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## Article

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## Article

# Creative Accounting and the Possibility of Its Detection in the Evaluation of the Company by Expert

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**Abstract:** The value of the company is influenced by a large group of factors that experts should take into account, in the evaluation process, and incorporate into their calculations. The paper is based on the knowledge and experience gained from more than 15 years of forensic practice and more than 60 expert opinions related to determining the value of the company. It clearly states, in selected two representative companies, how significantly creative accounting can influence the final value of the company. Therefore, it is necessary to think about how to eliminate these possible interventions in the process of valuing the company. Background: Creative accounting is an important issue that is being addressed worldwide. It can have significant impacts in many areas, but in the article, we focus specifically on the area of determining the value of the company in the companies of the Slovak Republic. Methods: Several methods are used, such as specifically selected methods of creative accounting, methods of determining the general value of the company's assets, specifically the property method, and the business method were applied to companies. Subsequently, selected methods of determining creative accounting were used in the work. The Beneish model and the Piotroski model were selected for the needs of the expert's methodological procedures. Results: From all the findings in our study, it follows that interventions in accounting can have a significant impact on the resulting value of the company. It depends on what kind of intervention is applied to the accounts and whether the expert is able to detect it. Conclusions: The result of the research, which is described in the article, is a proposal for the use of selected methods of detection of creative accounting by experts in the evaluation process. The paper proposes a coefficient of creative accounting, which adjusts the resulting value of the company. It is the first design created by longer-term research. In the process of determining the value of the company in the conditions of the Slovak Republic, interventions of this kind have not yet been applied to the final value. The proposed coefficient is one of several proposals that were the result of the dissertation.

**Keywords:** general value; creative accounting; property method; coefficient; risk



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## 1. Introduction

The value of a company is a very broad concept, and its determination depends on many internal and external factors that must be taken into account when quantifying it.

The value of the objectified asset must take into account the acquisition costs of the asset concerned, its degree of depreciation, and the development of market prices of the relevant components of the asset from the time of their acquisition to the time of their valuation. Furthermore, it must include the costs associated with the establishment, operation, and management of the company and its financial structure, i.e., the share of equity and borrowed capital that covers the company's assets, as well as the terms related to the performance of the contract. An important factor in determining the value of a company, based on the revenue principle, is the consideration of its future revenue, a

well-designed business plan that relates to past business development, especially when the company is valued for an indefinite period of life. Maximizing the company's value is the goal of the company's financial strategy and can analyze the future development of the company in terms of company value (Na and Qian 2017).

The basic for calculating the value of the company is the company's accounting. Various methods work with the outputs, which are used to quantify the value of the company. In fact, there is a risk on the part of the expert to work in the calculation with the documents submitted by the company, given the current time, which is recording an increase in economic fraud and distorted data. On the one hand, the submitter of the expert opinion is responsible for the documents that are submitted to the evaluation process. On the other hand, the expert has to quantify the value of the company on the basis of them, which has to meet several attributes, and at the same time, the expert is responsible for this quantified value, which he also confirms with his/her signature and stamp. The value determined by the experts should be the most likely estimate of the price it should achieve on the market in conditions of free competition, in fair sales, when both buyers and sellers act with due information and caution, and assuming that the price is not affected by undue motive. The quantified value should be realistic and should not take into account any unfair practices. However, where is the line of responsibility between what the company states in the accounts, and its outputs, and the fact that the expert does not reveal it during the evaluation?

Accounting is a scientific discipline that deals with recording true economic changes in a company. It is intended to provide a true and fair view of the company's finances. A company that is required to keep accounts must ensure the continuous and true reporting of facts about the state of assets and their movement, the state of liabilities and their movement, differences between assets and liabilities, income, expenses, income, expenses, and profit or loss (Act No. 431/2002 Coll. on Accounting as Amended and on Amendments of Some Act. Slovakia).

