Solutions for measuring the quality of the accounting information

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SOLUTIONS FOR MEASURING THE QUALITY OF THE ACCOUNTING INFORMATION

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ABSTRACT

There are many studies confirming the theory according to which the decisions of the users of the accounting information depend on the quality of this very information, namely its intrinsic quality, as well as its impact through publication.
We undertake to test the extent to which the intrinsic quality of the accounting information is assured by the internal means of obtaining the information. The analysis is performed on the Romanian market and takes into account the qualitative characteristics of the accounting information contained within the IASB conceptual framework. We have opted for the data analysis using the technique of the study case and for methods of economic analysis applicable in accounting.
After having checked the relevance of the conceptual framework, we have identified the prerequisites, the criteria and, respectively, the measurable quality parameters. We have monitored the influence of these explanatory variables in respect of the topic analysed through the study case, and we have considered the level of quality assurance.
The contribution of the study consists of new explicit sub-criteria for the assurance and control of the accounting information, which enrich the accounting theory, and, of an instrument for assessing the quality of the information to be offered to the users, namely managers, but also consultants, who can use it in practice and base their analyses and decisions on it.

KEYWORDS

Accounting information, quality, quantification, managers, consultants

INTRODUCTION

In spite of the essential role the quality of the accounting information has in users' decision making on sound grounds, this quality is rather complex to achieve and hard to detect. These qualitative characteristics are difficult to specify and monitor within the accounting standardization and practice. Moreover, they are difficult to examine even within archive or experimental studies that use or not empirical tests (Maines & Wahlen, 2006). Therefore, this topic has been a challenge for many papers in the economic literature.
Most of the papers have treated the topic from the accounting theory and standardization perspective (Demsey, 1989; Nobes & Parker, 2006; Pahler, 2003). Other papers analyse the quality of the information in general, from a conceptual point of view, and suggest definitions and classifications in order to develop new assessment methodologies (e.g. Lillrank, 2003).

A second category of papers is related to our study. These are papers that suggest methods for quantifying the quality. Among these papers, there are studies that demonstrate the extent to which the quality of the published accounting information impacts on the decisions of the external users, namely investors, by analysing the published results. These papers focus on the *effect of the accounting information* on the users' decisions, by performing empirical tests, by assessing the quality of the information according to the size of the statistical correlation between the price of the action and the published accounting indicators, on the basis of the efficient market hypothesis (e.g. Lee & Masulis, 2007; Barron & Stuerke, 1998; Dechow *et al.* (1996); Hirst *et al.*, 1995). Some other studies refer to the *intrinsic quality of the information* and to its influence mainly on the agent's management system. To this purpose, they have an internal approach, using more detailed information on the entity, identifying qualitative criteria, using variables that are rather non-financial than financial. Many of these studies refer to decision support systems (Hirst *et al.*, 1995; Kaplan *et al.*, 1998; Zhang, 2003; Xu *et al.*, 2003; Glăvan *et al.*, 2007).

Our study belongs to the category of papers that analyse the intrinsic quality of the accounting information. It takes further the conclusions of the mentioned authors, trying to measure the degree of quality assurance expected by the users of accounting information. It focuses on the use of the accounting information by the managers in decision-making and on the extent to which they can trust this information. It makes the proposal of a model of quality quantification, based on published accounting information, but also on other financial or non-financial information available for an internal analyst. The instrument is intended to managers, but we consider it can as well be used by financial analysts and auditors, consultants, who are thus assured to have a correct database for their own investigations, and who can quickly validate their own conclusions related to the information that the audited entity offer to third parties.

This paper is an exploratory study, which opens possibilities for establishing, deepening and implementing a methodology for quantifying the quality of the accounting information, making use of economic analysis methods intensely used at present in accounting research.

