

14th International Scientific Conference on Sustainable, Modern and Safe Transport
(TRANSCOM 2021), High Tatras, Novy Smokovec – Grand Hotel Bellevue,
Slovak Republic, May 26-28, 2021

Possibility to reveal creative accounting when determining the value of the forwarding company's assets

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Abstract

Procedures and methods for determining the value of a transport or forwarding company are different. The purpose of determining the value of the company, what results the company reports and also who performs the valuation has a significant influence on the choice of the method. In addition to various other influences, the expert must also take into account the possibility of the existence of interventions in the transport and forwarding company's accounting. Creative accounting practices follow from the theory of accounting, but they record distorted economic changes in the company according to the wishes of various entities.

The most common reason is the reduction of the tax base, but the rare case is, on the contrary, the artificial improvement of the achieved results. The aim of the paper is to analyze the procedures and methods for evaluating a company engaged in transport and/or forwarding and to examine the significance of possible interventions in the accounting of the company and the possibility of their detection by experts.

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Peer-review under responsibility of the scientific committee of the TRANSCOM 2021: 14th International scientific conference on sustainable, modern and safe transport

Keywords: forwarding; value of company; creative accounting; asset method

1. Introduction

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. These are internal as well as external factors, as well as the

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purpose for which the value is determined by the experts, the phase of the life cycle in which the company is located and also the sector of the economy or the part of supply chain. The value can be determined for various legal acts, which can also affect its outcome.

For expert activities, the company's accounting and outputs are one of the basic documents for determining the value of the company.

The basic goal of the business is considered to be maximizing profit or maximizing the market value of the company. In the case of a joint stock company, this is about maximizing the market price of shares. The company's financial goals significantly affect the company's financial management and policy. Revenue streams provide financial stability for business development, companies should create an individual revenue model that ensures their healthy and sustainable growth (Remenova, Kintler and Jankelova, N. 2020). Accounting is a scientific discipline that deals with recording real economic changes in society. The intention is to provide a true and fair view of the company's finances.

In practice, in determining the value of the company, the most used methods are based on the asset and yield principle.

The asset principle of valuation represents a static view of the company as a whole as of a specific date. As of that date, the contracting authorities are submitted to the expert the sets of assets and liabilities in a detailed breakdown by individual components, for example details according to asset cards, inventory records, cash and bank account balance, detailed records of each receivable and payable, together with relevant contracts, repayment schedules, credit agreements and the like depending on the specific structure of the company. It requires the cooperation of experts from technical and economic expert departments, the precise organization of work and their interconnection, the provision of documents, inspections of property.

The yield principle of valuation works with data for a longer period of time, as it is necessary to process an analysis of the company's past development. The analysis of past developments will point out the reality of the business plan and financial plan, which is based on the principle. The client receives an expert opinion using this method to obtain information about the value of the company as a whole, but does not know the value of individual components of assets and liabilities. This, in turn, is the advantage of the property method. Each of the methods based on the property or income principle has its positives, but also its negatives. It is up to the expert's experience and also to the structure of the submitted data and information that the methods are applied correctly (Szilágyi and Sedlakova2002). At the same time, expert activity belongs to knowledge-intensive market services (Majduchova, Rybarova and Sivakova 2016).

Each company is unique, each has its own specifics and also its own team of managers on which the company's results depend. Some companies try to use management procedures in their activities, they want to achieve business excellence, which is also addressed in the study where the basis for achieving Business Excellence is to respect the core principles of Total Quality Management (Jankalova and Jankal 2020). Other companies like to they use creativity and influence their results to achieve their goal.

The value of a company is determined for various purposes, such as sale, non-monetary deposit, merger, obtaining a loan, etc. Depending on this purpose, the company may try to influence this value with various tools within the legal possibilities. Companies that deal with KIBS need a well-developed environment for building these services (Corejova and Al Kassiri, 2015). These practices may include creative accounting, which stems from accounting theories but records distorted economic changes in the enterprise according to the wishes of several entities.