The company's accounting is one of the basic documents for the expert to determine the general value of the company's assets. However, the business may attempt to adjust this information using creative accounting methods. It may do so in order to be able to carry out the planned legal act or to show the company, for example, in a more positive light. However, creative accounting tools can go beyond the legality and lead to crime. The essence of creative accounting is based on accounting theories, but it adjusts the company's results according to various purposes. It can be understood as a deliberate disruption of economic change in society due to a predetermined purpose. It is a process in which accountants manipulate the data contained in accounting, using knowledge of accounting laws and rules. (Jankalova 2017) Enterprises manage earnings in an effort to balance their profit fluctuations to provide increasingly consistent earnings in every reporting period. Earnings management is a legal, and very effective, method of accounting techniques that may be used to obtain specific objectives of the enterprises involving the manipulation of accruals (Kliestik Tomas et al. 2020).

It is possible that the very situation related to the COVID-19 pandemic may significantly increase the whole interest in using these creative accounting practices. Companies can not only try to worsen their financial results, but they can also try to improve them, for example, if they are trying to get a loan.

It is up to the discretion of the entity that uses these creative accounting practices, as this is, in any case, a distortion and manipulation of the data, and in some cases, it may be a criminal offense. According to the Criminal Code in Slovakia, anyone "who provides false or grossly misleading data, or conceals mandatory data on serious facts in a statement, report, computer input or other documents used for accounting control" commits an offense against economic discipline (Criminal Code no. 300/2005 Coll. as Amended and on Amendments of Some Acts. Slovakia).

Misleading financial reporting has a negative impact on all stakeholders because financial records are the primary source of information about the financial stability, economic activity, and financial health of any company (Svabova Lucia et al. 2020).

Experts in Slovakia have expert activity defined by legal regulations, which, in some cases, significantly guides the expert and set the boundaries for his/her work. There is not as much freedom in using different methods as it is abroad.

In the evaluation process, the so-called the objectification process must be carried out by each expert, in accordance with the applicable valuation principles, and must be observed in all circumstances:

- the principle of an economically reasonable solution,
- objectivity—objective evaluation,
- justification of the evaluation,
- reserve the substance—preserve the core of the problem (Majduchova et al. 2016).

In addition to the basic principles, it is essential that a neutral and independent attitude towards the company is maintained and that the evaluation of the expert is based on a clear basis. The principles of evaluation in the conditions of Slovak legislation are:

**Asset principle**—The value of the company is calculated from the value of individual components of the company's assets, from which the value of liabilities is deducted. In (Decree of the Ministry of Justice of the Slovak Republic no. 492/2004 Coll. on the Determination of the General Value of Property, as Amended 2004), the property and liquidation method corresponds to this principle. Methods based on the property principle work with quantities, which are referred to as state quantities. These are methods that capture and express the state of the company's assets and liabilities at a particular point in time.

"The company's asset valuation principle represents a static view of the enterprise as a whole while respecting the principle of conservation of substance. It requires the cooperation of experts from technical and economic fields, precise organization of the work, provision of documents, property inspections, consultations with the contracting authority, as well as the use of all the skills and expertise of the experts." (Sedlaková 2012).

**Revenue principle**—In this case, the value of the company is determined on the basis of deductible resources that the company will create in the future. The decree uses the income principle in the business method.

**Combined principle**—It combines the property and income principle. The combined method is based on this principle in the decree.

**Market principle**—Its basis is the derivation of the value of the company from the value of a similar company on the market. In legislation, the comparative method works on this principle and in practice, it is minimally used (Harumová 2016).

Expert activity requires a high level of expertise, and an expert has to be able to assess the various specifics of the cases he encounters during his/her work. It must be constantly educated and advanced in knowledge and practice.

However, the creative accounting itself is not always possible for an expert to detect. It depends on the method of creative accounting used by the accountant, as well as the quality and scope of the submitted documents with which the expert works.

In addition to accounting, it is necessary to know other information about the evaluated company during the work of the expert. For example, in the case of assessing the revenue potential, it is necessary to know the company's plan, to know its development in the past, the company's opportunities, or its threats.