The study is structured on chapters that present:

- the economic and accounting theories involved, corroborated with the conclusions of certain studies from the specialty literature on which we rely when supporting our hypothesis;
- the construction of an economic model containing explicit measurement prerequisites and criteria for each qualitative characteristic of the accounting information and of quality parameters within these characteristics;
- the testing of the conceived model through a study case that allowed us to quantify and interpret the global quality of the accounting information.

1. RELATED STUDIES AND THEORIES USED

In the specialty literature – concerning quality in general – there are two patterns used to define or measure it (Lillrank, 2003), i.e. the pattern based on the demand of the clients (for accounting information, users), and, respectively, the pattern based on the quality dimensions or attributes. According to these two patterns, we can identify, in the accounting literature, as stated in the introduction, two types of papers, i.e. papers studying the impact of the quality on the users, and, respectively, papers approaching the inner, intrinsic quality of the information. Both types of papers were useful in our study, even if in different extents.

We start from the conclusions of the papers that have tested the effect of the accounting information quality on the users' decisions. Firstly, the demonstration of this correlation gives usefulness to our study and may be a supporting theory. Secondly, the testing has related the impact on the economic performance with the *degree of quality assurance*. Thus, a high quality of the accounting information improves the economic performance by mitigating adverse selection and moral hazard problem (Francis *et al*., 2004, 2005; Bushman *et al.*, 2004, quoted by

Chen, 2005). Bushman and Smith (quoted by Chen, 2005) justify the importance of the information quality for the decisions of the users by mitigating the asymmetry of the information and by mitigating agency problems by interacting with corporate governance mechanisms.
The papers that analyse the intrinsic quality of the information have helped us at least in two ways. Firstly, some of the quality criteria attached, in general, to the accounting information in the specialty literature and in the related accounting standards are selected and justified. Reliability (Maines & Wahlen, 2006: 401), and fairness and timeliness (Busacca & Maccarrone, 2007) are supported. We shall analyse reliability and comparability as demonstrated further on. Secondly, we rely on that part of the papers that consider quality through human, system, organisation related elements, i.e. through external factors (Xu *et al.*, 2003). As far as we are concerned, we have stopped at the influence of the internal factors, among which we have separated the influence of the accounting organisation system that we have not taken into account.
As a conclusion, our paper is based on the pattern of defining quality through quality attributes (Lillrank, 2003). The quality attributes are presented in different lists, out of which we have chosen the one referring to 15 attributes, grouped in 4 classes: intrinsic quality, accessibility, contextual quality and representational quality (Huang *et al.*, 1999, quoted by Lillrank, 2003). We exclude the last two classes among these, since we are not interested in the attribute of the information system (AIS) (the contextual dimension), and nor are we interested in the representation elements. We suppose the accessibility to be fulfilled, and thus the intrinsic quality of the accounting information is the only one to be analysed.
We state that there are few research studies that quantify the intrinsic quality of the accounting information by using an internal measure starting from the accounting theory and principles and not from the economic or financial theories. It is obvious that, in our turn, we are attached to economic theories that we use to justify the context of our study, as well as to the correlation (theory) between the quality of the accounting information and the efficiency of the users' decisions. Thus, we start from the entity modern theories, out of which, we are interested in the theory of the mixture of contracts (Alchian, 1991) – from the category of agency theories, and, respectively, in the theory of the hierarchical communication (Casson, 1997) – from the category of the incomplete contracts. When corroborating the theories mentioned, we can see that there are contracts that make the link between the entity and the market, which require a specialization in processing necessary information that results in cost reduction. This is the context where we place the dependence relation – that we intend to test – between the decisions of the users (for us, managers and consultants) and the quality of the accounting information, with the constraint of cost-efficiency.
The importance of the accounting theory for us consists of the justification of the economic model construction. Without going into details in this paper, we believe that beside specific concepts, the accounting theory also means fundamental, durable principles, i.e. principles deriving from the double-entry accounting, on the one hand, and, on the other hand, the ones considered to be implicit (closed patrimony, historical cost, monetary quantification, others). For a research to be well grounded, it is necessary to add to the accounting theory the accounting standards, which, together with the proper theory and the interests of the users' groups, define the accounting objectives. And, any accounting demonstration should start from the objectives, and reach to the (stable or current) instruments used to achieve these objectives. When we state this, we also take into account professor Ionaşcu's demonstration (Ionaşcu, 2003) concerning the characteristic of accounting as management science and not as economic science, as social game, as managing economic reality approach. In the light of the above-mentioned, when building our model, we shall use the accounting principles as a result of standardization, as they define the quality of information in a certain situation, a certain area and for certain users and their interests.
As already stated, our paper embraces the pattern of the quality defined through attributes,

