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## EMPIRICAL STUDY ON THE CREATIVE ACCOUNTING PHENOMENON

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**Abstract:** The present study aims to analyze the accounting professionals' point of view as opposed to the students and master students' one, regarding the creative accounting phenomenon existence and manifestation forms. In order to accomplish this objective, there has been used the poll/investigation, as a research method and the questionnaire, as a research instrument. Within the study, there is suggested the testing of more hypotheses that contribute to the clarifying of the aspects wished to be analyzed through the research. These hypotheses' acceptance or rejection is based on the „chi-square" (Karl Pearson) statistical test and rank ordering method. Trying to elaborate a global conclusion of the questionnaire, there could be noticed the fact that over 50% from the questioned accounting students are not tempted to use the creative accounting practices and techniques in order to optimize the taxation without breaking the actual law regulations. At the opposite side, more than a half from the questioned accounting professionals would use these practices without breaking the law regulations that lead to the taxation's optimization. The creative accounting has a negative connotation if the accurate image of the financial position and of the performance is not targeted because it represents the essential factor for elaborating and grounding the accounting policies. However, the positive side of the creative accounting is not excluded, given that one appeals to the „fair" professional judgment of the accounting professionals and to the good faith of managers.

**Key words:** creative accounting, ethics, „chi square" statistical test, accounting students, accounting professionals.

**Jel codes:** M41

## 1. Introduction

The creative accounting is associated, by the accounting professionals, with the creative work, the design, the research and the management of "technological process", the resulting information being presented in the financial statements in accordance with the wishes expressed by the management of the economic entity. If methods are applied by specialists of good faith, the result is as realistic as possible. If the techniques and methods are used, aiming to present a favorable financial position and favorable performances of the economic entity, the result may be distorted. The question that comes out in this case is to determine whether creative accounting and fraud are two synonymous concepts. The answer is categorically negative, because fraud is an act of bad faith that violates the law and has a negative character. Creative accounting appeals to accounting practices deriving from standard accounting practices.

The accounting's role is to provide the necessary information in order to take decisions regarding the financial position, the performances and the changes in financial position of the economic entity. The information provided is useful for business partners only if they satisfy certain characteristics that ensure the quality of reporting. IASB (International Accounting Standards Board) is the global accounting standard-setting body assuming the central role on coordinating the international accounting convergence process (Burca & Cotlet, 2014, p.73).

In the process of convergence initiated by the IASB and FASB there has been drafted a concept paper: Conceptual framework for financial reporting, valid from the 1<sup>st</sup> of January 2011. In Chapter 3 of this regulation, entitled "Qualitative characteristics of useful financial information" qualitative characteristics were divided into two categories: fundamental characteristics (relevance and accurate representation) and auxiliary characteristics (comparability, verifiability, timeliness, intelligibility). If there are two or more ways considered equally relevant and accurate in order to describe an economic phenomenon, the auxiliary characteristics are those that help choosing one of them, enhancing the utility of information already fulfilling the fundamental characteristics (Tabara & Rusu, 2011).

Although the efforts of the normalization organisms have been intensified and the importance of the financial statements had increased within the decision-making process, the accounting information has only partially managed to fulfill the objective of providing an accurate image, as close to reality business of an economic entity. The 21<sup>st</sup> century was marked by diverse financial scandals registered at companies (Enron, Parmalat, etc.), but also by the economic crisis manifested worldwide, they demonstrating the limits of the quality and the credibility within the financial information presented in the main financial

statements. They are based either on the use of certain fakes or on the use of certain techniques in order to conceal the accounting information, known as creative accounting.

In the last decade, in Romania, the concept of creative accounting began to be a much debated issue within the academic and the professional areas.

This paper aims to analyze the perception of the accounting professional opposite to that of the bachelor and master accounting specialized students, regarding the forms of creative accounting or the influence that the applying of the creative accounting techniques and practices have on the financial information specific to the companies in Romania.

Thus, we will discuss two target groups within the Arad county: one consisting of the accounting professionals and the second represented by students / master students from the two universities: "Aurel Vlaicu" University and the "Vasile Goldis" Western University.

## 2. Literature review

References to the creative accounting were made for the first time in 1494 within the famous treatise by Luca Paciolo: "Suma de arithmetica, geometria, proportioni et proportionalita". It refers to creative accounting techniques used in Venice in terms of a foreign trade very well developed. Relations among those times traders were written in ink, based on the accounting principles, within the main and secondary registers. When appearing inconsistencies between them, often the ink bottle was poured over them, not by chance but for the records to become illegible.

Following the financial scandals that rocked the economic reality, the studies and the investigations that have studied the phenomenon of creative accounting have attracted more and more attention. At the international level, we find a series of specialized papers placed in the creative accounting area that revise the accounting models leading to the outcome's deflation outcome (for the purpose of tax optimization) or at the opposite side, accounting models leading to the artificial swell of the result (in order to attract the investors or to contract a bank loan). In most of the cases, the specialized literature brings to front a general overview of creative accounting, focusing more on the impasse in which there is the financial information included in the financial statements (balance sheet, income statement and notes) and less on the removing techniques of this phenomenon of handling figures (Dumitrescu 2014, p.25). Several authors belonging to the specialized literature from abroad manage to emphasize a number of faces of the creative accounting, many of them directed toward answering the question though: Do the financial statements offer an accounting truth?

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Compared with the specialized publications from abroad, the accounting literature in Romania is still insufficient regarding the creative accounting phenomenon. We could note a number of studies elaborated by Romanian authors that contributed to the development of this topic in our country.

In Romania, the first work in which they have been made references to the creative accounting issue belongs to the professor Niculae Feleaga (1996). In his work, entitled "Accounting Controversies, Conceptual Difficulties and Accounting Credibility" professor emphasizes some points of view on the dimensions and boundaries of creative accounting, drawing attention to the fact that the creative accounting exacerbates the contemporary crisis increase. Malciu (1999, pp.109-125) leans on the challenges that the creative accounting supposes for the accounting profession and in seeking solutions in order to limit its use. A representative work on the creative accounting issue is the professors' Feleaga & Malciu one (2002). This is structured into two parts: the first is dedicated to the accounting options and policies in a positive sense (accounting fair) and the second is intended to the creative accounting phenomenon (bad accounting). Within the content of the second part of the paper, dedicated to the creative accounting phenomenon are discussed conceptual and motivational aspects of emergence and development of creative accounting practices, coordinates and meanings of these practices in analyzing the ethics and the ways of combating the accounting techniques of intent. (Feleaga & Malciu 2002, pp. 389-462).