Therefore, the article examined the ways to eliminate creative accounting. In our procedure, we used methods that we considered to be suitably applicable to evaluation methods, and at the same time, can be easily combined with financial analysis.

The article is divided into several parts. The following chapter lists the methods that were used in the work. Some are very extensive, so they are described in a shorter mode, without disturbing their essence. The third chapter summarizes the results of the research, which is divided into two parts. One part deals with the impact of creative accounting on

the value of the company. The second part presents the results of calculations of methods for revealing creative accounting. The conclusion of the second part is the sequence of the design of the coefficient of creative accounting.

The fourth chapter presents the strengths and weaknesses of the present proposal, and the fifth chapter concludes and gives a brief summary of the findings.

## 2. Methodology

The general value of the company and its parts by the asset method is determined as follows ([Decree of the Ministry of Justice of the Slovak Republic no. 492/2004 Coll. on the Determination of the General Value of Property, as Amended 2004](#)):

$$V\check{S}H_M = \sum_{i=1}^n V\check{S}H_{ZMi} - V\check{S}H_{CZ}$$

where:

$V\check{S}H_M$ —the general value of the company [€],

$n$ —total number of asset components by type

$\sum V\check{S}H_{ZMi}$ —summary general values of asset components [€],

$ZM_i$ —asset components (for example inventory, receivables, liabilities)

$V\check{S}H_{CZ}$ —the general value of liabilities and external resources [€] ([Adamikova and Sedlakova 2021](#)).

During the research, not only the assets method was applied to the company, but also the yield method that is also defined in detail in ([Decree of the Ministry of Justice of the Slovak Republic no. 492/2004 Coll. on the Determination of the General Value of Property, as Amended 2004](#)). Methodologically, it is described on two levels, for a business with an unlimited life or for a company with a limited life. An unlimited lifetime version was used for the research: (the so-called going concern principle):

$$V\check{S}H_P = H_{OZ} + H_P \text{ [€]},$$

where:

$V\check{S}H_P$ —the general company value by the yield method [€],

$H_{OZ}$ —the value of the expected values from the financial plan for the valuable period (for example, profit development) [€],

$H_P$ —continuing value by the so-called going concern principle [€] ([Decree of the Ministry of Justice of the Slovak Republic no. 492/2004 Coll. on the Determination of the General Value of Property, as Amended 2004](#); [Adámiková et al. 2019](#)).

Due to the large scope of the whole method, it is described in the paper generally from the point of view of its main essence. The resulting general value represents the present value of the planned revenues at the valuation date. The basis for the method is a well-processed financial plan of the company. It is usually intended for 6 years. The first phase of the calculation includes data from 5 years and the second phase is a quantified value continuing, which is calculated from the following year after a period of 5 years (from the first phase).

The value continuing is significantly influenced by the denominator in the fraction, specifically the relation between capitalization rate ( $i$ ) and growth of withdrawable resources ( $g$ ) for satisfying the inequality ( $i > g$ ). For the method, it is very important to set the capitalization rate  $i$ , which is used to calculate the present value of expected returns. It is also very important to set the right growth rate of the company and abstract from all the extremes that need to be examined in detail at the same time.

Sustainable growth ( $g$ ) depends on the state of the company, on its development before the valuation date and for the period of the prepared financial plan, on the valuation date. The growth rate  $g$  is determined in the expert opinion in accordance with the usual procedures, such as Gordon's model, geometric series, and arithmetic series. The

assessment must describe the specific methodological procedure by which it is quantified (Adamikova and Sedlakova 2021).

There are a large number of methods for detecting fraud, which can be used in practice, for example, statistical techniques, artificial intelligence, financial analysis, and various analytical models. Methods based on analytical models evaluate the occurrence of fraud or possible accounting errors (Safta et al. 2020). It is possible to use them to eliminate possible hidden facts, to detect discrepancies or indications that identify the basic features of fraud (Safta and Achim 2020). Such methods for detecting balance sheet fraud and entity misconduct include, in particular, the Beneish model, the CFEBT model, Benford's law, the Piotroski score model, the Altman index, and the Dechow F score (Kozlov et al. 2018).