choosing a rational and deductive approach, according to which the information is logically derived from theories and principles (Lillrank, 2003).
The designed model uses, first of all, the financial statements that, as they are standardized, offer the most reliable information resource in the users' eyes (Năchescu, 2007). Moreover, this model uses sometimes internal, analytical information, since the accounting principles through which we intend to demonstrate the information quality should be followed and applied all through the financial year and not only at its end (Ristea M., 2004).
The internal approach and the choice of the managers as the main addressees of the model are also linked to the need to refer the study to the Romanian market and to its realities. The Romanian managers cannot perceive sufficiently well the importance of the accounting information, of its quality and relevance (Ionaşcu M., 2007; Glăvan *et al*., 2007). A reason for this may be the impossibility to demonstrate to them, outside the auditor's report, the degree of trust they should have in it. The choice of the managers and consultants as addressees of the suggested model is based on the idea that the assessment of the information quality depends on the specific need of information of a user, on the significance of the information for that user (Lillrank, 2003). For this purpose, it is important to have information exchanges between the information producers and the information users in order to see what is useful for the latter. The more intense the information exchanges before the final product provision, the higher the quality of the final message. Therefore, we estimate that the managers, who control the production of accounting information, and the consultants (financial analysts and auditors), who diagnose the functions of the entity on the basis of internal documents and discussions with the leaders of the entity, can obtain higher quality information.

2. METHODOLOGY OF RESEARCH AND DESIGNED MODEL

2.1. Methodology of research

The study is based on the quantitative economic analysis. The quantitative models have developed with the heuristic ones and have especially developed in respect of assessing the health status of the agents, since they are intended for analysis performed mainly by creditors. Among the quantitative models, we have chosen a model based on determinant factors that should allow us to identify a correlation between the quality of the accounting information and certain accounting characteristics of the entity. In fact, this type of models is statistic type models, and it is necessary that the selection of the variables that are suggestive from a theoretical point of view to be checked empirically in order to keep only the statistically relevant ones. The specialty literature has dedicated to this purpose the discriminant analysis, the k method classification - nearest neighbour or LOGIT model (Dardac & Moinescu). We have opted for the discriminant analysis and, within this, for the classical „Z score" type model for measuring the quality of the accounting information. The statistical model supposes a consistent assessment of the qualitative characteristics of the information and the development of a econometric model (a), and, respectively, the differentiation and interpretation of quality with the help of a scoring scale (b).
In this study, we have performed the two stages, but we have used a study case and not a statistical analysis, on the basis of a sample, which should allow us the statistical validation and the generalization of the explanatory variables of the econometric model (a), and, respectively, the importance coefficients assigned to the variables (b). This is the major limit of the study, and it represents the second stage of the research proposed here, a stage in which the linear discriminant analysis or the classification through the k method - nearest neighbour will be used.
As a conclusion, the study has focused on the creation of a economic model for the measurement of the quality of the accounting information, where the explanatory variables are quality prerequisites, criteria and parameters selected through an archival research based on the analysis of the literature, of the accounting regulations and of the financial statements, and, respectively,

through interview. This model has been tested through a study case, where the topic of the analysis was an entity considered to be big from an accounting point of view, with a high performance accounting system, which was also checked through the expertise of an auditor, whose opinion had validated our conclusions resulted from the application and interpretation of the model.

