

THEORETICAL AND METHODOLOGICAL APPROACHES TO ASSESSING THE SAFETY AND RELIABILITY OF ACCOUNTING AND ANALYTICAL INFORMATION IN THE SYSTEM OF ECONOMIC SECURITY OF ENTERPRISES

Bondar Mykola¹;
Iershova Natalia²

¹Professor, Doctor of Economic Sciences, Head of Accounting of Business Activities Department, SHEE «Kyiv National Economic University named after Vadym Hetman», Ukraine
E-mail: nibondar@mail.ru

²PhD, Assistant Professor of Economic Analysis and Accounting Department, National Technical University "Kharkiv Polytechnic Institute", Ukraine
E-mail: natalia_iershova@mail.ru

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ABSTRACT

Subject of research is theoretical and practical aspects of accounting and analytical information in the system of economic security. Subject area is focused on ensuring reliability and accuracy of accounting and analytical information in management decisions towards economic security of entities.

Aim of research is to highlight the key features of accounting and analytical information, development of methods for evaluating the reliability and accuracy of accounting and analytical information in the system of economic security of entities in terms of innovation and investment phase of economic development.

Research objectives consist in identifying prospects for development of management accounting in the context of accounting and analytical security activities, research characteristics of accounting and analytical information decomposition factors that ensure the quality of accounting and analytical information systems for economic security of businesses and developing methodologies for evaluating the integral quality factor accounting and analytical information in decision-making in the system of economic security of entities.

Hypothesis of research is based on the assumption that management efficiency in management decisions to ensure economic security businesses require reliable, accurate and timely information, which is formed in accounting and analytical system.

Methodology is based on the methods of theoretical and empirical research, deductive, abstraction, formalization, statistical methods. Survey of 125 respondents from industry enterprises of Kharkiv Region. Data was collected through direct survey during preparation of Kharkiv Region Development Strategy for the period until 2020. Respondents were asked a number of questions that determine the purposes and directions of development of managerial accounting as an information platform in management decisions of economic security. Based on the structural approach was performed decomposition of the factors that ensure the quality of accounting information systems for economic security of entities. On the basis of additive reduction developed and offered method of estimating the integral quality factor of accounting and analytical information of entities in the system of economic security of entities.

Conclusion. Research confirmed the role and importance of accounting and analytical management accounting information in making management decisions in the system of economic security. According to the results, was performed decomposition of the factors that ensure the quality of accounting and analytical information systems for economic security of entities and the proposed method of estimating the integral index of quality accounting and analytical information in decision-making in the system of economic security of entities.

Practical implications. Decomposition of the factors that ensure the quality of accounting information useful in the construction of an integrated accounting and analytical system of individual enterprise. Methods of assessing the quality of accounting and analytical information can be used during certain control measures within the decision-making system of economic security and modified for individual undertakings in accordance with the specific activities and class of management tasks.

Value/originality. Coverage of the main objectives and perspectives of management accounting in the context of accounting and analytical security proves that the information is in demand at the level of top management in strategic decision-making, and at the level of middle management in decision-making and tactical control measures.

1. Introduction

The most important condition for maintaining economic security of entities in terms of innovation and investment phase of the development of Ukrainian economy is the timely detection of threats associated with the loss of positions entity in the market and choose those areas of development that provide sustainable competitive positioning and defining specialization of the development. This important formation of such an information system, which will select the basic characteristics and indicators of the entity to objectively describe the financial situation, financial stability and ability to develop. Formation of an information system based on reliable and accurate accounting information that allows to quickly control the production process, identify negative trends and to capture the promising areas of development, becomes the first condition for economic security of entity.

In the scientific literature on economic security at the enterprise level are considered primarily within the concept of risk management (Ansoff, 1979; Demynh, 2007; Frigo & Anderson, 2009; Frigo & Ramaswamy, 2009; Hanks, 1990; Ittner & Larcker, 2001). Today examined some aspects of applying accounting and analytical data to support the safe operation of economic activities (Bondar, 2012; Bradul, 2009; Shaykan, 2009; Kuznetsova, 2007; Gnylytska, 2013; Solonenko, 2011). In the articles of famous scientists laid the foundation for research in theoretical principles of forming accurate and reliable accounting information (Deming, 2007; Juran, 2004). Monitoring system for certain characteristics of accounting information in the evolutionary development is formulated and substantiated (Crosby, 2003; Ishikawa, 1998). Found a conceptual development of the theory quality of accounting information (Bondar, 2012; Bradul, 2009; Golov, 2008; Kuzmynskyy, 2006; Sokolova, 2012). Enough actively the problem of assessing the reliability and credibility of accounting information in conducting certain control measures, such as auditing, revision, control (Butynets, 2011; Kuznetsova 2007).

