BIG BATH AS A DETERMINANT OF CREATIVE ACCOUNTING IN SMALL AND MICRO ENTERPRISES

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Abstract


Creative accounting is a 21st century phenomenon and in the context of the economic crisis and deficit budget it has been receiving increasing attention, in particular in the area of prevention and detection of accounting manipulation. The focus of the research on small and micro-enterprises stems from little attention paid to these enterprises and the undeniable importance of small and micro-enterprises for the economy. Primary research is based on the examination of a phenomenological paradigm, i.e. it focuses on understanding human behaviour on the basis of a reference framework for research participants. The main research method used in research is a comparative case study, which is one of few methods that allow research of this sensitive topic. Research will focus on the existence of a big bath in the company's ratio of profit and turnover as a determinant of a change in the company's approach to creative accounting.

Keywords: creative accounting, fraudulent accounting, earnings management, bath in accounting

INTRODUCTION

Creative accounting is often associated with the 21st century's economy and for several years it has been discussed in the media virtually every day. Following the trend set by the media, creative accounting has become increasingly more often the subject of research studies and scientific publications.

After media exposure of a series of accounting scandals, the concept of creative accounting has gained a new dimension, which caused the focus of research in particular on large enterprises and the public administration.

In the context of the economic crisis and deficit budget, the issue of creative accounting is, in particular in terms of prevention and detection of accounting manipulation, an issue in focus. Small and micro-enterprises cannot remain under-researched due to their undeniable importance to the economy.

Raising awareness of the issue of creative accounting and the improvement of accounting manipulation detection is one of the ways to fight against creative accounting.

Theoretical Background

The concept of creative accounting can be understood, in accordance with the definitions by Naser in 1993, Krupová in 2001, O'Regan in 2004 and Tumpach in 2008, as a misuse of accounting methods and use of accounting manipulations at the enterprise level in order to influence the financial statements so that they provide their users with distorted information about the enterprise.

In accordance with the definitions of the term in more recent publications, creative accounting includes operations within the limits of law as well operations outside the law, i.e. fraudulent ones. The reason for not excluding fraudulent operations is also the difficulty to prove the intention to manipulate with accounting data. A number of research studies therefore concentrate on accounting frauds as one of the worst activities in the area of creative accounting.

Effects of Creative Accounting

The effects of creative accounting, as reported in the published literature, can be divided into in principle positive ones and negative ones.
The positive effects of creative accounting include enhanced ability of external users of financial statements to predict the future of the company (Roden and Sadan, 1980), or increased information value of the reported profits and the perception of the enterprise as less risky in the case of the use of creative accounting (Wang and Williams, 1994), or increased sustainability and predictability of revenue (Subramanyam, 1996). A positive effect can also be considered reduced cost of borrowed capital and improvement of conditions for obtaining additional capital (Amat et al., 2000). Enterprises may also see the confusion of competitors by false data as a positive effect. Examples of authors who believe that the influence of creative accounting on the market is insignificant include Imhoff (1977) or Healy and Wahlen (1999).

However, positive and neutral approaches of authors to creative accounting are, consequently, subjected to arguments of authors who perceive creative accounting as a negative phenomenon. As Stolowy and Breton (2004) argue, if market players knew that the numbers are manipulated, there would be no reason for their manipulation.

Manipulation with accounting data, however, has a more significant consequence beyond providing manipulated information for company shareholders and owners. Even assuming that we acknowledge the benefits specifically for them, creative accounting provides manipulated information for the whole society. These results then affect the statistics of the entire country and hence GDP and other indicators. On a deeper thought, statistics data then affect the allocation of resources. In an economy where allocation of resources is affected by interventions such as manipulations with accounting data of business units, the general economic target in the form of efficient allocation of resources may be threatened. A specific part of creative accounting which can already be classified as economic criminal activities has paramount social and economic impact on the internal stability of the State. Besides other aspects, it affects the basic revenue components of the State; if these are threatened, the long-term functioning of the state mechanism is challenged. For example, financial analyst Smith (1992) believes that the greatest part of the economic growth of the United Kingdom in the 1980s can be attributed to creative accounting rather than actual economic growth.