2.2. The designed model

Our model has the classical form of a linear combination of indicators that reflect the global quality of the accounting information (Qai), is based on 2 quality prerequisites (Pq) (out of which we consider continuity to be a non-financial prerequisite of the analysis, outside the model, an eliminatory condition for the entity that does not fulfil it), and on 6 quality criteria (Cq), that are quantified through the identification and the measurement of specific parameters:

$$Qai = Pq_1 + \sum_{i=1}^{n} a_i \cdot Cq_i \,, \qquad \text{if } Pq_0 = 1 \qquad (1)$$

Where
Pq_0 – „going concern" quality prerequisite, eliminatory condition of the analysis
Pq_1 – „exhaustivity" quality prerequisite, Bernoulli type variable, with a value of 0 or 1, and with an importance coefficient of 1
Cq_i – quality criteria
n – number of quality criteria supposed, $i = 1 \div 6$
a_i – importance coefficients assigned to the quality criteria

In order to develop the economic model, we have gone through the following stages, which required a certain methodology for the collection and processing of data, and which resulted in several explanatory variables that were subsequently tested:

a) Choosing the quality references – through the comparative analysis of the accounting normative theories and of the study of the Romanian accounting system

Whereas the standardization of the financial statements is associated with the greatest trust in the accounting information, we have opted for the international reference, i.e. IASB conceptual framework. Beside the argument of generalization, there is the short Romanian accounting practice in implementing this conceptual framework (2001-2005 for big companies; the period after 2006 for certain companies/establishments that apply the conceptual framework and IFRS, either optionally or mandatory). Thus, we resorted to normative theories, out of which the most developed ones belong to FASB and IASB. Even if they have their own normative theory, the European directives and the Romanian regulation applied by all the entities do not define any concepts and do not offer any assessment criteria for the quality of the accounting information.
IASB conceptual framework provides for the following quality characteristics of the accounting information (IASB, 2007): *intelligibility (1), pertinence or relevance (2), reliability or credibility (3), comparability (4). Among the 4 characteristics, reliability is detailed, and it can be assured by: fair view of the transactions, substance over form, neutrality, conservation, exhaustivity.* Among these 4 characteristics, we shall integrate reliability and comparability in the economic model. We suppose that intelligibility is assured for the financial consultants who are addressees of the model (financial analysts and auditors) through the nature of their activity. Similarly, in the case of the managers, we suppose that the intelligibility condition is met, and thus we have no intention to test it within this study. We estimate that the relevance of the accounting information can only be tested through the second approach of quality, i.e. the impact on the users' decisions; therefore we do not discuss it here.

Reliability and comparability will be analysed through the accounting principles they indicate explicitly or implicitly, to which the use of the fair value is added.

b) Choosing the quality prerequisites and criteria, and their prioritisation – through the analysis of the documents and of the variables of the environment having an influence on the Romanian accounting system, by economic analysis methods

The assumed accounting principles for reliability and comparability to be used in the model are the 9 principles required by the Romanian regulations for big entities. Besides, we add the use of the fair value. The elements have been separated into prerequisites, and, respectively, into quality criteria, according to the testing possibility.

The quality prerequisites are (Pq): going concern and exhaustivity. The former is an explicit accounting principle that we consider to be, in fact, a prerequisite to the implementation of the other principles and that we shall test through the technique of the score function indicating the risk of bankruptcy, resulting in one of two possible situations, i.e. assurance or non-assurance of the prerequisite. We consider exhaustivity to be the consequence of the implementation of all the accounting principles, and we test it through the analysis of the auditor's report, concluding by confirming or infirming it.

The rest of the elements are considered quality criteria (Cq). We refer to the sunstance over form, conservation, consistency, accrual basis, intangibility of the opening balance sheet, implementation of the fair value.