Research methodology is based on the methods of theoretical and empirical research, deductive, abstraction, formalization, statistical methods. Survey of 125 respondents from industry enterprises of Kharkov Region. Data were collected through direct survey in preparation of Kharkiv Oblast Development Strategy for the period until 2020. Respondents were asked a number of questions that determine the goals and directions of development of managerial accounting as an information platform in management decisions of economic security. Based on the structural approach Decomposition of the factors that ensure the quality of accounting information systems for economic security of entities. On the basis of additive reduction developed and proposed method of estimating the integral quality factor accounting and analytical information entities in the system of economic security of the entities.

Purpose of research and research tasks. Purpose of research is to highlight the key features of accounting and analytical information, development of methods for evaluating the reliability and accuracy of accounting and analytical information in the system of economic security of entities in terms of innovation and investment phase of economic development. Scientific research tasks: define the goals and prospects of development of management accounting in the context of accounting and analytical security activities, research characteristics of accounting and analytical information, decompose the factors that ensure the quality of accounting and analytical information systems for economic security of entities, develop method evaluation as an integral factor of accounting and analytical information.

Hypothesis of study. Hypothesis of the study is based on the assumption that management efficiency in management decisions to ensure economic security of businesses require reliable, accurate and timely information, which is formed in accounting and analytical system.

Design of research involves setting goals and perspectives of management accounting in the context of accounting and analytical security activities by survey respondents two status

groups, study characteristics of accounting and analytical information through decomposition, development of methodology for assessing the quality factor of integrated accounting and analytical information by additive reduction.

2. Prospects for development of management accounting in the context of accounting and analytical security activities

Philosophy of the account is in the birth from «information chaos» «information agenda». Accounting ideas for management accounting is the process of creating relevant information. Birth of management accounting ideas to be found in the views of the relationship between accounting and management accounting. Benedetto Kotruli and Luca Pacioli launched a study of accounting as a management tool of individual enterprise, on the one hand, and as a universal methodological science - on the other. Luca Pacioli perceived accounting data not only as accounts, but as a basis for decision-making (Needles, Anderson & Caldwell, 1996).

In the Statement of management accounting «Definition of management accounting» (USA) indicates that the profession of management accounting covers the partnership in decision-making, development planning and performance management, providing expert approach to monitoring to assist managers in formulating and implementing the organization's strategy.

Special content of management accounting takes in the information age, characterized by avalanche growth of knowledge requires adequate processing and interpretation to exclude certain set of information noise that creates obstacles to effective economic and business activity, affects economic security of its system (Bromwich, 1990; Chaya & Chupahina, 2007; Summons, 1982). It is recognized that in recent years management accounting has become more responsive to the needs of modern enterprises (Cooper & Kaplan, 1991; Kharlamova, 2014; Khakhonova & Khakhonova, 2013; Schank & Govindarajan, 1999; Storozhuk, 2013). Research in this area is confirmed (Chaya & Chupahina, 2007; Bondar, 2012; Bradul, 2009; Golov, 2008; Kuzmynskyy, 2006), that formed new approaches in management accounting, which focus on improving the quality of information received by executives and managers; paying more attention to design monitoring and processing of information for decision-making in support of economic security. Thus, the way to build an effective system of management accounting in providing economic security involves not develop and improve accounting methods, and identify key information management needs and find the optimal solutions.

To meet the information needs of internal and external users and the formation of information necessary to ensure economic security for enterprises, special management information system. This system consists of interrelated subsystems, among which the most important is accounting and analytical subsystem, which plays a leading role in shaping the economic data flow and sending them in all departments of the enterprise, as well as interested parties. However, with the development of information management needs now, accounting and analytical information system includes not simple registration and analytical processing of economic activity, but also economic consulting and managerial staff involved in preparing management solutions with information systems of production and technological, marketing and other departments.

In order to obtain practical results on the objectives and perspectives of management accounting as an information platform in management decisions, while ensuring economic security conducted a survey of top and middle managers (heads of departments) industrial enterprises of Kharkiv Region, practical activities are directly related to the use of information management accounting. Research was conducted on 125 industrial enterprises of Kharkiv Region that implement innovations (48% of the total as of 01.01.2015 year) (Statistical

Yearbook «Kharkiv Region in 2014», 2014) during the development strategy of the Kharkiv Region for the period 2020. Strategy includes a specific initiative for businesses that are aimed at strengthening of strategic position, information support of strategic management decisions, increase of efficiency of management. In this case, respondents had to rank the goals and prospects of development of management accounting in meaning for themselves on a scale of 1 to 10, where 10 is the most significant. Results are given in Table 1.