In his work, Cernusca (2004, pp. 389-465) raises the issue of the improvement of financial statements through bad intentioned accounting options and policies. There are discussed a number of issues related to the optimistic and pessimistic attitudes in grounding the accounting policies shaping the outcome and the content of the financial statements.

In the acceptance of Diaconu (2004), the creative accounting phenomenon could be caused by the desire of managers to more and more increased salaries. The above mentioned author believes that "Most indicators which represent basis for calculating the salaries of managers are based on the company they manage annual accounts. Therefore, managers will be always interested to exert pressure on those indicators, so that they to be as close as possible to the value provided for an as a substantial as possible bonus". (Diaconu, 2004, p. 209). In the acceptance of Patroi (2006, p.9) creative accounting techniques "may be a direct and dangerous threat to the stability of the accounting rules."

Ristea and Dumitru (2008) bring into discussion a number of conceptual development and deepening on prudence and aggressiveness in accounting. There are presented in the paper's content a series of creative accounting techniques and practices regarding the valuation of tangible and intangible assets, regarding the

valuation of financial instruments, regarding the measuring of inventories, regarding the impairment of receivables, etc.

In the content of his research, Dumitrescu (2014, p. 35) seeks to present "the creative accounting as a deceptive practice in order to handle the financial statements and, also, as a positive, beneficial technique which aims to find new solutions to current accounting problems for the purpose of presenting as accurately as possible the financial position and the performances of organizations."

Balaciu (2012) achieves an empirical research on the Romanian area seeking the auditors' perception and the attitude of managers on creative accounting practices. In the presented context, the author aims to identify a possible trend of appealing to creative accounting practices in order to provide, through the presented financial statements a positive image of the economic entity.

Grosanu (2013) takes into consideration the topic of the creative accounting in a complex manner, trying to find answers to various questions related to its practice. It can be retained the question concerning also the authors of this paper: What is the solution, either for using the creative accounting in good faith or to prohibit techniques of creative accounting?

In the specialized economic literature, we could notice some empirical studies on the existence and development of the creative accounting practices using the views of various target groups composed of accounting professionals, financial auditors, accounting specialized students/master students, alumni, academics and representatives of the professional bodies. Thus, we recall the concerns of such research by Jones (1991), Dechow, Sloan and Sweeney (1995), Burgustahler and Dichev (1997), Balaciu (2011), Vladu and Grosanu (2011), Fagbeni and Olaoye (2014), Karim, Fowzia & Rashid (2014), Cernusca & Balaciu (2014), Stoica & Cernusca (2014), Balaciu et. al (2014), Herbal & Cernusca (2015), Balaciu (2015) Faragalla (2015), Herbei & Cernusca (2015), Marin & Lesconi-Frumusanu (2015), Inalial Mohd Ali et al. (2016), Mudel (2016), Traistaru (2016).

On the line of the concerns of the above mentioned authors shall also be entered the subject of this paper, which aims to study the perception of the accounting professionals opposite to the accounting specialized students/master students on the phenomena of the creative accounting manifestation.

### 3. Research Methodology

There has been made an exploratory study being based on a descriptive cross-sectional research, the research method used was the survey and the research tool was the questionnaire. The following scientific research methods were also used: the comparison method, the observation method, the method of economic analysis,

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the statistical method, the graphical method, the case study method, the statistical analysis and the comparative analysis.

An important role has also the quantitative research which aimed to analyze the perception of the accounting professionals opposite to the accounting specialized students and master students' one regarding the phenomena of creative accounting's manifestation and the influence that the appliance of the creative accounting techniques and practices has on the financial information of companies in Romania. In order to achieve this goal, there has been developed a questionnaire containing two categories of questions: general questions, their role being to provide a more complete picture on the personal profile of the target group and questions about perception of the accounting professionals opposite to the accounting specialized students' one regarding their perception on the phenomena of creative accounting manifestation. The questionnaire has been distributed to the target group consisting of a total number of 200 accounting professionals members of the Body of Expert and Licensed Accountants of Romania (CECCAR) within the Arad branch and 175 accounting specialized students and master students from the Faculty of Economics of "Aurel Vlaicu" University of Arad and of "Vasile Goldis" Western University of Arad. The questionnaire has been distributed during January, February and March 2016, representing the basis on which interpretation of scientific endeavor was conducted. The material determines its five objectives dynamically translated by testing hypotheses presented in detail in the following section.

Setting the research hypothesis helps clarifying issues that need to be analyzed within the research and it can be accepted or rejected by appealing to calculations based on the statistical test "chi square" and rank ordering method.

Also, there have been used the following techniques and methods of research: studying the literature within the field, collecting and processing information, making tables and graphs in order to illustrate as clearly as possible the results of the research.

#### 4. Resultes and discussion

We intend to bring to the front the analyzed issues in order to achieve the objectives taken into consideration.

**Objective I:** The perception of the two target groups about the opportunities offered by the accounting and by the tax legislation to resort to creative accounting techniques and practices that do not exceed the limits imposed by law in order to improve the image of the financial position and of the economic and financial performance.



Within this objective we intend to test the following hypothesis:

**Hypothesis I:** There is a difference of perception between the accounting specialized students and the accounting professionals regarding their opinion about the opportunities offered by the accounting and by the tax legislation in what concerns applying creative accounting techniques and practices that do not exceed the limits imposed by law in order to improve the image of the financial position and of the economic and financial performance.

The two target groups were asked to answer the following question: "Do you think that the accounting and the tax legislation provide sufficient opportunities to accounting professionals so that they could apply creative accounting techniques and practices that do not exceed the limits imposed by law in order to improve the image of the financial position and of the economic and financial performance?" The predetermined answers to the question were based on the Likert scale using five possible answers marked from 1- totally disagree to 5- totally agree.

**The null hypothesis H<sub>0</sub>:** There is not a difference of perception between the two target groups regarding their opinion about the opportunities offered by the accounting and by the tax legislation to resort to creative accounting techniques and practices that do not exceed the limits imposed by law in order to improve the image of the financial position and of the economic and financial performance.