Creative accounting can be understood as a conscious distortion of economic changes in a company for a predetermined purpose, it can be characterized as a process in which accountants use their knowledge of accounting laws and rules to manipulate the data contained in the accounting books (Jankalova 2013). Many studies deal with creative accounting in practice. Most studies consider this practice to be unethical and should be stopped; others acknowledge that, although it contributes to business failure, loss of investment and the economic crisis, it is a necessary and legitimate course of action (Akpanuko and Umoren 2018).

It is up to the company to use these creative accounting practices. This is data distortion and manipulation and in some cases can be a criminal offense. Distortion of accounting information (financial statements) can have several purposes. The most common reason is a reduction in the tax base, but an unusual case is the artificial improvement of the achieved results. Various groups may be interested in the distortion of the financial statements, for example, employees, management, or investors who are interested in securing and valuing their investments. The management

of the company may be interested in presenting the entity in a "better light", for example in front of competitors, the public, banks or in order to prevent transfer prices between related parties and the like.

One of the best known creative accounting techniques defined by the Institute of Certified Accountants of England and Wales (ICAEW) is Purposeful Manipulation - Windows dressing, which can be considered the execution of transactions where financial statements give misleading information or an unrepresentative picture of an organization's financial position. The purpose of the window dressing technique is to manipulate the accounting data so that the statements take on a form that suits managers. The main techniques of windows dressing include: replacement of modernization of assets for repairs and vice versa, choice of depreciation method, distortion of valuation of assets in the balance sheet at the time of acquisition, intentional reporting of revenues that do not meet their definition, non-compliance with the principle of prudence in accounting and the like.

The second is Off-balance sheet financing, which is defined as the financing or refinancing of business activities that do not appear in its balance sheet in compliance with the legal requirements of existing accounting policies.

The following crucial techniques are used for off-balance sheet financing (Finančné trhy, 2016):

- non-recognition of liabilities arising from non-payment of a receivable;
- incorrect reporting of leasing;
- reporting liabilities (debts);
- guaranteed loans treated as sales and
- loans classified as equity.

The third technique is Profit Management - this technique is very popular and widespread in the USA and is defined as profit manipulation with the intention of reaching its desired level.

A wide range of cover-up techniques is often used, such as issuing false documents, backdating contracts and invoices by changing the time on the computer, scanning and then modifying the data in the documents. These activities involve a more aggressive form of creative accounting called abusive profit management (Drabkova, 2017).

Some creative accounting practices can have a significant impact on business structure. The share of own and foreign sources of coverage of the company's assets affects the financial stability of the assessed company. Equity includes the profit or loss for the current accounting period, which is mostly subject to distortion.

In our article we will summarize a study in which creative accounting was applied to the forwarding company and an analysis was processed, which the expert could reveal at work and what was not possible due to methodological procedures, documents and information in the evaluation. At the same time, one of the models for detecting creative accounting was applied to the adjusted financial statements.

2. Methods

The aim of the paper is to point out the possibilities of using creative accounting procedures to determine the value of the forwarding company in the context of transport, logistics and forwarding industry as well as the perception of the company's position. The first step in achieving aims was to characterize, analyse and define the restrictions from the perspective of the forwarding company. We selected a representative company based on expert opinions, market analysis and data availability (www.finstat.sk).

The primary sources of information were professional publications and materials in the field of value of the company from the expert point of view. As part of the application of the creative accounting procedures, individual elements of the balance sheets decisive for the application and investigation of determinants of the value of company were formulated and analysed. Subsequently, individual possibilities of creative accounting were used and evaluated the modified parts of balance sheets.

Creative accounting was an effort to reduce the profit for the current accounting period. The data were examined by experts for possible manipulation. The adjusted results of S.R.O. a model for detecting errors in accounting was applied. Beneish's model belongs to mathematical models, it is based on 8 variables, which can be used to identify the manipulation of information in the financial statements. The variables are compiled from the data in the company's financial statements and, after their calculation, generate an M-score describing the extent to which the revenues have been processed.