Table 1

Based goals and prospects of development of managerial accounting as an information platform in management decisions of economic security in enterprises of Kharkiv Region (from a position of status groups) in % and ranked places

| No. | Purpose | Status groups of respondents | | | |
|-----|--|------------------------------|------|-----------------------|------|
| | | senior managers | | medium-level managers | |
| | | in % | rank | in % | rank |
| 01 | Accounting and analytical support for strategic planning | 48 | 10 | 2 | 2 |
| 02 | Accounting and analytical support for the implementation of business strategies | 14 | 9 | 5 | 4 |
| 03 | Information support of cost control, income | 9 | 8 | 20 | 9 |
| 04 | Accounting and analytical support in assessing the effectiveness of the company | 6 | 6 | 3 | 3 |
| 05 | Planning and managing of budgets | 8 | 7 | 9 | 8 |
| 06 | Accounting and analytical support of tactical planning objectives within an overall strategy | 4 | 4 | 30 | 10 |
| 07 | Interpretation and presentation of results of management accounting | 5 | 5 | 7 | 5 |
| 08 | Implementation of new information systems | 3 | 3 | 8 | 6 |
| 09 | Interpretation of information on operations | 2 | 2 | 15 | 9 |
| 10 | Other areas | 1 | 1 | 1 | 1 |

Summary results for the two groups of respondents shown in Fig. 3.

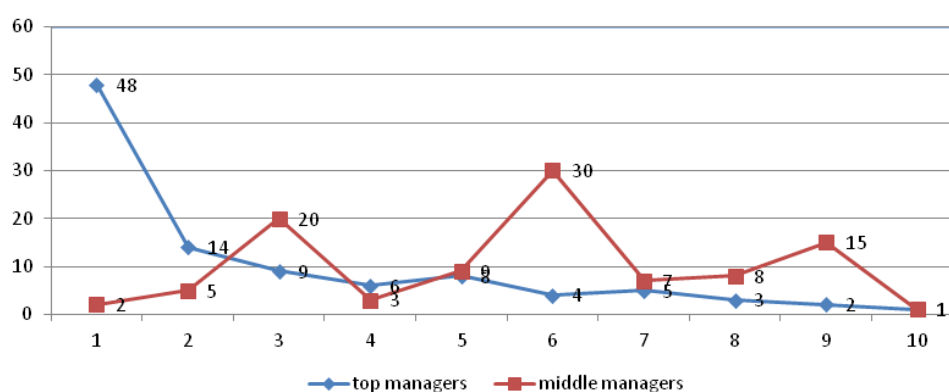


Fig. 1. - Synthesis division of purposes and perspectives of management accounting as an information platform providing economic security in management decisions at the enterprises of Kharkiv Region (from position of status groups), %

Results show that top managers that have a direct relation on the process of formation and strategic management decisions, see the main goals of management accounting in accounting and analytical support for strategic planning (48%), implementation of business strategies (14%), control expenses, income (9%). Managers (heads of departments) that are not directly related to the process of formation and strategic management decisions, see the main purposes of management accounting in accounting and analytical support tactical

planning under the objectives of the overall strategy (30%), planning and management of budgets (9%), cost control, revenue (20%). Results show that management of accounting information remains relevant and used in planning, organization, analysis and control. That is, in the functions of management, for which management accounting information used to justify the required class solutions. Developing information technology accounting aimed at the implementation of information systems, business strategy and changes in the management. Computer technologies facilitate the adoption of a comprehensive accounting of reasonable management decisions based on reliable quick, accurate and comprehensive information on the topic or issue.

3. Features of accounting and analytical information for the purpose of ensuring economic security of the business

Rationale and choice of management solutions for the purpose of ensuring the economic security depends on many factors, including the accuracy and reliability of accounting information. Obtaining accurate and reliable accounting information is the quintessential organization and accounting in the enterprise. World experience of accounting information indicates that enhance its credibility and reliability can be achieved by adhering to the principles of formation of accounting information which formulated, including International Financial Reporting Standards and other International Accounting Standards Board (IASB) publications, as well as improving the mechanism for assessing the quality of regulation and accounting information.