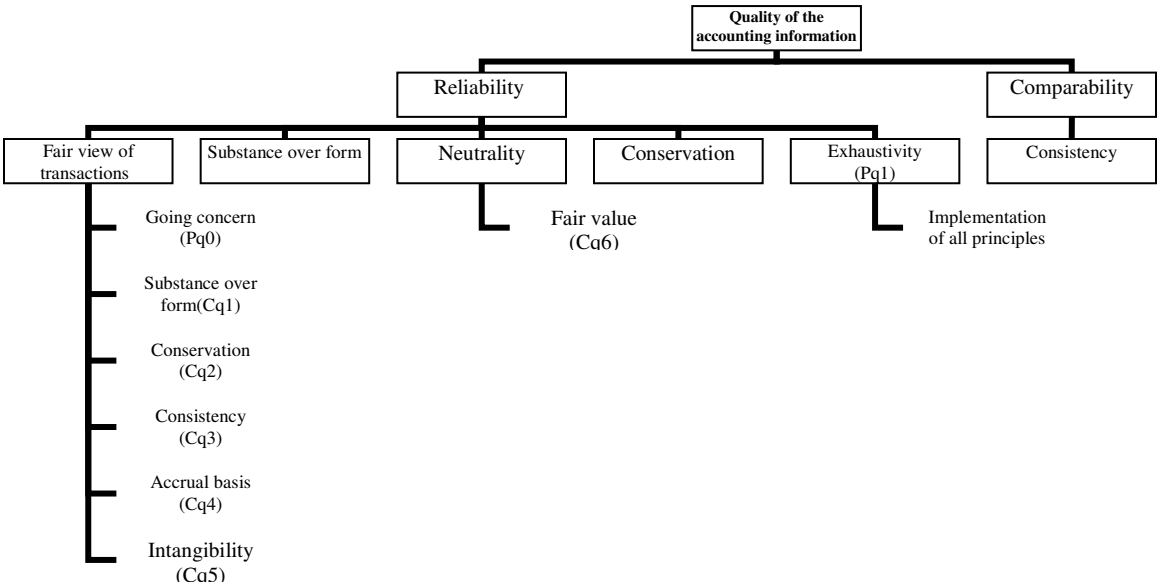
The principles have been prioritised by assigning certain importance coefficients, chosen according to the position they have in the presentation of the qualitative criteria within the conceptual framework (a) and by reason of their importance on the Romanian market (b). The importance coefficients (a_i) were assigned values ranging between $0{,}083 \div 0{,}2083$, proportionally to the significance we awarded them, taking the global indicator of quality as a weighted average of the value of the qualitative criteria (we have not resorted to the discriminant analysis method in this study). „Exhaustivity" quality prerequisite is assigned an importance coefficient of 1. Thus, three of the quality criteria have received a maximum importance coefficient, on the following grounds:

- Substance over form (Cq_1) – because it is presented explicitly within the conceptual framework as a quality sub-criterion, and, on the other hand, because we accept the thesis according to which the patrimony can stay the object of accounting in Romania, but as redefined, and integrating economic dimensions (Ionaşcu, 2003). We take into consideration the economic theory of the mixture of contracts according to which the entity should be defined.
- Conservation (Cq_2) - because it is explicitly presented in the conceptual framework as a condition for reliability assurance, but also because we consider that micro-economic financing in Romania – which is the main variable of the environment that influences the accounting – is mainly assured by credit. Hence, a conservation policy of some important users of information and a still significant importance of the conservation principle in Romania.
- Consistency (Cq_3) – because, together with the other accounting principles, it assures to obtain a fair view image, which is the first condition of reliability, and, on the other hand, it represents the solution to assure the comparability of information, which is an explicit quality criterion of the conceptual framework.

We consider the implementation of the fair value (Cq_6) to be a quality criterion that assures the neutrality of the accounting information, which is a quality element provided explicitly within the conceptual framework. The impact of the fair value on the information neutrality was proven by various empirical studies (*i.e.* Barth *et al*., 2001). The criterion of fair value implementation is assigned an importance coefficient of 0,1666.