3. Results

In today's modern economy, forwarding is no longer just about procuring transport. Forwarding is often referred to as one of the stages of outsourcing (so-called third-level outsourcing), while the individual levels differ from each other in the scope and complexity of the services provided. With the current understanding of forwarding, the forwarder is becoming more and more a logistician and is a full-fledged and often very important element of the logistics chain, while its services can sometimes form the whole basic logistics link for distribution logistics. At the same time, the optimization of transport costs itself is very important for companies dealing with forwarding and/or transport. A new, progressive approach based on the latest lean knowledge and the need to look for chain technologies can make a positive contribution to companies. Selected and discussed business topics are supply chain management, inventory management, traffic management, lean management. Mutual relations and possible problems should be contractually concluded (Kozak, Madlenak and Neszmelyi, 2020).

The basic legal document in freight forwarding is the conclusion of a freight forwarding contract. This contract is concluded by the shipper and the ordering party (transport customer). The forwarding contract expresses the forwarder's obligation to arrange transport from a certain place to a certain other place in his own name and on behalf of the principal, and the principal undertakes to pay the forwarder. This definition implies a relationship between the parties involved in the commercial-transport relationship. The priority task of forwarding and transport companies is to transport their shipments at the right time, to the right place, in the required quality, at the appropriate price, according to customer requirements. At a time when manufacturing cooperation has progressed as far as it is today and retail chains are operating around the world, this is usually not an easy task. The cycle of customer orders is shortening, e-commerce is starting over the Internet and new tasks for transport and forwarding companies are emerging. These are also the reasons that lead to an ever closer connection between forwarding and logistics.

Freight forwarding is therefore related to the provision of services. However, most companies have several subjects of activity, in our study we work with company S.R.O. in the Commercial Register established in 5/2015. The company is engaged in the forwarding and operation of road freight transport, but also has the following activities: purchase of goods for sale to the final consumer (retail) or other trade operators (wholesale), rental of movable property, brokerage in trade, services and production, activities of business, organizational and economic consultants, towing service, moving services, providing services of driving a foreign motor vehicle, courier services, storage, packaging activities, administrative activities, advertising and marketing services, rental of real estate associated with the provision of other than basic services with renting, performing extracurricular educational activities, forwarding, diagnostics and repairs of road motor vehicles, the performance of the profession of road freight transport operator.

From the financial statements of the analyzed company S.R.O. the following tables for the years 2017-2019 have been processed. In 2019, we deliberately adjusted the data in the financial statements, namely fictitiously received invoices in the amount of EUR 14,000, a provision for receivables in the amount of EUR 6,000 and non-differentiation of deferred costs in the amount of EUR 2,000. After the incorporation of interventions, the calculation was based on the following data, with real data in 2019 and also data adjusted for 2019 (see Table 1).

Table 1. Asset side of the balance sheet (in EUR).

Asset	2017	2018	2019	adjustment 2019	2019 modified
Total assets	980 736,00	1 398 134,00	1 614 686,00		1 606 686,00
Non-current assets	638 688,00	943 239,00	986 309,00		986 309,00
<i>Intangible assets</i>	<i>0,00</i>	<i>2 329,00</i>	<i>1 594,00</i>		<i>1 594,00</i>
<i>Tangible fixed assets</i>	<i>638 688,00</i>	<i>940 910,00</i>	<i>984 715,00</i>		<i>984 715,00</i>
Current assets	334 300,00	445 310,00	617 521,00		611 521,00
<i>Inventory</i>	<i>2 408,00</i>	<i>2 699,00</i>	<i>3 421,00</i>		<i>3 421,00</i>
<i>Short-term receivables</i>	<i>331 009,00</i>	<i>443 357,00</i>	<i>593 893,00</i>	-6000	587 893,00
<i>Financial assets</i>	<i>883,00</i>	<i>-746,00</i>	<i>20 207,00</i>		<i>20 207,00</i>
Accruals	7 748,00	9 585,00	10 856,00	-2000	8 856,00

It can be seen from the financial statements that non-current assets are represented in a higher proportion than current assets. All non-current assets consist mainly of individually movable property and sets of movable property. In 2019, the company reports land in addition to movable property. Current assets are mainly represented by short-term receivables. Financial assets consist of cash in hand and bank accounts on which, due to the balance on the bank account, there is probably an overdraft, as as of 31 December 2017 and 31 December 2018 no loan is reported for the previous period, but interest expense is reported in the income statement (Table 2).