As far as negative effect is concerned, creative accounting may have adverse, or even liquidating, consequences for enterprises that use it (Smith, 1992). Indirect damages relate to destabilization of trust on the financial markets, a decline in the volumes of trading, and a reduction in the volume of investment by the enterprises (Tumpach, 2008). Albrech's (2006) conclusions state that after the manipulation with accounting data of Enron was published, the decline in trading caused by a loss of investors' trust was even higher than the decline caused by the terrorist attacks in September 2001.

The effects of creative accounting can therefore be considered to be much greater than an ordinary person compiling the financial statements realizes, and creative accounting must be understood purely as a negative phenomenon with adverse effects on the enterprise itself as well as on the society as a whole.

Detection of Creative Accounting

Understanding of creative accounting in the negative sense raises the question of prevention and fight against creative accounting. The search and the use of tools to detect creative accounting is one of the ways that can help increase the perceived risk of manipulating accounting data and can aid prevention and fight against the phenomenon of creative accounting. Detection of accounting manipulations is a very complex process, which is in the centre of attention of a number of research studies.

One of the determinants of creative accounting can be considered big bath accounting. In Healy's view (1985), big bath accounting represents a particular drop in accounting data which precedes manipulation. Healy therefore understands the big bath as the cause of creative accounting, followed by creative accounting techniques with the aim to eliminate great decreases in financial indicators. Conversely, Blake et al. (1997) consider big bath accounting to be a result of creative accounting. They start from the position that enterprises may seek to report the maximum loss in one year to be able to report an improvement in financial indicators in the following years.

The most commonly used indicators in the detection of creative accounting are the company's profit and income. In the USA, the term earnings management has been commonly used. Earnings management is understood as application of decision-making in the matter of financial reporting and structuring of transactions with the aim to provide misleading financial reports to some stakeholders so as to influence the performance of the enterprise or future transactions that depend on the reported results (Healy and Wahlen, 1999). Earnings management is therefore based on information asymmetry, which occurs between the privileged management and more distant stakeholders (Schipper, 1989). Contemporary literature describes two basic objectives of earnings management. One of them is an attempt to report the best results possible (e.g. Bonner et al., 1998; Healy and Wahlen, 1999; Lynch et al., 2011). Another focus of earnings management described in the literature is, on the contrary, reporting of the lowest possible profit in an attempt to reduce the amount of the payments derived from the profit (Tumpach, 2008; Ravisankar et al., 2011). The managers of small and micro enterprises have different approach than managers of big companies.
Accounting is closely connected to the taxes payment. In that system small and micro-enterprises try to modify their taxes payments downwards.

In their research focused on creative accounting, other authors also concentrate on profit; these consider indicators based on profit to be the most suitable ones for fraud detection (e.g. Burgstahler and Dichev, 1997; Dechow and Skinner, 2000; Elitzur, 2010; Comunale et al., 2010; Hadani et al., 2011; Ravisankar et al., 2011). For example, Ravisankar et al. in their research used the ratio of profit relative to revenue. Other research studies in the area of creative accounting also focus on indicators based on income (e.g. Loebbecke et al., 1989; Comunale et al., 2010; Ravisankar et al., 2011). The above implies that one of the appropriate indicators for detecting creative accounting is considered to be the ratio of the company's profit and turnover.

In practice, companies that are uncovered are mostly those whose managers use too aggressive techniques and have not correctly assessed the boundary between earnings management and fraud, and clearly violated legal norms. Generally it can be said that in practice it is difficult to identify companies that abuse accounting (Dechow and Skinner, 2000).

**OBJECTIVE AND METHODOLOGY**

The objective of this paper is to verify the existence of a big bath of a company's ratio of profit and turnover in selected small and micro-enterprises as a determinant of changes in the approach to creative accounting.