In order to test the hypothesis, we take into consideration the chi square test (Karl Pearson). In this context, there have been completed the following steps: definition of statistical hypothesis, establishing the materiality "alpha" and the degrees of freedom, defining the chi square parameter, defining the critical region, calculating the parameter value calculation and the decision making.

Decision criteria:

- The materiality:  $\alpha = 0,05$
- The number of freedom degrees:

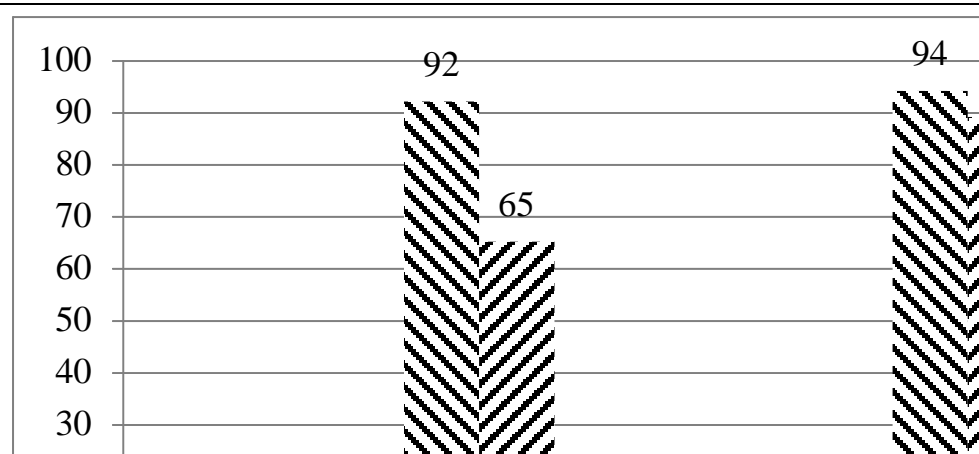
$$df = (\text{columns no.} - 1) \times (\text{rows no.} - 1) = (5-1) \times (2-1) = 4$$

**Table 1. Frequencies observed and theoretical (group 1 and 2)**

<del>OBSERVED</del> THEORETICAL	Totally disagree	Disagree	Indifference	Agree	Totally agree	Total rows
Accounting specialized students	3/2	9/7	6/7	92/87	65/72	175/175
Accounting professionals	2/3	7/9	8/7	94/99	89/82	200/200
<b>Total columns</b>	<b>5/5</b>	<b>16/16</b>	<b>14/14</b>	<b>186/186</b>	<b>154/154</b>	<b>375/375</b>

Source: own elaboration based on answers from questionnaires

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**Figure 1. Accounting specialized students and accounting professionals opinion about the opportunities offered by the accounting and by the tax legislation to resort to creative accounting techniques and practices**

According to Figure No. 1, we can see that a large percentage of those surveyed considered that the accounting and the tax legislation offer opportunities to resort to creative accounting techniques and practices that do not exceed the limits imposed by law in order to improve the image of the financial position and of the economic and financial performance (in totally agreement are 37,14% of the students and 44,5% of the accounting professionals, in agreement are 52,57% of the students and 47% of the accounting professionals, in total disagreement are 1,71% of the accounting specialized students and 1% of the accounting professionals, in disagreement are 5,14% of the accounting specialized students and 3,5% of the accounting professionals, 6 accounting specialized students and 8 accounting professionals are undecided).

The calculation of the parameter's observed value:

$$\chi^2_{\text{calculated}} = (3-2)^2/2 + (9-7)^2/7 + (6-7)^2/7 + (92-87)^2/87 + (65-72)^2/72 + (2-3)^2/3 + (7-9)^2/9 + (8-7)^2/7 + (94-99)^2/99 + (89-82)^2/82 = 3,66$$

$$\chi^2_{\text{calculated}} = 3,66$$

$$\chi^2_{\text{critical}} = 9,488$$

(the value of  $\chi^2_{\text{critical}}$  is taken from <https://www.medcalc.org/manual/chi-square-table.php>)



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The decision making:

$$\text{Chi}^2_{\text{calculated}} < \text{Chi}^2_{\text{critical}}$$

The null hypothesis is accepted, and therefore the alternative hypothesis is rejected. Therefore, both the accounting specialized students and the accounting professionals believe that the accounting and the tax legislation provide enough opportunities for the accounting professionals to appeal to creative accounting techniques and practices that do not exceed the limits imposed by law in order to improve the image of the financial position and of the economic and financial performance?

Although, apparently, accounting rules seem to be quite strict, the accounting professionals may proceed with the option for a particular accounting policy from the diversity of existing policies, and has a margin of freedom within the options game in the description he gives to acts. The accounting professionals can implement their knowledge, ability and creativity in order to submit financial and reporting statements desired by the users, exploiting some gaps/loopholes found in the accounting and tax rules wording that leaves place for interpretation. The existing diversity in accounting policies for solving a problem leads to options, driven by the need to choose a particular policy. (Popa, 2011, p.70). By resorting to the margin of freedom given by the options game in accounting, the manager may be tempted to make a subjective in order to improve the picture of the financial position and of the entity's performance for the partners. The Romanian rulers have made efforts during the last years towards the harmonization of Romanian accounting system to the European and to the international accounting referential. The IFRS allow multiple accounting policies for solving a problem, which could lead to different results. This could have a negative impact on the comparability of financial statements, with negative consequences on the credibility of accounting information. In this case, it is appropriate to restrict the number of accounting options. The IASB is part of this endeavor, its orientation being towards the reduction or elimination of the existing alternatives for treating certain situations. (Popa, 2011, p. 71).

**Objective II:** The perception of the two target groups about appealing during their professional activity to techniques and practices of creative accounting motivated rather by tax consequences than by the need for adequate financial information.

Within this objective we intend to test the following hypothesis:

**Hypothesis II:** There is a difference of perception between the accounting specialized students and the accounting professionals regarding their appealing during their professional activity to techniques and practices of creative accounting

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motivated rather by tax consequences than by the need for adequate financial information.

The two target groups were asked to answer to the following question: "Would you appeal during your professional activity to techniques and practices of creative accounting motivated rather by tax consequences than by the need for adequate financial information?"