Their use is related to their overall methodological process and what final effect the method provides. Several factors were taken into account when selecting the methods for the design coefficient. An important condition was the need to work with accounting and outputs from it to make the method applicable to different types of companies. Financial analysis is important for expert work, so an effort was made to link it with other selected methods.

At the same time, methods for detecting creative accounting were applied in the research, namely:

Beneish model—belongs to the mathematical models, it is based on 8 variables, which can be used to identify the manipulation of information in the financial statements. The Beneish M-score helps identify companies that are likely to manipulate their reported earnings. Companies with a higher score are more likely to be manipulators. This is a probabilistic model, so it will not detect manipulators with 100% accuracy (Beneish 2001).

The variables are compiled from the data in the company's financial statements and, after calculating them, create a M-score showing the extent to which the profits have been manipulated. The calculation of the M-score value is calculated on the basis of equations:

$$M = -4.84 + 0.92 \times \text{DSRI} + 0.528 \times \text{GMI} + 0.404 \times \text{AQI} + 0.892 \times \text{SGI} + 0.115 \times \text{DEPI} - 0.172 \times \text{SGAI} + 4.679 \times \text{TATA} - 0.327 \times \text{LVGI}$$

where:

DSRI Days' sales in receivable index in the  $t$  and  $t - 1$  period.

GMI Gross margin index as the ratio of gross margin and sales in the  $t$  and  $t - 1$ .

AQI Asset quality index.

SGI Sales growth index.

DEPI Depreciation index.

SGAI Sales and general and administrative expenses index.

LVGI Leverage index of total debts to total assets in the  $t$  and  $t - 1$ .

TATA Total accruals to total assets in the  $t$ -period.

If  $M > -2.22$ , a firm is likely to be a manipulator.

The individual coefficients are defined in detail in various publications (Drábková 2017; Beneish et al. 2012), original (Beneish 1999).

The Piotroski score model uses selected ratios used in the financial analysis of companies and the evaluation of their health, specifically indicators of liquidity, profitability, efficiency, and sources of financing and leverage of the company. The individual indicators are awarded points based on a comparison of data from the previous year and their total sum is the basis for determining the overall score. A point is awarded to an enterprise if the inequality relationship holds. The score is calculated based on 9 criteria divided into 3 groups.

#### Profitability

ROA Return on assets. Net income dividend by year beginning total assets. F score is 1 if ROA is positive, 0 otherwise.

CFO Operating Cash Flow dividend by year beginning total assets. F score is 1 if CFO is positive, 0 otherwise.

$\Delta$ ROA Change in ROA from prior year. If  $\Delta$ ROA > 0, F score is 1. Otherwise F score is 0.

ACCRUAL CFO compared to ROA. If CFO > ROA, F score is 1. Otherwise F score is 0.

### **Leverage, Liquidity, Source of Funds**

$\Delta$ LEVER Change in Long—term Debt/Average Total Assets ratio. If the ratio compared to prior year is lower, F score is 1. Otherwise F score is 0.

$\Delta$ LIQUID Change in current ratio. If current ratio increases from prior year F score is 1. Otherwise F score is 0.

EQ\_OFFER Total common equity between years. If common equity increases compared to prior year, F score is 1. Otherwise F score is 0.

### **Operating Efficiency**

$\Delta$ MARGIN Change in Gross Margin Ratio. If current year's ratio minus prior year's ratio > 0, F score is 1. Otherwise F score is 0.

$\Delta$ TURN Change in Asset Turnover Ratio (Revenue/Beginning Year Total Assets). If current year's ratio minus prior years > 0, F score is 1. Otherwise F score is 0.