Research on the problems of creative accounting can be considered a very sensitive topic. It is research of a phenomenological paradigm, i.e. it focuses on understanding human behaviour on the basis of a reference framework for research participants. This approach emphasizes the subjective aspects of human activity with a focus on meaning rather than on measuring social phenomena. The focus on the phenomenological paradigm in a sensitive topic like that of creative accounting appears to be more appropriate because it is not possible to obtain sufficient amount of data for quantitative research so that these data could be regarded a representative sample of enterprises. Obtaining suitable data for the examination of the issue of creative accounting in the Czech Republic is a very hard task due to obligations of confidentiality of officials and persons involved in the administration of taxes, which follows from section 52 of the Tax Code. In research focused analyzing a number of cases, the effect of the surveyed matter and the people's fear of the consequences may lead to a significant distortion of the outputs of the research. Therefore, it was not possible to conduct research using common research methods such as questionnaire surveys. In addition, most companies are not willing to participate in such research due to their fear of the consequences of the research on the continuation of the enterprise's activity. Phenomenological paradigm seems to be more convenient also due to its main characteristics, as listed by Collis (2003). It involves production of rather qualitative data (although partly also quantitative), use of a small analyzed sample, focus of the research on the formation of theories with low reliability but high validity and attempts to generalize from one sample to another.

A number of methods can be used in research on a phenomenological paradigm. The method selected as relevant for this research was a case study with the use of some elements of ethnographic methods. As Collis and Hussey (2003) argue, the method of case studies should be used mainly as a modern method of empirical research in the research of current, not historical problems, especially in situations where the relevant behaviour cannot be manipulated (or only indirectly). Yin (2003) claims that the method is suitable if the method of interviews with individuals involved can be used for data collection. Ethnography is a method in which the researcher uses their acquired social experience to understanding human behaviour patterns.

In many situations, the case study method helps recognize organizational, social, political and related phenomena in individuals as well as in groups. In the last few years they have also been applied to economics. A general definition of case study says that it is an intensive study of one case, one situation, one person or one problem, which allows for a very thorough and comprehensive grasp of the problem (Široký, 2011).

Depending on the manner of application of the method, a multiple comparative explanatory case study was selected because multiple case study is considered to be more conclusive than single case study. The purpose of a comparative case study is to search for similarities and differences between individual cases.

Yin (2003) argues for two to three cases as the recommended minimum. Similarly, Miles and Huberman (1994) claim a minimum of two to four cases. In case studies, the selection is always deliberate since it is the only way to ensure that the phenomena under investigation will have exactly the characteristics that are needed for research (Široký, 2011). Four companies that use creative accounting were selected for the research. These companies are further in the study referred to as cases A to D because of the sensitivity of the data provided. The basic information about the selected companies is listed in Tab. I.

The research is focused on enterprises operating in the private sector, and this is for two reasons. The first reason is less pressure on enterprises in the private sector compared with enterprises in the public sector. The second reason is the fact that the private sector makes up the majority in the production of GDP in the Czech Republic. For example, in 2011 and 2012, the expenditures...
of the non-governmental sector represented 79% (The Czech Statistical Office, 2013). The selection of enterprises focused on small and micro-enterprises. In the area of detection and prevention of creative accounting, the tax authority currently focuses rather on large enterprises due to the significance of possible manipulation with accounts and, in the context of Czech legislative framework, the subsequent amount of taxes. Small and medium-sized enterprises do not receive much attention of the tax administration and research studies. The importance of small and medium-sized enterprises for the performance of the state economy is undeniable. According to the statistics of The Czech Statistical Office, in 2011 small and micro-businesses represented 99.84% of active business entities in the Czech Republic, employed 60.85% of all employees in the business sector and accounted for 54.43% of the added value (The Czech Statistical Office, 2013). Moreover, a study by Hadani et al. (2011) proves that the size of an enterprise has negative relationship with creative accounting. The assumption that larger enterprises use creative accounting less often also stems from the obligation to have the financial statements verified by an auditor, and a greater probability of the enterprise's relations with the Chamber of Chartered Certified Accountants and, therefore, adoption of its code of ethics.