It should be noted that the international standards (ISO 9001: 2008 (E)) determining the quality was more complicated: quality - extent to which set of own characteristics satisfies requirements. Quality and requirements in this definition is related directly and quite rightly, as a subject, which need not always know what the object of that quality can meet those needs. In this context the pertinent information - degree of compliance of the documents found as a result of information retrieval, information needs, expressed in the information

request (Sokolova, 2012). This observation has profound practical nature: consumer importantly, satisfied that requirement.

Concept of quality changes over time, it depends on the level of information about the object, technical characteristics of the object detection and others. In modern conditions are the following factors that ensure the quality of accounting information (Fig. 2).

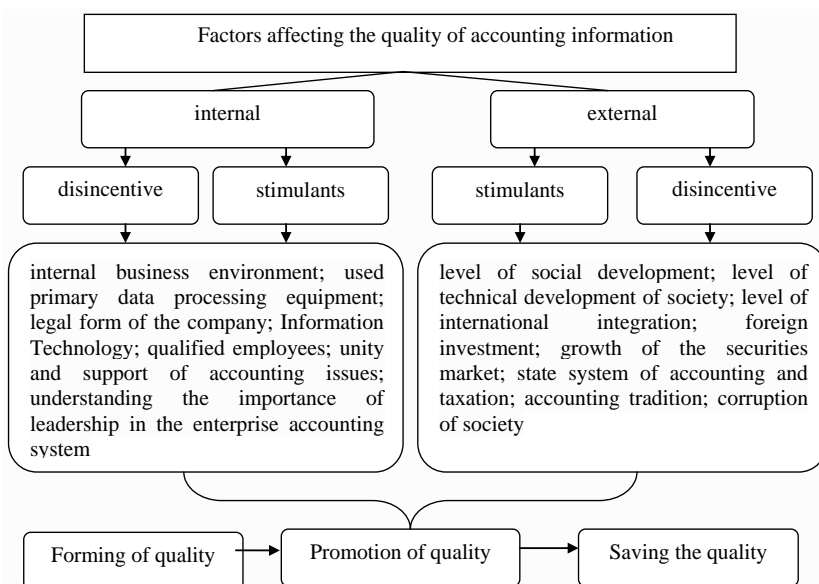


Fig 2. Factors that ensure the quality of accounting information systems for economic security subjects

the user. With the level of quality increases its value for users. Attention to assess the quality of accounting information is increasing recently around the world and in particular in

Ukraine. Particularly acute problem of assessing the quality of accounting information was made in light of the reform of the accounting system and financial reporting in accordance with International Financial Reporting Standards. Quality information should be subjected to assessment at all stages of the accounting information. Strategic aim of assessing the quality of accounting information - providing users of accounting information system that meets the selected criteria. Presented functional purpose of assessing the quality of accounting information in accordance with the stages of control (Table. 2).

Table 2

Functional purpose of assessing the quality of accounting information in accordance with the stages of management to ensure economic security

| Stages | Purpose | Tasks |
|--------------|---|--|
| Planning | provision with methods of accounting selection indicators that meet a certain set of quality characteristics | <ul style="list-style-type: none"> determining the quality requirements of accounting information for economic security; forming a system of indicators to measure the quality of accounting information in order to ensure economic security or separate units; development of qualitative and quantitative methodology for assessing the quality of accounting information. |
| Organization | organization of selecting accounting indicators that meet a certain set of quality characteristics | <ul style="list-style-type: none"> organization of provision of accounting information in full the areas of accounting, while ensuring economic security; organization of provision of information in terms of accounting presentation. |
| Analysis | provision of analytical information, which characterizes the current financial state of the organization, and the extent and significance of set strategic business goals | <ul style="list-style-type: none"> providing with accounting information management of organization in full to ensure economic security in decision making; development of criteria for evaluation of accounting quality indicators; use of quality control methods of accounting information. |
| Control | develop a system of criteria for assessing the quality of information in financial monitoring | <ul style="list-style-type: none"> providing members of the business process with quality indicators accounts that reflect the financial position of the organization and financial performance to ensure economic security; ensuring the competitiveness of enterprises in the management decisions to ensure economic security |

4. Evaluation of the quality of accounting and analytical information in decision-making in the system of economic security of businesses

Increasing role of accounting and analytical information system in enterprise management contributes to a significant expansion of its maintenance and development functions of accountants. Modern accountant is not only keeping accounts, but also has extensive activities, including the planning and preparation of economic decisions, control and drawing the attention of management, assessment and review of listening (Kaplan, 1984; Needles, Anderson & Caldwell, 1996).

