Account Rev* 92: 69–100. https://doi.org/10.2308/accr-51551

Converse BA, Juarez L, Hennecke M (2019) Self-control and the reasons behind our goals. *J Pers Soc Psychol* 116: 860. https://doi.org/10.1037/pspp0000188

Cormier D, Lapointe-Antunes P (2006) The auditor's assessment and detection of corporate fraud: Some Canadian evidence. *Int J Account Audit Perform Eval* 3: 133–165. https://doi.org/10.1504/IJAAPE.2006.010299

De Aquino ACB, Lino AF, Cardoso RL, et al. (2020) Legitimating the standard-setter of public sector accounting reforms. *Public Money Manage* 40: 499–508. https://doi.org/10.1080/09540962.2020.1769381

De Villiers C, Sharma U (2020) A critical reflection on the future of financial, intellectual capital, sustainability and integrated reporting. *Crit Perspect Account* 70: 101999. https://doi.org/10.1016/j.cpa.2017.05.003

Dechow PM, Hutton AP, Kim, JH, et al. (2012) Detecting earnings management: A new approach. *J Account Res* 50: 275–334. https://doi.org/10.1111/j.1475-679X.2012.00449.x

Dechow PM, Myers LA, Shakespeare C (2010) Fair value accounting and gains from asset securitizations: A convenient earnings management tool with compensation side-benefits. *J Account Econ* 49: 2–25. https://doi.org/10.1016/j.jacceco.2009.09.006

Falcón VV, Sánchez FDJC, Vizcaino MEG (2019) An axiological look at Creative Accounting. https://doi.org/10.2139/ssrn.3554841

Feldman R, Govindaraj S, Livnat J, et al. (2010) Management's tone change, post earnings announcement drift and accruals. *Rev Account Stud* 15: 915–953. https://doi.org/10.1007/s11142-009-9111-x

Friedman M (1937) The Use of Ranks to Avoid the Assumption of Normality Implicit in the Analysis of Variance. *J Am Stat Assoc* 32: 675–701.

Gadelha Dias AG, da Cruz Cunha JH, Henriques Sales IC, et al. (2016) Creative Accounting, Ethics and Earnings Management: Auditors versus Academics. *Rev Adm Dialogo* 18: 133–151.

Gowthorpe C, Amat O (2005) Creative accounting: some ethical issues of macro-and micro-manipulation. *J Bus Ethics* 57: 55–64. https://doi.org/10.1007/s10551-004-3822-5

Griffiths I (1986) *Creative Accounting*. London: Sedgwick & Jackson Publisher.
Gunny KA (2010) The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks. *Contemp Account Res* 27: 855–888. https://doi.org/10.1111/j.1911-3846.2010.01029.x
Habib A, Uddin Bhuiyan B, Islam A (2013) Financial distress, earnings management and market pricing of accruals during the global financial crisis. *Manag Financ* 39: 155–180.
Hadani M, Goranova M, Khan R (2011) Institutional investors, shareholder activism, and earnings management. *J Bus Res* 64: 1352–1360. https://doi.org/10.1016/j.jbusres.2010.12.004
Han S, Kang T, Salter S, et al. (2010) A cross-country study on the effects of national culture on earnings management. *J Int Bus Stud* 41: 123–141. https://doi.org/10.1057/jibs.2008.78
Hazarika S, Karpoff JM, Nahata R (2012) Internal corporate governance, CEO turnover, and earnings management. *J Financ Econ* 104: 44–69. https://doi.org/10.1016/j.jfineco.2011.10.011
Hollander Sanhueza R, Morales Parada F (2017) A Perspective on the Creative Accounting Phenomenon form IFRS and IPSAS. *Rev Perspect Empresarial* 4: 85–94.
Hong Y, Andersen ML (2011) The relationship between corporate social responsibility and earnings management: An exploratory study. *J Bus Ethics* 104: 461–471. https://doi.org/10.1007/s10551-011-0921-y
Hussein H, Kasim N, Arumugam V (2015) A review of creative accounting practices and its area, technique and ways of prevention. *Int J Sci Res* 4: 1377–1381.
Ibanichuka EA, Ihendinihu JU (2012) Creative accounting and implication for dividend payout of companies in the financial sub-sector of Nigerian economy. *Mediterr J Soc Sci* 3: 132–134. https://doi.org/10.5901/mjss.2012.v3n15p125
Jackson AB (2018) Discretionary accruals: earnings management... or not? *Abacus* 54: 136–153. https://doi.org/10.1111/abac.12117
Jameson M (1988) *Practical guide to creative accounting*. London: Kong Page.
Jiang JX, Petroni KR, Wang IY (2010) CFOs and CEOs: Who have the most influence on earnings management? *J Financ Econ* 96: 513–526. https://doi.org/10.1016/j.jfineco.2010.02.007
Jones M (2011) *Creative Accounting, fraud and international accounting scandals*. Chichester: Joho Wiley & Sons, Ltd.
Kothari SP, Mizik N, Roychowdhury S (2016) Managing for the moment: The role of earnings management via real activities versus accruals in SEO valuation. *Account Rev* 91: 559–586. https://doi.org/10.2308/accr-51153
Kubanová J, Linda B (2009) *Kritické hodnoty a kvantily vybraných rozdělení pravděpodobností*. Pardubice: Univerzita Pardubice.
Kuběnka M (2018) Improvement of prosperity prediction in Czech manufacturing industries. *Inž Eko* 29: 516–525. https://doi.org/10.5755/j01.ee.29.5.18231
Li Y, Qian X, Zhang L, et al. (2017) Exploring spatial explicit greenhouse gas inventories: Location-based accounting approach and implications in Japan. *J Clean Prod* 167: 702–712. https://doi.org/10.1016/j.jclepro.2017.08.219
Linsmeier TJ, Wheeler E (2021) The debate over subsequent accounting for goodwill. *Account Horiz* 35: 107–128. https://doi.org/10.2308/HORIZONS-19-054
Lo AW, Wong RM, Firth M (2010) Can corporate governance deter management from manipulating earnings? Evidence from related-party sales transactions in China. *J Corp Financ* 16: 225–235. https://doi.org/10.1016/j.jcorpfin.2009.11.002