In the phase of data collection method, the interview method and the method of analysis of documents were used. In case studies, the interview method is one of the main sources of information (Yin, 2003). As opposed to, for example, questionnaire survey, an interview allows the interviewer to ask more complex questions and further develop those (Collis, 2003). As far as the format of interview is concerned, the interviews were mainly personal interviews with contact persons, who were, in two cases, the company executives and, in two cases, the company accountants. In terms of structure of questions, the interviews were non-standardized interviews with non-structured questions, as required, according to Collis (2003), by the phenomenological approach. The analysis of documents was based on profit and loss statements of the surveyed enterprises for the last few years that were provided by the contact persons for analysis.

The selected cases have some identical or similar characteristics, such as the legal form, the number of members, paid-up registered capital, and size of the enterprise. These ensure the comparability of the results.

At the same time, the cases show some different characteristics in terms of the time period of the establishment of the company, the line of business, the volume of the current turnover of the company, the profit and the feeling of being hit by the economic crisis. This allows examining the companies' differences in their approach to creative accounting.

### MAIN RESULTS OF THE RESEARCH

On the basis of the documents analysis, the evolution of each company's profit and turnover was identified.

Based on interviews with the contact persons, information was supplemented about the evolution of the company's attitude to creative accounting. Specific questions were directed to whether the company in the course of its existence used the techniques of creative accounting techniques and whether its attitude towards their use changed during the existence of the company, i.e. whether the company started using creative accounting to a greater extent or whether, on the contrary,

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<td><strong>Case A</strong></td>
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<td>Contact person</td>
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<td>Legal form</td>
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<td>Number of members</td>
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<td>Registered capital in CZK</td>
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<td>Number of employees</td>
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Source: own elaboration
the use of creative accounting decreased during the existence of the company. Other questions were directed to the perception of the degree to which the company was affected by the economic crisis. The interviews continued but other questions were associated with research of other determinants of creative accounting since this particular research is part of a larger one. The companies’ ratio of profit and turnover is represented in Fig. 1.

The chart shows the indicator in the surveyed enterprises in each year of the existence of the company.

In case A, the chart shows a clearly noticeable decline in the company's ratio of profit and turnover in 2011. An interview with the contact person revealed that in that year the company significantly increased the use of creative accounting due to the growth in its profit. Profit growth in the conditions of a close relation of profit and tax obligations of the company led the company owners to attempts to reduce the amount of taxes paid. This was the reason for the increase in the use of creative accounting. The interview also revealed that the company has been hit by the economic crisis. The decline in the ratio of profit and turnover can be considered a big bath in accounting.

In case B, the indicator has been increasing slightly since 2004. By contrast, it has been decreasing slightly since 2004. In 2004, the increase in the indicator is more significant than in other years. The interview showed that in that year the company significantly restricted the use of creative accounting, mainly because of the personal position of the company owner and changes in his family situation. The contact person also stated that the company did not feel to be affected by the economic crisis. The development of the indicator can therefore be considered a sort of reverse bath in accounting.

In case C, the chart shows a noticeable decline in the company D ratio of profit and turnover in 2009. The interview revealed that management has not significantly changed their attitude towards creative accounting and also the fact that the company has been significantly hit by the economic crisis since 2009. The development of the indicator is therefore significantly affected by the economic crisis. The fact that in this case it is not a big bath in the company's ratio of profit and turnover but influence of the economic crisis on the indicator can also be justified by the low value of the indicator in the two following accounting periods. It is therefore not an immediate drop but a long-term status. The development of the indicator in 2012 proves that the enterprise overcome the economic crisis. The contact person confirms that in 2012 the company saw a significant growth in the volume of services provided.