In preparation for assessing the reliability and accuracy of accounting and analytical information to ensure the economic security of accounting information clarified and specified needs and requirements of users, according to their objectives when making decisions in the system of economic security entity. Preparing to test the robustness and reliability of accounting information in decision-making in the system of economic security entity by using the previous classification parameters of quality of accounting information. Basis of the

grading system of accounting information quality parameters assigned qualitative characteristics of accounting information (FASB, 1986):

- 1) appropriateness of accounting information - influence on the economic decisions of economic security of users;
- 2) reliability - no mistakes and distortions that significantly affect the justification of decisions in a system of economic security;
- 3) comparability over time and comparability of the information to other companies;
- 4) clarity - availability of qualified users to understand;
- 5) materiality - accounting information is considered material if its omission or distortion could influence the economic decisions of the safety of users;
- 6) truth of submission - reducing the risk of formation of accounting information using unlawful methods of measurement and provision;
- 7) priority under the form of content - presentation of accounting information in accordance with the essence and economic content business transaction, not just its legal form;
- 8) neutrality - lack of accounting information source intends to persuade the user to a particular economic decisions, that the objectivity of accounting information;
- 9) caution - presence of uncertainty in the choice of the accounting treatment of an indicator: interests of user most will respond choice of those who provide a less optimistic picture of the state of affairs of the company;
- 10) timeliness - to ensure the relevance and reliability in management decisions in the economic security of accounting information to be transmitted to the user in a timely manner;
- 11) completeness - to be reliable accounting information must be complete considering its materiality and the cost of its receipt.

If quality indicator describes several properties of accounting information, it is called complex. Complex indicator could be characterized together some simple properties or single property complex, consisting of several simple. Integration indicators realizes the possibility to fully describe the quality of information in constructing generalized index of individual performance.

Performance evaluation of the quality of accounting and analytical information is comprehensive indicator - integral quality factor accounting and analytical information. Methods of assessing the quality factor integrated accounting and analytical information designed to establish the quantitative evaluation of reliability and accurate information in decision-making in the system of economic security undertakings of different legal forms of ownership and industry sector.

Methods of assessing the quality factor integrated accounting and analytical information based on the method of additive reduction (Vasilieva & Lialina, 2012):

$$I = \sum_{i=1}^n P_i \times W_i, \quad (1)$$

where I - integral quality factor of accounting and analytical information;

P_i – general i-indicator of quality of accounting and analytical information;

W_i – weighting coefficient of i-indicator of quality of accounting and analytical information ($\sum_{i=1}^n W_i = 1$);

i – serial number of the total index;

n – number of general indicators ($n = 3$).

In order to determine weighting coefficients used method of expert evaluations (Vasilieva & Lialina, 2012):

$$W_i = \frac{1}{mn^2} \sum_{j=1}^m B_{ij} , \quad (2)$$

where m– number of experts;

B_{ij} –total score affixed to i index by j expert;

n – number of general indicators ($n = 3$).

Assessment of consistency of expert opinion is based on calculating the rank correlation coefficient multiple (coefficient of concordance) if connected ranks are present. Checking the statistical significance of the coefficient of concordance performed using Pearson criterion (Vasilieva & Lialina, 2012).

To assess the integral quality factor accounting and analytical information and overall performance assessment is offered interval of values (Table. 3).

Table 3

Interval scale values of integral quality factor of accounting and analytical information and overall performance

| value range | mentioned integral coefficient / overall quality |
|----------------------|--|
| from 0 to 0,4 | absolute distortion |
| more than 0,4 to 0,7 | moderate distortion |
| more than 0,7 to 0,9 | weak distortion |
| more than 0,9 to 1,0 | no curvature distortion |

As an overall performance evaluation of the quality of accounting and analytical information offered:

1. *Overall rate of arithmetic deformation* (AD) is an indicator of the quality of accounting and analytical information on positions absence or presence of significant arithmetical errors, misstatements and fraud. When deciding on matching characteristics of an arithmetical calculation or reliability of the analytical parameter to be taken into account: calculation of indices in accordance with current legislation and regulatory and methodological basis, accounting standards, accounting policies of the entity at the relevant time, presence of internal procedures control or audit. Indicators that fall under this assessment can be considered completely reliable, and therefore, we can talk about accounting and analytical information, which consists of absolutely reliable performance. Formula for calculating the index:

$$AD = (\sum AD_i) / m, \quad (3)$$

where AD_i – individual i-indicator of arithmetic deformation;

m - amount of accounting / analytical indicators.