The model was modified by several authors, but all its variants are divided by companies into two types:

Valuable companies with a score of 8–9

Businesses at risk with a score of 0–1 ([Chen 2019](#)).

## **3. Results**

The most used methods in Slovakia are the property and business method. Both methods have been tested by research to see if their methodological procedures are built in such a way that the expert is able to reveal creative accounting when quantifying them. At ABC, s.r.o. the business method was applied, working on the revenue principle, for which a financial plan was also designed due to the necessity for its calculation. For EFG, s.r.o. the property method working on the property principle was applied. Selected interventions were implemented for both companies in the research using creative accounting methods. Subsequently, these interventions were analyzed, from the perspective of the expert and his/her methodological procedures, on whether it is possible to detect these creative interventions in accounting. Despite the fact that these interventions were implemented in small numbers, it was found that they can affect the resulting general value of the company, and not all interventions using creative accounting methods can be detected by the expert in the evaluation.

The research in the paper is presented at two companies ABC, s.r.o. and EFG, s.r.o. One company is mainly focused on production, and the other company is mainly engaged in providing services. Data from real companies that have been subject to expert evaluation are used. As this is confidential information (the expert is bound by confidentiality), the names of the companies have not been published, and the data have been adapted for the purposes of the study.

### **3.1. Impact of Creative Accounting on the Value of the Company**

The correct setting of the company's financial goals can significantly affect the company's financial management and policy. Financial stability for business development is represented by financial returns. Therefore, the company should create an individual revenue model for its conditions to ensure healthy and sustainable growth ([Remeňová Katarína and Nadežda 2020](#)).

In the case of ABC, the financial plan is set very carefully with a growth rate  $g = 0.1\%$ . The quantified value of the company before interventions by creative accounting methods and the general value after interventions are given in the Tables 1 and 2.

**Table 1.** General value of the enterprise's assets by the yield method before adjustments (autor).

Period of Years $n = 5$	1	2	3	4	5	$n + 1$
ABC, s.r.o Original Values	2019	2020	2021	2022	2023	2024
The original plan	134,876.35	135,011.23	135,146.24	135,281.39	135,416.67	135,552.08
$(1 + i)^t$	1.17446183	1.37936061	1.62000640	1.90263569	2.23457302	
$1/(1 + i)^t$	0.85145380	0.72497358	0.61728151	0.52558669	0.44751279	HT
$H_{OZ}$	114,840.982	97,879.573	83,423.275	71,102.096	60,600.690	349,709.72
$H_{OZ}$	427,846.6165					
$H_p$	349,709.7178					
$V\check{S}H_p$	777,556.33	Rounded to the nearest ten euros				777,560

Source: own processing.

**Table 2.** General value of the company's assets according to the yield method after adjustments (autor).

Period of Years $n = 5$	1	2	3	4	5	$n + 1$
ABC, s.r.o Adjusted Values	2019	2020	2021	2022	2023	2024
The adjusted plan	73,640.57	73,714.21	73,787.92	73,861.71	73,935.57	74,009.51
$(1 + i)^n$	1.1009	1.2119	1.3342	1.4688	1.6169	
$1/(1 + i)^t$	0.90836706	0.82513072	0.74952156	0.6808407	0.61845327	HT
$H_{OZ}$	66,892.665	60,823.857	55,305.639	50,288.058	45,725.696	458,279.94
$H_{OZ}$	279,035.915					
$H_p$	458,279.939					
$V\check{S}H_p$	737,315.85	Rounded to the nearest ten euros				737,320

Source: own processing.

It can be seen from the resulting values that, in comparison with the development of the value of  $H_{OZ}$  in the plan for 2019–2024 before and after the intervention in accounting, the decrease in the resulting general value is not as significant as the significant decrease was in the adjusted profit.