Lucchese M, Carlo FD (2020) Inventories Accounting under US-GAAP and IFRS Standards: The Differences That Hinder the Full Convergence. *Int J Bus Manag* 15: 180–195. https://dois.org/10.5539/ijbm.v15n7p180

Massa M, Zhang B, Zhang H (2015) The invisible hand of short selling: Does short selling discipline earnings management? *Rev Financ Stud* 28: 1701–1736. https://doi.org/10.1093/rfs/hhu147

McBarnet D, Whelan C (1999) *Creative accounting and the cross-eyed javelin thrower*. John Wiley & Sons Inc.

Milesi-Ferretti GM (2004) Good, bad or ugly? On the effects of fiscal rules with creative accounting. *J Public Econs* 88: 377–394. https://doi.org/10.1016/S0047-2727(02)00076-2

Mulford CW, Comiskey EE (2005) *The financial numbers game: detecting creative accounting practices*. New York: John Wiley & Sons.

Mutuc EB, Lee JS, Tsai FS (2019) Doing good with creative accounting? Linking corporate social responsibility to earnings management in market economy, country and business sector contexts. *Sustainability* 11: 4568. https://doi.org/10.3390/su11174568

Palazzi F, Sgrò F, Ciambotti M, et al. (2020) Technological intensity as a moderating variable for the intellectual capital–performance relationship. *Knowl Process Manag* 27: 3–14. https://doi.org/10.1002/kpm.1617

Pasko O, Chen F, Tkal Y, et al. (2021) Do Converged to IFRS National Standards and Corporate Governance Attributes Affect Accounting Conservatism. Evidence from China. *Sci Papers U Pardubice-Ser D- Faculty Econ Admin* 29. https://doi.org/10.46585/sp29021272

Popescu VA, Popescu GN, Roman C, et al. (2009) From creative accounting to the moral and financial crisis. *Metal Int* 14: 141–149.

Remenarić B, Kenfelja I, Mijoč I (2018) Creative accounting–motives, techniques and possibilities of prevention. *Ekon Vjesn* 31: 193–199.

Repousis S (2016) Using Beneish model to detect corporate financial statement fraud in Greece. *J Financ Crime* 23: 1063–1073. https://doi.org/10.1108/JFC-11-2014-0055

Rodríguez-Pérez G, Van Hemmen S (2010) Debt, diversification and earnings management. *J Account Public Policy* 29: 138–159. https://doi.org/10.1016/j.jaccpubpol.2009.10.005

Safta IL, Achim MV, Borlea SN (2020) Manipulation of financial statements through the use of creative accounting. Case of Romanian companies. *Stud Univ Vasile Goldis Arad Seria Stiinte Economice* 30: 90–107.

Sharma N (2020) Creative accounting: an interaction of HR and accounting. *JIMS8M: J Indian Manag Strategy* 25: 19–27. https://doi.org/10.5958/0973-9343.2020.00003.4

Sohn BC (2016) The effect of accounting comparability on the accrual-based and real earnings management. *J Account Public Policy* 35: 513–539. https://doi.org/10.1016/j.jaccpubpol.2016.06.003

Stangova N, Vighova A (2016) Possibilities of creative accounting avoidance in the Slovak Republic. *Econ Ann-XXI* 158: 97–100. http://dx.doi.org/10.21003/ea.V158-22

Stockmans A, Lybaert N, Voordeckers W (2010) Socioemotional wealth and earnings management in private family firms. *Fam Bus Rev* 23: 280–294. https://doi.org/10.1177/089448651037445

Stubben SR (2010) Discretionary revenues as a measure of earnings management. *Account Rev* 85: 695–717. https://doi.org/10.2308/accr.2010.85.2.695

Suer AZ (2014) The Recognition of Provisions: Evidence from BIST100 Non-financial Companies. *Procedia Econ Financ* 9: 391–401. https://doi.org/10.1016/S2212-5671(14)00040-9

Taherinia M, Tavakoli N, Tavakoli F (2018) The impact of creative accounting on the probability of fraud in the companies accepted in the Tehran stock exchange. *Ind Eng Manag Syst* 17: 709–718. https://doi.org/10.7232/iems.2018.17.4.709

Tassadaq F, Malik QA (2015) Creative accounting & financial reporting: model development & empirical testing. *Int J Econ Financ Iss* 5: 544–551.

Vladu AB, Amat O, Cuzdriorean DD (2017) Truthfulness in accounting: How to discriminate accounting manipulators from non-manipulators. *J Bus Ethics* 140: 633–648. https://doi.org/10.1007/s10551-016-3048-3

Watts RL, Zimmerman JL (1990) Positive accounting theory: a ten year perspective. *Account Rev*, 131–156.

Zang AY (2012) Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *Account Rev* 87: 675–703. https://doi.org/10.2308/accr-10196

AIMS Press

© 2024 the Author(s), licensee AIMS Press. This is an open access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0)