The predetermined answers to the question were based on the Likert scale using five answer options marked from 1-totally disagree to 5-totally agree.

**The null hypothesis  $H_0$ :** There is not a difference of perception between the two target groups about appealing during their professional activity to techniques and practices of creative accounting motivated rather by tax consequences than by the need for adequate financial information.

In order to test the hypothesis, we take into consideration the chi square test (Karl Pearson).

Decision criteria:

- The materiality:  $\alpha = 0,05$
- The number freedom degrees:

$$df = (\text{columns no.} - 1) \times (\text{rows no.} - 1) = (5-1) \times (2-1) = 4$$

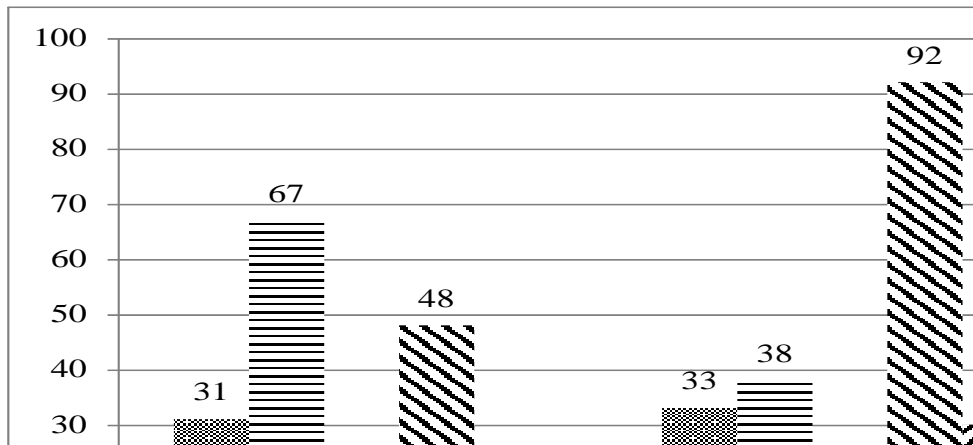
**Table 2. Frequencies observed and theoretical (group 1 and 2)**

<b>OBSERVED THEORETICAL</b>	<b>Totally disagree</b>	<b>Disagree</b>	<b>Indifference</b>	<b>Agree</b>	<b>Totally agree</b>	<b>Total rows</b>
Accounting specialized students	31/30	67/49	14/10	48/65	15/21	<b>175/175</b>
Accounting professionals	33/34	38/56	7/11	92/75	30/24	<b>200/200</b>
<b>Total columns</b>	<b>64/64</b>	<b>105/105</b>	<b>21/21</b>	<b>140/140</b>	<b>45/45</b>	<b>375/375</b>

*Source: own elaboration based on answers from questionnaires*

According to Figure no. 2, there can be seen that over 50% of the surveyed accounting specialized students are not tempted to resort to creative accounting practices and techniques for the purpose of tax optimization without violating the actual legal provisions (17,71% totally disagree and 38,28% disagree). 27,42% of the respondents agree with appealing throughout their activity to creative accounting techniques and practices motivated rather by tax consequences than by the need for adequate financial information, and a percentage of 8,57% totally agree. We can notice that 14 people are undecided. Over 50% of the surveyed accounting professionals would resort to creative accounting practices and techniques without violating laws leading to tax optimization (15% totally agree and 46% agree). 16,5% of the respondents totally, a percentage of 19% disagree

and 7 people are undecided.



**Figure 2. The accounting specialized students and the accounting professionals' opinion on appealing during their professional activity to techniques and practices of creative accounting motivated rather by tax consequences than by the need for adequate financial information**

The calculation of the parameter's observed value:

$$\chi^2_{\text{calculated}} = (31-30)^2/30 + (67-49)^2/49 + (14-10)^2/10 + (48-65)^2/65 + (15-21)^2/21 + (33-34)^2/34 + (38-56)^2/56 + (7-11)^2/11 + (92-75)^2/75 + (30-24)^2/24 = 27,02$$

$$\chi^2_{\text{calculated}} = 27,02$$

$$\chi^2_{\text{critical}} = 9,488$$

(the value of  $\chi^2_{\text{critical}}$  is taken from <https://www.medcalc.org/manual/chi-square-table.php>)

The decision making:

$$\chi^2_{\text{calculated}} > \chi^2_{\text{critical}}$$

The null hypothesis is rejected, and, therefore, it is accepted the alternative hypothesis. As a result, there is a difference of perception between the accounting specialized students and the accounting professionals regarding the appeal throughout their activity to creative accounting techniques and practices motivated rather by tax consequences than by the need for adequate financial information.

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As a result, the conclusion that emerges is that there is a difference of perception regarding the use of creative accounting techniques between the accounting specialized students and the accounting professionals. Thus, more than 50% of the surveyed students say they would not resort to creative accounting practices for tax purposes when most surveyed accounting professionals support the use of these techniques in order to optimize tax.

The question is why there is this difference of opinion between the students and the accounting practitioners? A possible cause is the experience in practicing the accounting, experience that has shown that one of the requirements of the internal users of accounting information, namely of the company's management, is reducing the tax burden.

Since the tax burden calculation and declaration are based on data provided by accounting, using appropriate accounting policies may diminish the taxable mass.

A good accountant will be able to do so using creative accounting techniques, but within legal limits. Tax optimization does not mean tax evasion! Perhaps this is an aspect that the accounting specialized students, lacked of experience, do not understand.

Regarding the adequate financial information, that correctly reflects the status of the company and its activity results, provided by the financial statements will not necessarily be distorted by creative accounting techniques.

The mere existence of several accounting policies, of accounting estimations and accounting multiple options makes the image of the same company to look differently depending on the accounting professional setting the accounting policy of the company's skills/abilities.

**Objective III:** The perception of the two target groups regarding the correlation between the ethical behavior and the tendency to use during the professional activity creative accounting techniques and practices motivated rather by the tax consequences than by the need for adequate financial information.

Within this objective we intend to test the following hypothesis:

**Hypothesis III:** There is a difference of perception between the two groups regarding the correlation between the ethical behavior and the tendency to use during the professional activity creative accounting techniques and practices motivated rather by the tax consequences than by the need for adequate financial information.