The company has high liabilities in relation to the company's total assets, ie high indebtedness. The company has high long-term trade payables, to a lesser extent short-term payables. Short-term liabilities consist mainly of trade payables and also payables to shareholders. The company shows positive equity, in the monitored period also in previous years the company makes a profit. Through interventions in accounting, we managed to reduce our profit and thus the value of equity also decreased.

Table 2. Liabilities statement (in EUR).

Liabilities and equity	2017	2018	2019	adjustment 2019	2019 modified
Liabilities and equity	980 736,00	1 398 134,00	1 614 686,00		1 606 686,00
Equity	56 998,00	78 487,00	105 515,00		83 515,00
Total liabilities	923 738,00	1 319 647,00	1 509 171,00		1 523 171,00
<i>Allowance and provision</i>	<i>3 408,00</i>	<i>3 933,00</i>	<i>4 540,00</i>		<i>4 540,00</i>
<i>Long-term liabilities</i>	<i>573 865,00</i>	<i>905 855,00</i>	<i>890 415,00</i>		<i>890 415,00</i>
<i>Short-term liabilities</i>	<i>346 465,00</i>	<i>409 859,00</i>	<i>541 119,00</i>	14000	<i>555 119,00</i>
<i>Bank loan</i>	<i>0,00</i>	<i>0,00</i>	<i>73 097,00</i>		<i>73 097,00</i>
Accruals	0,00	0,00	0,00		0,00

In the income statement, our interventions affected costs, specifically the consumption of materials, services and provisions caused an increase in costs and thus a decrease in reported profit (Table 3).

Table 3. Profit and loss (in EUR).

Profit and loss	2017	2018	2019	2 019 modified
revenues	1 164 953,00	1 944 338,00	2 580 622,00	2 580 622,00
costs	1 149 462,00	1 915 826,00	2 545 696,00	2 567 696,00
profit not taxed	15 491,00	28 512,00	34 926,00	12 926,00
tax	3 290,00	7 022,00	7 899,00	7 899,00
profit after taxed	12 201,00	21 490,00	27 027,00	5 027,00

Looking at the profit and loss statement, it can be seen that the overall economic result is affected by the result of financial activities. The company has high interest rates. Operating activity is achieving positive results and has a growing tendency compared to the previous period. The company has high sales of services showing growth. The result of management from economic activity is also affected by services, a smaller part consists of personnel costs, taxes and fees and other costs.

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. If the final M-score is greater than -2.2, there is a real risk that the company will manipulate its financial statements. If the value is less than -2.2, it is unlikely that the company would be a manipulator.

Table 4. Indicator M-Score.

	2019	2019 modified		2019	2019 modified
DSRI	1,009257546	0,999061189	DEPI	1,330968522	1,349481759
GMI	0,969003090	0,943259717	SGAI	1,409904842	1,428760433
AQI	0,592624423	0,595575215	TATA	0,409534114	0,417797255
SGI	1,327249686	1,327249686	LVGI	1,310590733	1,317116417

The result M-score:

$$M = -4,84 + 0,92 \times \text{DSRI} + 0,528 \times \text{GMI} + 0,404 \times \text{AQI} + 0,892 \times \text{SGI} + 0,115 \times \text{DEPI} - 0,172 \times \text{SGAI} + 4,679 \times \text{TATA} - 0,327 \times \text{LVGI}$$

- accounting adjusted 2019 $M = -0,564683575$
- unadjusted accounting 2019 $M = -0,578317743$

The company has achieved results that show that the data has already been manipulated for us by editing the data (Table 4). The company has a reported loan in 2019, which may be the reason for manipulating the results. In both cases, the results show the manipulation of data in accounting.