Under the business method, the resulting value was affected not only by the decrease in the value of  $H_{OZ}$  (in this case, the decrease in profit in the current accounting period). The determination of the degree of capitalization, which was also affected by creative accounting methods, also had a significant effect. The change in the ratio of own funds to liabilities, on the liabilities side, changed significantly, which was reflected in the calculation of the value of the first phase of the calculation (designated  $H_{OZ}$ ), which consists of 5 years (2019–2023) and the continuing value (designated  $H_p$ ) at 2024. In the first phase of the calculation, there was a decrease in the value of  $H_{OZ}$ . Additionally, see that the implemented changes affected the ongoing value, which, however, caused its increase, despite the fact that the plan is a decline in profit compared to the original unadjusted plan. It is given by the methodology of calculation of  $H_p$ , specifically by the denominator in the fraction  $(i - g)$  under the conditions  $i > g$ . A detailed methodological procedure is given in the Decree on Determining the Value of Assets ([Decree of the Ministry of Justice of the Slovak Republic no. 492/2004 Coll. on the Determination of the General Value of Property, as Amended 2004](#)). The smaller this value, the greater the value of  $H_p$ . By adjusting the values, the capitalization rate decreased (Table 3).

The method is sensitive to a number of influences and also creative accounting practices can have a significant impact on it. It is difficult to set the financial float in the future and to guarantee its reality, given the number of fluctuations and uncertainty in planning. According to [Majduchova et al. \(2016\)](#), it is possible to emphasize the applicability of accounting variables to determine the value of the Beta coefficient and identify significant impact on the value of the company's revenues. In this contribution, the cost of equity is recalculated by a simple calculation using the return on equity. The calculation should point out the impact of changes in the structure and changes in the share of own and external resources on the rate of capitalization.

**Table 3.** Calculation of the capitalization rate (i) based on the WACC method (autor).

WACC	2018 Original Values	2018 Adjusted Values
own capital	444,097.61	382,923
foreign capital	360,092.39	408,934.39
Total capital	804,190.00	791,857.39
Cost of own capital rentabilita vlastného kapitálu	0.3034	0.192119565
EAT	134,741.61	73,567
cost of foreign capital	0.01954	0.019540893
income tax 21%	0.21	0.21
WACC (v %/100)	0.1745	0.1009

Source: own processing.

At company EFG, s.r.o. property method, there was also a decrease in the general value of the company's assets (Table 4).

**Table 4.** The general value of the assets by the asset method before and after the intervention.

EFG, s.r.o 31.12.2019	Netto Values	VŠH <sub>M</sub>	Netto Values	VŠH <sub>M</sub>
Assets and liabilities	original	original	adjusted	adjusted
Non-current assets	986,309.00	1,324,055.04	986,309.00	1,324,055.04
Inventory	3421.00	3885.78	3421.00	3885.78
Receivables	593,893.00	593,893.00	590,693.00	590,693.00
Financial accounts	20,207.00	20,207.00	23,147.00	23,147.00
Deferred expenses	9984.00	9984.00	7984.00	7984.00
Deferred income	872.00	872.00	872.00	872.00
<b>Total assets</b>	<b>1,614,686.00</b>	<b>1,952,896.82</b>	<b>1,612,426.00</b>	<b>1,950,636.82</b>
Allowance and provision	4540.00	4540.00	4,540.00	4540.00
Long-term liabilities	890,415.00	890,415.00	890,415.00	890,415.00
Short-term liabilities	541,119.00	541,119.00	557,919.00	557,919.00
Bank loan	73,097.00	73,097.00	73,097.00	73,097.00
<b>Total liabilities</b>	<b>1,509,171.00</b>	<b>1,509,171.00</b>	<b>1,525,971.00</b>	<b>1,525,971.00</b>
<b>Difference Total assets–total liabilities</b>	<b>105,515.00</b>	<b>443,725.82</b>	<b>86,455.00</b>	<b>424,665.82</b>
General value (VŠH <sub>M</sub> ) Eur		443,730 Eur		424,670 Eur

Source: own processing.