All four of the interviews also showed that enterprises use creative accounting due to efforts to reduce the amount of compulsory payments, whether it is corporate income tax or personal income tax and social and health insurance for employees. This fact is related to the close link between the profit and the tax base in the conditions of the Czech tax and accounting systems. In the context of these links, interviews show that enterprises with growing profit used creative accounting more and those with decreasing profit use it less. Here it can be assumed that the use of
creative accounting in the context of efforts to decrease profit is related to the focus of the research on small and micro-enterprises.

DISCUSSION OF THE FINDINGS

Creative accounting is a phenomenon whose consequences are negative for both the enterprise and the economy, despite the fact that some authors claim that the effects are in principle positive (e.g. Roden and Sadan, 1980; Wang and Williams, 1994; Subramanyam, 1996; Amat et al., 2000). Negative consequences (listed, for example, by Smith, 1992; Albrecht, 2006; Tumpach, 2008) and their impact on the economy of the State are the reason for the reduction and prevention of creative accounting. One way of limiting creative accounting is improving the detection of accounting manipulation.

Big bath in accounting, i.e., a short-term drop in certain financial indicators, may be used as one of the determinants of changes in approach to creative accounting. One of the indicators that can be used to detect changes in the approach to creative accounting is the ratio of profit and turnover (similarly to Ravisanark et al., 2011). A fluctuation of this indicator may be considered, in accordance with Blake et al. (1995), to be a result of a change in the attitude to creative accounting rather than its cause as Healy (1985) believes. A drop in the indicators can detect an increased use of creative accounting in the enterprise; on the contrary, its short-term increase may detect restriction of use of creative accounting in the enterprise.

The use of such drop in the company's ratio of profit and turnover to detect an increased use of creative accounting is restricted by the economic crisis, which affects this indicator. The result of the economic crisis, however, may have a long-term impact on the undertaking, and therefore the indicator may also be influenced in long term. Nevertheless, the use of the indicator of company's ratio of profit and turnover as a determinant of changes in the company's approach to creative accounting is unlimited in the event of the company being stricken by the economic crisis, and this must be taken into account. The above indicator can be better used to detect creative accounting in enterprises which do not feel to be affected by the economic crisis.

CONCLUSION

Creative accounting is a phenomenon with a negative impact on the economy. Creative accounting provides not only manipulated data for business owners and shareholders, but also false information for statistics on the development of the economy of the State. In a system where there is a close relationship between accounting and the tax system, as is the case in the Czech Republic, manipulated accounting directly affects the income component of the State budget, which brings about deterioration in the efficiency of resource allocation in the economy. Creative accounting also has indirect impact on the decline in trust and trade. The negative effects of creative accounting are the reason for the need to deal with issues relating to its limitation and prevention.

There is probably no reliable way to prevent all cases of accounting manipulation. Increasing the risk of disclosure of the accounting manipulations, however, contributes in the fight against and prevention of this phenomenon.

Detection of creative accounting is not an easy task. In practice, companies that are uncovered are mostly those whose managers use too aggressive techniques and have not correctly assessed the boundary between earnings management and fraud, and clearly violated legal norms. Overall, it has been confirmed that in practice it is difficult to identify companies that abuse accounting (Dechow and Skinner, 2000).

Improvement in the detection of creative accounting is the subject of a number of research studies; however, it cannot be said that the detection of accounting manipulations is sufficient. Therefore, examination of other determinants of creative accounting and raising awareness of the issue of accounting manipulations can have a restrictive as well as a preventive impact on creative accounting.

One of the determinants of change in the company's approach to creative accounting can be considered a short-term decline in the ratio of the company's profit and turnover. However, it is necessary to take into account that this indicator may be influenced if the company has been hit by the economic crisis.

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REFERENCES


BONNER, S. E., PALMROSE, Z. and YOUNG, S. M. 1998. Fraud Type and Auditor Litigation: An Analysis of SEC Accounting and Auditing


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