The financial year independence (Cq_4) and the balance sheet intangibility (Cq_5) are not elements presented explicitly in the conceptual framework. We use them to deliver the faithful image together with the other principles. The importance coefficients assigned have been 0,125, and 0,083, respectively.
The following principles were not included in the model: non-compensation, materiality and separate assessment, because they are related to the accounting professional judgement, and to the current accounting records, thus being more difficult to test.
The reasoning behind the economic model is presented below:

Figure 1. **Economic model elements**



Thus, the economic model has the form of a score function, is based on relation (1), and is detailed below:

$$Qai = Pq_1 + 0{,}2083 \cdot Cq_1 + 0{,}2083 \cdot Cq_2 + 0{,}2083 \cdot Cq_3 + 0{,}125 \cdot Cq_4 + 0{,}083 \cdot Cq_5 + 0{,}1666 \cdot Cq_6 \quad (2)$$

The economic model shall be tested through the method of the study case and shall be interpreted through economic analysis methods. Each quality criterion is developed into quality parameters on the basis of the analysis of the documents and of the applicable accounting regulations.

3. RESULTS OF RESEARCH

The results are presented as assessment method of the quality prerequisites and criteria, and, respectively, as interpretation.

3.1. Assessment of quality prerequisites and criteria

Quality criteria are measured with the help of quality parameters (Qp). These parameters have been quantified by assigning a scoring ranging between $0{,}5 \div 3$, according to the significance we have attached to each parameter, the usual value being 1. Moreover, the parameters were assigned accomplishing probabilities for the entity concerned, on the basis of the internal analysis of data.

Considering these probabilities, the score obtained by each quality criterion was calculated in relation with the maximum possible score.

A. Assurance of going concern (Pq_0 – quality prerequisite)
We have tested the assurance of going concern by using established methods for bankruptcy risk assessment, taking into consideration the limits of each of them. The results of their application are presented in Table no 1. The values of the score functions certify the continuity of operation in the entity, which is a prerequisite to applying the accounting principles in the accounting approaches corresponding to the analysed period (year 2007). The results of the calculations are confirmed by the information received from the management of the entity during interviews.
The hypothesis concerning the assurance of the quality prerequisite that is going concern is confirmed and the model can be applied.

Table 1. **Valuation of bankruptcy risk**

*BANKRUPTCY RISK ASSESSMENT METHODS; INDICATORS USED **	*E. ALTMAN'S MODEL*	*J.CONAN AND M.HOLDER'S MODEL*
Patrimony indicators		
Working capital fund/Total assets	X1 = 0,0872	
Permanent capital/Total liabilities		x2 = 0,8636
Equity capital (accounting value)/Total debts	X4 = 0,4662	
Current assets – Stocks/Short term debts		x1 = 0,8984
Result indicators		
Reserves/Total assets	X2 = 0,1371	
Gross operating profit/Total debts	X3 = 0,6110	Nb]
Turnover/Total assets	X5 = 0,6342	
Financial expenditure/Turnover		x3 = 0,0126
Gross operating surplus (Operating profit before taxes and amortization)/Added value		x5 = 0,2329
Labour costs/Added value		X4 = 0,3862

* Our classification into two groups

Values obtained:
a) E. Altman's Model – Zeta score
Z = 0,012 **.** x1 + 0,014 **.** x2 + 0,033 **.** x3 + 0,006 **.** x4 + 0,01 **.** x5
Z = 0,027, which means that there is a probability that the entity present no bankruptcy risk (it is close to the optimum threshold of 0,03)

b) J. Conan and M. Holder's Model
Z = 0,16 **.** x1 + 0,22 **.** x2 - 0,87 **.** x3 - 0,10 **.** x4 + 0,24 **.** x5
Z = 0,34, which means a very low bankruptcy risk (< 10%)

B. Assurance of exhaustivity (Pq_1 – quality prerequisite)
The audit report correspondent to the period concerned and the opinion expressed (without reserve) confirm the assurance of this quality criterion. We have validated the message by checking the presence of the accounting-financial function in the entity, i.e. the analysis of the work methods, their formalization manner, the testing of the professional quality of the employees. The maximum score is 1. The score obtained was 1.