Research has shown that creative accounting can have an impact on the general value of a company's assets as determined by both the property and yield methods. In the case of these companies, it has less influence on the value determined by the property method than in the value determined by the yield method. In both companies, similar interventions were implemented in the accounting of the type creation of reserves, provisions for receivables. The difference was in the case of ABC, a loss event was applied to inventories and in the case of EFG, s.r.o., fictitious invoices from the supplier and accruals on the assets side were incorporated. When comparing accounting interventions in the asset method, the expert identifies provisions and does not take them into account in the calculation. Allowance and provision are a bigger problem if they are duly substantiated and unquestionable, and the expert must take them into account. The same is true of a loss event, if the company has all the documents that prove it, it is undetectable. Fictitious invoices, if the documents contain all the data that are given by law, the expert has no reason to determine that the document is fictitious. In the case of accruals, if the document is incorrectly incorporated in terms of time, the expert knows this fact. If the problem is of a different nature, e.g., fiction, he does not know how to reveal this fact. An even bigger problem can arise with the yield method if the expert does not examine the entire profit and loss statement and the resulting profit of the company in detail. Only some creative accounting methods can be revealed, even by detailed examination and requesting various information. However, some interventions cannot be detected.

### 3.2. Possibilities of Revealing Creative Accounting

According to the findings of the research, by implementing selected methods of creative accounting for the value of the company, it was found that not all intentional adjustments in accounting can be revealed by an expert in his/her work. Therefore, the research continued in a direction that could help the expert in his/her work, so that the expert cannot have doubts that the data he is counting on are really realistic. This part of the research is really challenging and is constantly in the solution phase. However, in this post we present a certain solution proposal. The research included an analysis of various methods for detecting creative accounting and fraud. The proposal incorporates methods that we believe could be suitable for expert work, as they can be linked through indicators to financial analysis. Therefore, from the whole selection, the final solution in our method proposal was the Beneish model (Beneish 1999), Piotroski model (Chen 2019) in connection with the obligation to prepare a financial analysis in relation to the individual monitored areas according to the Piotroski model. The result of the Beneish model is to say that if the value is less than  $-2.22$ , the company is not expected to manipulate the data. Conversely, if the value of the M-score is greater than  $-2.22$ , there is a risk and probability of data manipulation. Following this fact, the results in the analyzed company EFG, s.r.o. are also evaluated, where the model draws attention to possible manipulation not only in 2019 but already a year before (see Table 5).

**Table 5.** M-score indicator after multiplication with weights.

Indicator	Weights	2017		2018		2019	
	−4.84	−4.8400	18.94%	−4.8400	663.64%	−4.8400	290.44%
DSRI	0.92	1.3491	−5.28%	0.7383	−101.23%	0.9285	−55.72%
GMI	0.528	0.5883	−2.30%	0.5592	−76.68%	0.5449	−32.70%
AQI	0.404	0.3272	−1.28%	0.4185	−57.39%	0.3658	−21.95%
SGI	0.892	1.7085	−6.68%	1.4888	−204.13%	1.1839	−71.04%
DEPI	0.115	0.0834	−0.33%	0.1195	−16.38%	0.0783	−4.70%
SGAI	−0.172	−0.4017	1.57%	−0.2529	34.68%	−0.2084	12.51%
TATA	4.679	1.4990	−5.86%	1.4023	−192.28%	0.5668	−34.01%
LVGI	−0.327	−25.8747	101.23%	−0.3630	49.77%	−0.2862	17.18%
M=		−25.5609	100.00%	−0.7293	100.00%	−1.6664	100.00%

Source: own processing.

From the final evaluation, according to the Piotroski model, it can be seen that EFG, s.r.o. does not achieve an overall rating of either the best at level 9 or the worst at level 1–2. The best rating is in 2019 (see Table 6.).

**Table 6.** The results Piotroski score.

Total evaluation	2017	2018	2019
	5	7	8

Source: own processing.