4. Discussion

From the point of view of the expert's work, the mentioned model can be positive for drawing attention to possible manipulation of data in accounting. However, in his work, the expert must examine everything in detail, each component of assets and liabilities, so the model is more informative and helpful material for the expert.

In the equity method, the general value of the forwarding company's assets is calculated from the sum of all components of the company's assets minus the general value of foreign capital. Therefore, the value depends on the structure of assets and liabilities in the company.

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.

When evaluating the economic components of the property, the expert is based on the submitted documents, therefore, with our selected interventions, it is not possible to realistically reveal all adjustments. Especially when the company has everything documented.

- Provision for receivables - will be reflected in the financial statements on the assets side of the statement, based on which the resulting net value of receivables will be lower. From an expert point of view, each receivable denominated in the original currency and the amount in which it was issued and when it was issued is examined in detail. The stated initial value of the receivable is further adjusted to a general value by a methodological procedure using the recoverability coefficient. It depends on the documents and information provided to the expert what the resulting general value of the receivable will be. As this is a receivable from 2019, a very serious reason and basis must be provided in order for the value of the receivable to be reduced in comparison with the created provision. On the liabilities side, the value of the provision for receivables will not be reflected, on the liabilities side it will be reflected in the profit or loss, which falls into the own sources of coverage of assets, not into foreign sources.
- Accruals on the assets side in the event of an intervention in its amount affect the assets side of the balance sheet. As our intervention did not differentiate in terms of time and all rental costs were included in the cost of services, this affected the value of the economic result. In determining the value of accruals, the expert goes through the initial documents, invoices, contracts and the like, on the basis of which he would certainly reveal the fact that it is necessary to differentiate these costs and assign them to the period to which they are materially and temporally related.

- Fictitious invoices form a separate group of accounting interventions. It is difficult for the expert in the evaluation process, because if they are in order, all the submitted documents, meet all the prescribed requirements, are content related to the subject of activity, are recorded in the company's accounting, the expert has nothing to consider unrealistic documents. The fictitious level would have to be demonstrated by a separate process, which would be solved on the basis of a specific initiative of the courts, investigators. If in such a process the fictitious nature of the documents is proved and then the expert determines the value of the company, then he must incorporate it into the work on the basis of the submitted information. But it is unlikely that the expert himself can reveal the fictitious nature of the documents when valuing the company's assets. Therefore, in the present case, the company's liabilities and the increase in the cost of purchasing the goods were significantly increased, which would ultimately cause a decrease in the value of the company's assets when determining the value.

5. Conclusion

Expert activity is particularly demanding for all the specifics of the various cases that the expert will encounter during the evaluation process. The extent to which an expert can detect interventions in accounting always depends on the type of accountant's operation, the quality of the documents submitted and, in particular, his/her experience and expertise.

There are several methods you can use to expose creative accounting. 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.

From all the findings in our study, it follows that interventions in accounting can have a significant impact on the resulting value of the forwarding company. It depends on what kind of intervention is applied to the accounts and whether the expert is able to detect it. Therefore, methods for detecting creative accounting may in some cases be an appropriate support for the expert's work, as they know how to alert him to possible interventions. These models, specifically the model we applied in our study, do not show a 100% result, it is a probabilistic model to which not all the necessary information can always be provided and there is also a risk of correct interpretation of individual indicators in the model. Therefore, in the work of an expert, it can only be considered an aid, it is not possible to rely on it and determine the value of a particular asset on the basis of it.

Acknowledgements

"This publication was realized with support of Operational Program Integrated Infrastructure 2014 - 2020 of the project: Innovative Solutions for Propulsion, Power and Safety Components of Transport Vehicles, code ITMS 313011V334, co-financed by the European Regional Development Fund".



EUROPEAN UNION
European Regional Development Fund
OP Integrated Infrastructure 2014 – 2020



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OF THE SLOVAK REPUBLIC

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