The two target groups were asked to answer the following question: "Please express your opinion on the agreement about the following question: A person with ethical behavior will not interfere "creatively" on the financial statements.

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The predetermined answers to the question were based on the Likert scale using five answer options marked from 1-totally disagree to 5-totally agree.

**The null hypothesis  $H_0$ :** There is a difference of perception between the two target groups regarding the correlation between the ethical behavior the tendency to use during the professional activity creative accounting techniques and practices motivated rather by the tax consequences than by the need for adequate financial information.

In order to test the hypothesis, we take into consideration the chi square test (Karl Pearson).

Decision criteria:

- The materiality:  $\alpha = 0,05$
- The number of freedom degrees:

$$df = (\text{columns no.} - 1) \times (\text{rows no.} - 1) = (5-1) \times (2-1) = 4$$

**Table 3. Frequencies observed and theoretical (group 1 and 2)**

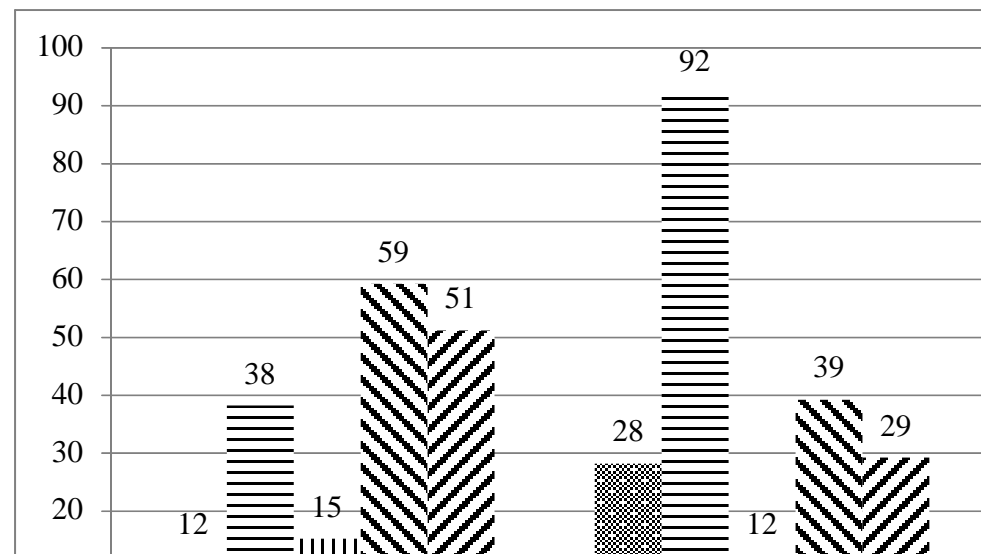
<b>OBSERVED THEORETICAL</b>	<b>Totally disagree</b>	<b>Disagree</b>	<b>Indifference</b>	<b>Agree</b>	<b>Totally agree</b>	<b>Total rows</b>
Accounting specialized students	12/19	38/61	15/12	59/46	51/37	<b>175/175</b>
Accounting professionals	28/21	92/69	12/15	39/52	29/43	<b>200/200</b>
<b>Total columns</b>	<b>40/40</b>	<b>130/130</b>	<b>27/27</b>	<b>98/98</b>	<b>80/80</b>	<b>375/375</b>

*Source: own elaboration based on answers from questionnaires*

According to Figure no. 3 it could be seen that over 50% of the surveyed accounting specialized students believe that a person with ethical behavior will not interfere "creatively" with the financial statements (29,14% totally agree and 33,71% agree). 6,85% of the respondents totally disagree, 21,71% disagree and 15 persons are undecided.

Over 50% of the surveyed accounting professionals believe that there is a correlation between the ethical behavior of the accounting professional and the tendency to appeal to practical creative accounting techniques (14% totally disagree and 46% express their disagreement about the question from above). 19,5% of the respondents agree and 14,5% totally agree that a person with ethical behavior will not interfere "creatively" on the financial statements We can notice that 12 accounting professionals are undecided.

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**Figure 3. The accounting specialized students and the accounting professionals opinion regarding the relationship between the ethical behavior and the tendency to use during the professional activity creative accounting techniques and practices**

The calculation of the parameter's observed value:

$$\chi^2_{\text{calculated}} = (12-19)^2/19 + (38-61)^2/61 + (15-12)^2/12 + (59-46)^2/46 + (51-37)^2/37 + (28-21)^2/21 + (92-69)^2/69 + (12-15)^2/15 + (39-52)^2/52 + (29-43)^2/43 = 39,38$$

$$\chi^2_{\text{calculated}} = 39,38$$

$$\chi^2_{\text{critical}} = 9,488$$

(the value of  $\chi^2_{\text{critical}}$  is taken from <https://www.medcalc.org/manual/chi-square-table.php>)

The decision making:

$$\chi^2_{\text{calculated}} > \chi^2_{\text{critical}}$$

The null hypothesis is rejected, and, therefore, the alternative hypothesis is supported. As a result, there is a difference of perception between the accounting specialized students and the accounting professionals regarding the correlation between the ethical behavior and the tendency to use, during the professional activity, creative accounting techniques and practices motivated rather by the tax consequences than by the need for adequate financial information.

Also, in the case of this hypothesis, the difference of opinion between the accounting specialized students and the accounting professionals regarding the correlation between the ethical behavior and the use of creative accounting practices for tax purposes can have the same cause, namely that students' perception that optimization is a form of tax evasion. Usage of accounting alternatives that lead to reduction of the tax burden, but within the legal limits, represents an ethical practice. Moreover, as an accounting professional, in order to force your client, the owner of the company, to pay a higher tax than the minimum possible is a violation of professional ethics and deontology and, also, a lack of professionalism.

**Objective IV:** The perception of the two target groups regarding the correlation between the inclination to creativity and the trend to resort throughout their professional activity to creative accounting techniques and practices motivated rather by the tax consequences than by the need for adequate financial information. Within this objective we intend to test the following hypothesis:

**Hypothesis IV:** There is a difference of perception between the two groups regarding the correlation between the inclination to creativity and the trend to resort, throughout their professional activity, to creative accounting techniques and practices motivated rather by the tax consequences than by the need for adequate financial information.

The two target groups were asked to answer the following question: "Please express your view of agreement on the following question: A person inclined towards creativity will be higher tempted to resort to creative accounting practices and techniques".