C. Compliance with substance over form principle (Cq_1 – quality criterion)
The two quality parameters (Pq) are the financial leasing and other transactions/contracts that require application of the prevalence principle. The probability assigned to the quality criterion is 1 (i.e. the entity has registered events that translate into quality parameters).
The first parameter is assured (Qp_1), as the entity has financial leasing contracts and has registered them correctly from the point of view of accounting principles and legislation. The second parameter (Qp_2) is not assured, as there are several commercial contracts with an abnormal settlement deadline, for which there are no records necessary according to the prevalence principle. Maximum score: 1 x (2x1) = 2. Score obtained 1 x (1+0) = 1.

D. Compliance with conservation principle (Cq_2 – quality criterion)
We have established three quality parameters, with a probability of 0,66 (4 possible cases out of 6) assigned to criterion Cq_2. For Qp_3 (adjustment for depreciation), the entity registered two situations out of the 4 possible ones (class adjustments of fixed assets, stocks, receivables, short term financial investments) in which there were adjustments for depreciation (stocks and receivables). Qp_4 (fixed assets depreciation) is considered to be met, on the basis of the analysis of the fixed assets balance sheet, of the intangible assets situation, of the financial statements. Qp_5 (provisions) is not assured. The diagnosis established identifies risks related to the shareholders (outstanding processes) for which there are no provisions established.
Maximum score: 0,66 x (3x1) = 1,98. Score obtained 0,66 x (1+1+0) = 1,32

E. Compliance with consistency principle (Cq_3 – quality criterion)
The two quality parameters, i.e. stock assessment methods (Qp_6) and depreciation methods (Qp_7), are assured, as the entity keeps the previously chosen methods for stock assessment, and, respectively, for depreciation of fixed assets.
Probability 1 (2 cases found out of 2 possible).
Maximum score: 1 x (2x1) = 2. Score obtained 1 x (1+1) = 2.

F. Compliance with accrual basis principle (Cq_4 – quality criterion)
The quality criterion is measured through 5 parameters whose fulfilment is differentiated as follows:

- Qp_8: received a maximum score for the use in advance of the expenditure and revenue accounts, outstanding operations, in the appropriate context; maximum score also for the registration of the differences found during inventory, according to the auditor's report;
- Qp_9: even if there are short or long term credit contracts and, according to these, the interest is paid with certain delays, the entity has not used the accounts for interests to pay but unmatured; the accounting structure concerned was only used for the interests corresponding to the financial leasing, according to the registration trail provided for in the specific legislation; 50% of the maximum score was assigned;
- Qp_{10}: there are receivables and debts in foreign currency, unmatured, and, respectively, cash accounts in foreign currency for which it was nor correctly reflected in the Cash flow statement the exchange rate differences existent at the end of the year as being "calculated" elements; 25% of the maximum possible score was retained.

Probability 1 (5 cases found out of 5 possible ones).
Maximum score: 1 x (3x1+0,5+1) = 4,5. Score obtained 1 x (1+0,5+0,75+0,5+1) = 3,75.

G. Compliance with the balance sheet intangibility (Cq_5 – quality criterion)
The entity was not in the cases corresponding to the established quality parameters, i.e. the treatment of the fundamental errors (Qp_{11}), and, respectively, the treatment of changing the method (Qp_{12}).
Probability 0 (0 cases found out of 2 possible ones).
Maximum score: 0 x (2x1) = 0. Score obtained 0.