A procedure that could help the professional to detect and rule out possible errors may generally look similar to this:

**Step 1** Use of the results of Beneish model analyses and the assignment of the indicator coefficients, according to the importance of the influence on the final value of the M score.

**Step 2** From the analysis of the results of the Piotroski score, assign, to each of the three monitored areas, a risk-related assessment. Specifically, each area that brings the risk of manipulation of data in accounting.

**Step 3** Link step 1 and step 2 to each other, support the financial analysis for each analyzed area according to the Piotroski model. Find out whether the company's effort was to influence the resulting value to increase or decrease.

**Step 4** The step according to whether, according to the processed financial analysis, these are interventions aimed at reducing the value of the company, to reduce the profit, then the general value of the company's assets can be determined as follows:

$$VSHM = \left( \sum_{i=1}^n VSH_{ZMi} - VSH_{CZ} \right) \cdot (1 + k_{kú})$$

If the interventions were aimed at maximizing value and increasing profits, then the general value of the company's assets can be determined as follows:

$$VSH_M = \left( \sum_{i=1}^n VSH_{ZMi} - VSH_{CZ} \right) \cdot (1 - k_{kú})$$

where:

$VSHM$ —the general value of the company [€],

$n$ —total number of asset components by type

$\sum VSH_{ZMi}$ —summary general values of asset components [€],

$VSH_{CZ}$ —the general value of liabilities and external resources [€].

$k_{kú}$ —the coefficient of creative accounting, which is added to the relationship in decimal form.

The coefficient of creative accounting is still the subject of research. Several proposals for it have already been processed. Due to its significant impact on the overall resulting general value of the company's assets, its design is very careful.

#### 4. Discussion

The work deals with only a few interventions in accounting, which were to confirm, respectively. Refute the impact of creative accounting on the value of the business, as determined by an expert. In the case of further research on this issue, it would be appropriate to apply different types of creative accounting methods and to classify the groups that have an impact and that do not affect the value of the company. As not all creative accounting interventions in the valuation process can be eliminated, the question arises as to how distorted data, from which the value of a business is to be determined, could be avoided.

The effort of all ongoing research is removable possible effects on the value of the company in the form of creative accounting. A large number of questions arise in the whole process of analysis and application of methods for detecting creative accounting and fraud. One of them is, for example, the fact that not all interventions are detectable. This is not only a detailed approach to the evaluation of the company by experts, but also the models themselves may not reflect all fluctuations unless they are particularly significant. From our point of view, it can be said that, if at least part of fraud or accounting interference is detected, this is also a step towards success.

At the same time, further research is needed to review and supplement the proposed coefficient of creative accounting, as it affects, directly, the value of the company. It is a very sensitive component of the proposed methodological procedure and can be significantly objected from the point of view of experts from practice. Other methods can be used in the design; a large number of methods can be explored. The proposed procedure should only be considered as an initial idea that needs to be further worked on.

#### 5. Conclusions

In this work, selected methods of creative accounting were applied to two companies, focusing on the decline in profit. It was observed that these selected practices had an impact on the amount of profit achieved, on the structure of all assets and liabilities and, at the same time, on the resulting general value of the company. In the analysis of the impact, of creative accounting on the resulting general value of the company's assets, the impact on the property method and the yield method were monitored separately, as they differ from each other in their methodological procedures.

The result of the research is the proposed methodological procedure and the coefficient of creative accounting for the asset method. Its application to the yield method is basically also possible, but it is still in the research phase. This proposed coefficient needs to be analyzed on a larger sample of companies, which may be the subject of our further research.

By applying the proposed procedure, to both companies, it was actually achieved to adjust the resulting value of the company. Based on the proposed procedure, the resulting value was almost comparable to the value of the company, which was originally quantified by experts before our interventions by creative accounting methods. However, the fact itself must be applied to more companies, so the calculation in this paper has not yet been described. After the next part of our research, specification, and elimination of all risks of the proposed coefficient of creative accounting, we can prepare a detailed contribution devoted only to a specific issue, which is extensive.

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