The predetermined answers to the question were based on the Likert scale using five answer options marked from 1-totally disagree to 5-totally agree.

**The null hypothesis H<sub>0</sub>:** There is a difference of perception between the two target groups regarding the correlation between the inclination to creativity and the trend to resort throughout their professional activity to creative accounting techniques and practices motivated rather by the tax consequences than by the need for adequate financial information.

In order to test the hypothesis, we take into consideration the chi square test (Karl Pearson).

Decision criteria:

- The materiality:  $\alpha = 0,05$
- The number of freedom degrees:

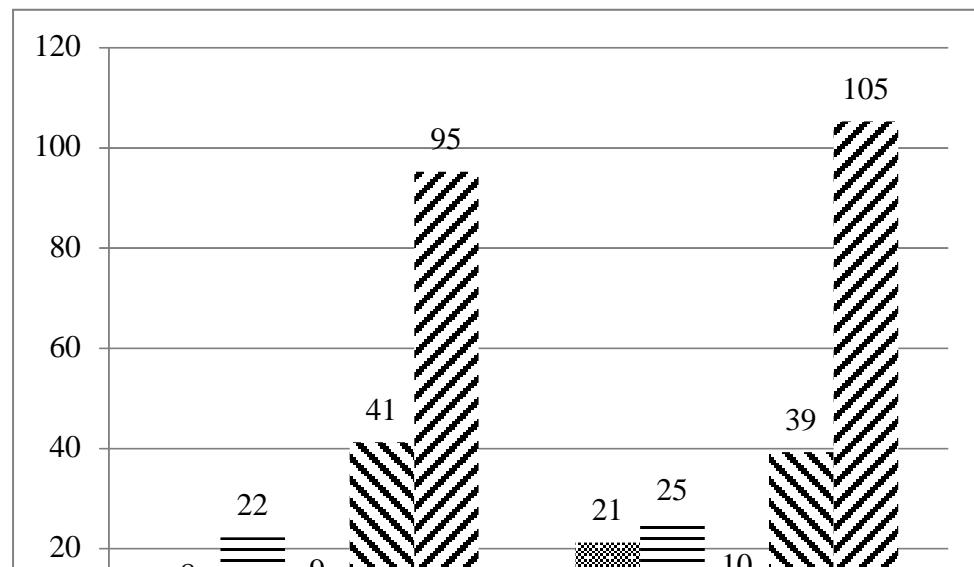
$$df = (\text{columns no.} - 1) \times (\text{rows no.} - 1) = (5-1) \times (2-1) = 4$$



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*Empirical Study on the Creative Accounting Phenomenon***Table 4. Frequencies observed and theoretical (group 1 and 2)**

<b>OBSERVED THEORETICAL</b>	<b>Totally disagree</b>	<b>Disagree</b>	<b>Indifference</b>	<b>Agree</b>	<b>Totally agree</b>	<b>Total rows</b>
Accounting specialized students	8/14	22/22	9/9	41/37	95/93	<b>175/175</b>
Accounting professionals	21/15	25/25	10/10	39/43	105/107	<b>200/200</b>
<b>Total columns</b>	<b>29/29</b>	<b>47/47</b>	<b>19/19</b>	<b>80/80</b>	<b>200/200</b>	<b>375/375</b>

*Source: own elaboration based on answers from questionnaires*

**Figure 4. The accounting specialized students and the accounting professionals' opinion regarding the correlation between the inclination to creativity and the trend to resort throughout their professional activity to creative accounting techniques and practices**

According to Figure no. 4, it can be seen that a large percentage of those surveyed considered that a person inclined towards creativity will be more tempted to resort to creative accounting practices and techniques, rather motivated by tax consequences than by the need for adequate financial information (in total agreement are 54,28% of the students and 52,5% of the accounting professionals, in agreement are 23,42% of the students and 19,50% of the accounting professionals, in total disagreement are 4,57% of the students and 10,5% of the accounting professionals, in disagreement are 12,57% of the students and 12,5% of

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the accounting professionals, 9 students and 10 accounting professionals are undecided).

The calculation of the parameter's observed value:

$$\text{Chi}_{\text{calculated}}^2 = (8-14)^2/14 + (22-22)^2/22 + (9-9)^2/9 + (41-37)^2/37 + (95-93)^2/93 + (21-15)^2/15 + (25-25)^2/25 + (10-10)^2/10 + (39-43)^2/43 + (105-107)^2/107 = 7,20$$

$$\text{Chi}_{\text{calculated}}^2 = 7,20$$

$$\text{Chi}_{\text{critical}}^2 = 9,488$$

(the value of  $\text{Chi}_{\text{critical}}^2$  is taken from <https://www.medcalc.org/manual/chi-square-table.php>)

The decision making:

$$\text{Chi}_{\text{calculated}}^2 < \text{Chi}_{\text{critical}}^2$$

The null hypothesis is accepted, and, therefore, the alternative hypothesis is rejected. As a result, both the accounting specialized students and the accounting professionals believe that there is a correlation between the inclination to creativity and the trend to resort throughout their professional activity to creative accounting techniques and practices motivated rather by the tax consequences than by the need for adequate financial information. Analyzing the answers to the question "will a person inclined towards creativity be higherly tempted to resort to creative accounting practices and techniques?" it appears that, unlike the answers to the other questions, there are no differences in perception between the accounting specialized students and the accounting professionals. Thus, more than half of the respondents from both categories consider that, creative people, by their very nature, will often resort to creative accounting techniques than less creative people. The explanation for the fact that, in this case, the two categories of respondents' views coincide might be that the answer to this question is not influenced by practical experience or professional maturity of the interviewed person. Moreover, it seems quite logical and natural that generally creative people to act in the same way within the profession, in this case the accounting. If so does an employer, he/she should choose the accountant depending on what he/she wants from him/her: a prudent accountant or rather an "adventurous" one, a creative accountant or rather an "inflexible" one? So, accountants will be the "image and likeness" of the employer and the same will be also the financial statements? In these circumstances, if the previous assumptions are confirmed, the hiring of accountants should be based also on psychological tests, on personality tests, besides the

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professional ones. As a future research direction, in a subsequent study, this question will be asked also to the employers in order to see if their perception is the same.