H. Use of the fair value (Cq_6 – quality criterion)
The parameters attached to the criterion are the cases when the accounting regulations require explicitly or not the assessment of the fair value, i.e. reassessment of tangible assets (Qp_{13}), adjustment for depreciation (Qp_{14}), contribution to the equity capital (Qp_{15}), donations (Qp_{16}), changes in the volume or in the structure of the equity capital (Qp_{17}), merger (Qp_{18}). Among the 6 established parameters, the entity only met the case of reassessment of tangible assets and the case of reversible depreciation, which should have required an assessment of the fair values. In the first case, the estimation was performed by certified assessors, well known on the local market, thus we accept it as correct and in compliance with the accounting and asset valuation standards that guide the valuation for the financial reporting. The second case, the adjustment for depreciation of stocks was not based on the estimation of a fair value, but on a correction according to the time spent by the stocks in the warehouse. This is the reason why the quality parameter was not scored.
Probability 0,33 (2 cases found out of 6 possible).
Maximum score: 0,33 x (3+5x1) = 2,64. Score obtained 0,33 x (3+0+4x1) = 2,33.

3.2. Interpretation of the value of the function, limits of the model and perspectives

The value of the global quality of the accounting information for the object of the analysis, determined for the year 2007, is 2,76.
The value of the function can be interpreted by comparison in dynamics, with the maximum possible score established by the logics of the economic model, and, respectively, with average values that could be found in the activity field of the entity. We have not used the analysis in dynamics, after the overall estimation of the accounting documents for 2005 and 2006 financial years, which would have led to a value close to the one obtained for 2007. In comparison with the maximum possible value of 3,25, we consider the quality of the accounting information to be good, if we take into consideration a value scale from 0 to 3,25 with three ranges defined on this scale, and which represents the equivalent of the auditor's opinion.
Thus: 0 – 1 points mean a poor quality of the accounting information; 1 – 2,125 points mean an average quality of the information; 2,125 – 3,25 points mean a good quality of the information.
As to the sector-related comparisons, the study has not investigated the behaviour of other entities, and it has focused on the development of the economic model and on its demonstration with the help of a study case. This is one of its limits, since the model is not validated through the analysis of a representative sample of entities that could check it in terms of importance coefficients assigned to the quality criteria, and, respectively, in terms of relevance of the chosen quality criteria. In a second stage, we intend to test, in an empiric way, the statistic link between the quality of the accounting information and the variables on which it depends, i.e. the quality criteria that we have used in our model, using the discriminant analysis or k-nearest neighbour and the utility theory for the values of the importance coefficients. Quality shall be assessed through two methods, i.e. in relation with the answer of the market to the communicated accounting indicators, and, respectively, through the assessment of the auditor's opinion by a

content analysis of his report with the purpose to point out several degrees of expression of the three types of opinions. In order to generalize the model that we suggest, it would be necessary to find some quantification solutions for the probabilities of occurrence of the events that represent assessment parameters for a certain quality criterion. Thus, the subjectivity of the assessment would diminish, and the model could be tested by using the published information, and not necessarily the internal, analytical information concerning the subject concerned.

CONCLUSION

It has been demonstrated that the decisions of the users of the accounting information depend on the quality of this information. The users have specific requirements and it is necessary to have a preliminary exchange of information with the information producer, so that the product should have a higher quality. We estimate that the managers and the consultants (among which, financial analysts and auditors) receive potentially higher quality information. On the basis of the modern economic theories, namely the normative accounting theory, the study suggests a model for quantifying the quality of the information from the perspective of these users, who can resort to internal, analytical data. The model is tested through a study case where quantitative economic analysis methods are applied.

The contribution of our study is manifest at the level of the knowledge in the field of the accounting theory, which should be enriched by new quality assurance and control criteria for the accounting profession (a); and, at the level of the accounting practice and standardization, by offering hints, first of all to the managers and consultants, who use the accounting data for complementary testing and for detailing their own control and investigation methods (b).

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