**Objective V:** The perception of the two target groups regarding their opinion about the creative accounting techniques and practices described within the economics literature.

Within this objective we intend to test the following hypothesis:

**Hypothesis V:** There is a difference of perception between the two groups regarding their opinion about the creative accounting techniques and practices described in the economic specialized literature. The two target groups were asked to answer the following question: "What is your position about the creative accounting techniques and practices described in the economic literature? (circle one or more variants of the following: have a negative connotation, can have a positive connotation, they are unacceptable and can be applied in accounting practice)". The target group was asked to rank the four opinions (have a negative connotation, can have a positive connotation, are unacceptable and can be applied in accounting practice) regarding the creative accounting techniques and practices described in the economics literature.

In order to achieve this goal, we proceed in using the method of the ranks ordering as a qualitative research, having as objective the evaluation of the four opinions in terms of importance attributed to them and, also, processing the responses of a sample of 175 accounting specialized students and of 200 accounting professionals. The ranking of these opinions will be achieved by the investigated subjects in terms of importance on a scale from 1-most important to 4-least important. In Table no. 5 is there is centralized the number of the accounting specialized students and of the interviewed accounting professionals which place every opinion on places 1, 2, 3 and 4 in terms of the importance given. Each interviewed subject was asked to evaluate the four opinions on a scale of 1-most important to 4-least important, depending on where he/she placed his/hers terms of preference.

**Table 5. Ordering the respondents preferences to the four opinions**

STUDENTS PROFFESIONISTS	PLACE 1 (4 points)	PLACE 2 (3 points )	PLACE 3 (2 points )	PLACE 4 (1 point )
a) Have a negative connotation	52/12	75/29	40/121	8/38
b) Can have a positive connotation	21/59	41/99	62/37	51/5
c) They are unacceptable	12/9	37/11	20/30	106/150
d) Can be applied in accounting practice	90/120	22/61	53/12	10/7

*Source: own elaboration based on answers from questionnaires*

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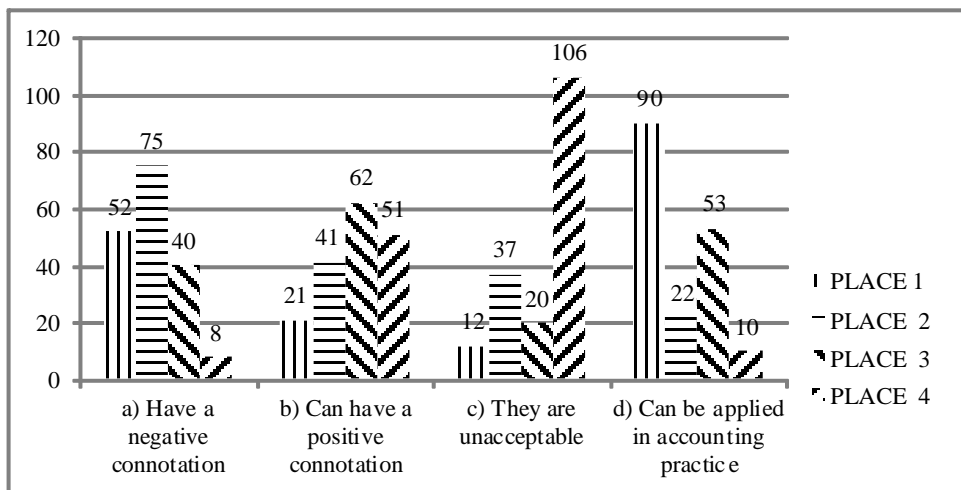


Figure 5.1. Opinion of the accounting specialized students related to creative accounting techniques and practices described in the economics literature

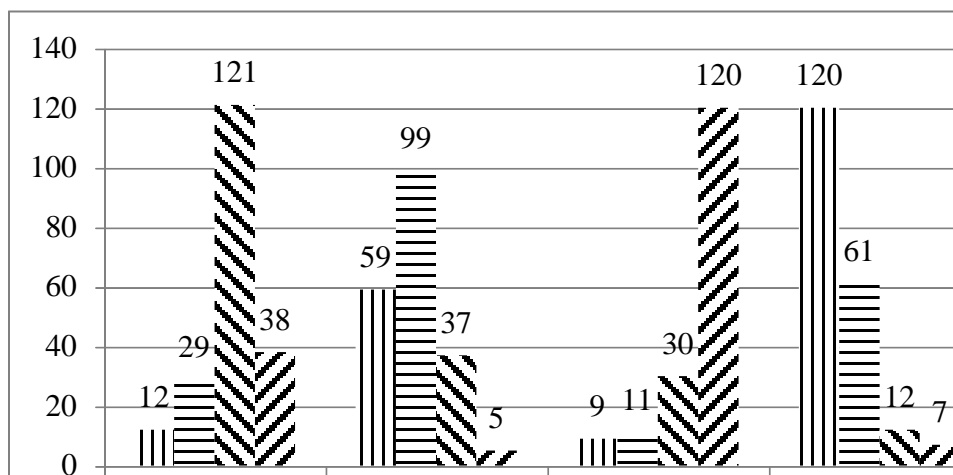


Figure 5.2. Opinion of the accounting professionals related to creative accounting techniques and practices described in the economics literature

The hierarchy of each opinion will be determined by weighting the number of opinions to the score awarded to each place that was estimated as follows:

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➤ **Students**

a)  $=52x^4+75x^3+40x^2+8x1 = 521$

b)  $= 21x^4+41x^3+62x^2+51x1 = 382$

c)  $= 12x^4+37x^3+20x^2+106x1 = 305$

d)  $= 90x^4+22x^3+53x^2+10x1 = 542$

The final hierarchy of the four opinions in terms of preferences of the 175 investigated students is:

$$d(542)>a(521)>b(382)>c(305)$$

➤ **Accounting professionals**

a)  $=12x^4+29x^3+121x^2+38x1 = 415$

b)  $= 59x^4+99x^3+37x^2+5x1 = 612$

c)  $= 9x^4+11x^3+30x^2+150x1 = 279$

d)  $= 120x^4+61x^3+12x^2+7x1 = 694$

The final hierarchy of the four opinions in terms of preferences of the 200 investigated accounting professionals is:

$$d(694)>b(612)>a(415)>c(279)$$

As we can see in Figures no 5.1 and 5.2, both students and accounting professionals believe that techniques and practices described in the economics literature can be applied in practice (this is the first option of the two target groups in order of preference). Opinion that these techniques are unacceptable in practice creative accounting is placed last in the preferences of the two target groups.

The creative accounting has a negative connotation when it is not reflecting an accurate image, as the accounting standards propose, but it is meant to lead to financial statements that accomplish the wishes of managers regarding the financial position, the performance, the changes in equity and the cash flows. The positive alternative of the creative accounting is not excluded, when the accounting professionals rely on a "fair" professional judgment and when managers are in good faith. Instead of being concerned with promoting the malevolent creative accounting techniques and practices, having negative effects on short term or long term, in order to satisfy certain "hidden" interests, Dumitrescu (2013, p. 23) believes that "it would be better for companies to be concerned with finding ways to maximize results effectively, better managing resources and avoiding waste, thus removing the risk to pay higher dividends than they can afford and pay an additional tax on cosmetic...".

It is important that the responsible factors within an entity to establish a "clean" and healthy behavior, discouraging the malevolent promotion of creative accounting techniques and practices which, distorsioning the reality, can both cause

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damage to the state budget and to the entity, therefore affecting the business environment health.

## 5. Conclusions and future directions of research

The present study aimed to analyze the perception of the accounting practitioners compared to the perception of the accounting specialized bachelor / master students regarding the creative accounting techniques and practices.

For this purpose, the respondents of the two target groups were asked questions related to:

- The opportunities that the current accounting and tax legislation provides regarding the use of the creative accounting techniques and practices;
- The extent to which they would use in practice creative accounting techniques motivated rather by the fiscal consequences than by the need for an adequate financial informing;
- The ethical character of the creative accounting techniques and practices' use;
- The correlation between inclination towards the creativity and the tendency to resort during their professional activity to creative accounting techniques and practices;
- The opinion about creative accounting techniques and practices described in the specialized literature.

Regarding to the first question, both the accounting practitioners and the accounting specialized bachelor/master students believe that the accounting and tax legislation provide enough opportunities for professionals to appeal to creative accounting techniques and practices. This way, the offered alternatives, both in terms of accounting and taxation lead to different views of the financial position and of the economic and financial performance of the economic entities. But what is the accurate image? The existence of these alternatives was generated by the fact that the economic reality is so diverse and changeable that an accounting/taxation standard can not capture all the opportunities and, as a result, there are offered several alternatives, the accountant's ability, creativity and professionalism being the ones that will decide the optimal solution for the given situation.

In conclusion, not the existence of alternatives is the one with negative consequences on the quality and credibility of the accounting information but the good faith of those who use them.

Regarding the second question on the use of creative accounting techniques and practices motivated rather by the tax consequences than by the need of an adequate financial informing, the conclusion that comes out is that there is a difference in perception between the accounting specialized students/master students and the accounting professionals.

Thus, more than 50% of the surveyed students say that they would not resort to creative accounting practices for tax purposes while most surveyed accounting professionals support the use of these techniques for the tax optimization.

In this case, the divergence of opinion between the bachelor's/master's students and the practitioners could be explained through the fact that those who practiced accounting have found that the tax optimization by reducing the taxable weight based on the data provided by accounting does not necessarily signify the distortion of the accurate image. The use of accounting alternatives leads to different views of the economic and financial situation of the economic entity and of its performance leading sometimes to the reduction of the tax burden, but under the law, this being one of the managers' requirements, besides legitimate. On the other hand, the students' lack of practical experience could explain their reluctance in using the creative accounting techniques, generating reductions in the taxable weight, that could be treated as tax evasion with its illegal connotations, which is completely wrong, because the creative accounting techniques are legal techniques allowed by the accounting rules.

On the third question regarding the correlation between the ethical behavior and the tendency to resort during the professional activity to creative accounting techniques and practices, was also found that there is a difference of perception between the accounting specialized students and the accounting professionals.

As we have already mentioned in this article, also in this case the difference of opinion may be caused by the fact that, unlike the accounting professionals, the students consider the tax optimization as a form of tax evasion, which is wrong, because using the creative accounting techniques in order to reduce the taxable weight under the law, is an ethical practice. Moreover, as an accounting professional, one who force his/her client, the owner of the company, to pay a higher tax than the minimum legally possible is a violation of professional ethics and deontology and a lack of professionalism.

From the analysis of the answers to the fourth question whether "a person inclined towards creativity will have a higher temptation to resort to creative accounting practices and techniques" it appears that, unlike the answers to the other questions, there are no differences of perception between the accounting specialized students and the accounting professionals.

Regarding the perception of the two target groups concerning their opinion about the creative accounting techniques and practices described in the economic specialized literature is noted that both students and accounting professionals believe that the techniques and practices described in the economics literature can be applied in practice, this being the first choice of the respondents in order of the



preferences, the view that these creative accounting techniques are unacceptable in practice being the last option.

In conclusion, the use of creative accounting practices and techniques has a negative connotation only to the extent to which it is associated with bad faith of the person who uses it. Otherwise, the appropriate use of these techniques can improve the true image of the economic entity, provide tax optimization, or, ideally, both. But what you should do when you have to choose ... This is where ethics interferes. From the answers to questions, we can conclude that the accounting professionals, practitioners, know this, while the students/master students, yet only theorists, don't. Could it be the role of the accounting professors to provide guidance to the students, regarding this aspect? Perhaps the issues of ethics and professional deontology should be treated with more importance from the very first years of college, or even in the last year's bachelor level when students have enough theoretical knowledge that they can understand the practical issues presented for emphasizing some situations of ethical/unethical behavior in the accounting practice. We think that it would be useful when presenting the creative accounting techniques that the professor also to touch ethical aspects of using these techniques insisting on situations in which calling these would be considered a violation of the professional accountant ethics.

As a future line of research, they might address the same questions to the employers in order to analyze their opinion regarding the use of creative techniques within the accounting practice, the necessary/unnecessary, helpful/harmful, respectively ethical/unethical character of these techniques and the relationship between the personality of the accounting professional and the way it appeals to creative accounting practices. Moreover, it could be investigated the extent to which, when hiring an accounting professional, the employer takes into consideration these aspects and chooses the accountant also on other criteria than the professional ones.

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