To determine the coefficient is used interval estimation of its values (Table. 3).

2. *Overall rate of methodological deformation* (MD) is an indicator of the quality of accounting and analytical information on the position of the absence or presence of unity calculation methodology of accounting and analytical indicators. When deciding on properties of matching unity calculation methodology or analytical parameter to be taken into account: unity of the organization of primary account (typical forms during the period unchanged), unification and standardization of titles indicators; establishment of unambiguous logical relationship between indicators; unity of uniform methodology for calculating indicators; using the same method of calculation and measurement units of analyzed indicators during

the period; unity intervals or points in time for which comparable figures were calculated. Formula for calculating of index:

$$MD = (\sum MD_i) / m, \quad (4)$$

where MD_i - individual i -indicator of methodological deformation;

m - amount of accounting indicators.

To determine the coefficient is used interval estimation of its values (Table. 3).

3. *Overall rate of access to information* (AI) is an indicator of the quality of accounting and analytical information and describes the opportunity to get this or that information. When deciding on characteristics matching the availability of information to be taken into account: availability of data, availability of adequate methods for their interpretation. Among the factors that affect the availability of information: availability of the method of calculation of each indicator reporting (these techniques can be defined legislative and regulatory framework or intra standards, accounting policies); number of alternative methods for calculating the indicators; conversion information in the information system available and easy to understand user form. Lack of access to data or lack of adequate data processing methods lead to the same result: information is not available. Formula for calculating the index:

$$AI_i = (\sum AI_i) / m, \quad (5)$$

where AI_i - individual i -indicator of access to information;

m - amount of accounting indicators.

To determine the coefficient is used interval estimation of its values (Table. 3).

As a result of expert evaluation, weighting the individual indices are equal to:

- index arithmetic deformation = 0,4,
- index of methodological deformation = 0,4;
- index of accessibility of information = 0,2.

Individual indicators (AD_i , MD_i , AI_i): are determined by experts based on the objectives and tasks of assessing the quality of accounting and analytical information in decision-making in the system of economic security of entities.

Individual indicators for assessing the quality of accounting and analytical information calculated using the modified correlation coefficient signs (Fechner coefficient), based on a comparison of deviations and marks the first settlement (expert) values of individual features or an analytical indicator of the actual value (properties) (Vasilieva & Lialina, 2012).

Calculation of the modified correlation coefficient of characters consists of the following stages:

1. Determine actual and estimated (expert) attribute value or an analytical index (X and Y).
2. Determine the deviation signs (–, +) the number of matches or discrepancies marks deviations of the actual value of the estimated signs (+, –)
3. If the signs are the same, assign a value of A, or B.
4. Calculate individual figures for each of the common indicators, calculating the modified correlation coefficient marks the formula:

$$AD_i (MD_i, AI_i) = (n_a - n_b) / (n_a + n_b), \quad (6)$$

where n_a - number of matching of symbols deviation of the actual characteristic value calculation (expert) values;

n_b - number of disagreements deviations of the actual value of the estimated signs (expert) values.

In Appendices I, II are tables containing accounting and analytical indicators, their signs and calculation of integral index assessing the quality of accounting and analytical information entity in the decision-making system of economic security of the entity according to the proposed methodology. Number of indicators and evaluation requirements determined by the characteristics of the entity, requirements of users in decision-making in the system of economic security, qualifications and other responsible persons. Resulting calculated integral quality factor of accounting and analytical information, which is equal to 0.682, on a scale that indicates the presence of moderate distortion of information in accounting-analytical system for the purpose of ensuring the economic security of the entity.

5. Conclusions

During the research was confirmed the role and importance of accounting and analytical management accounting information in making management decisions in the system of economic security. Was established that the quality of accounting information is a set of essential characteristics of accounting and analytical information describing its compliance with their intended use and offered requirements to it and ability to meet the needs and demands of users. According to the results, was performed decomposition of the factors that ensure the quality of accounting and analytical information systems for economic security of entities. On the basis of additive reduction was developed and offered a method of estimating the integral quality factor accounting and analytical information entities in the system of economic security of entities.

Implementation of methodical approach to assessing the quality of accounting information to determine the nature of the relationship between the indexes that provides the ability to identify and study the strong and weak characteristics information from the position of satisfaction of information needs of a user or group of users in making managerial root of the system of economic security of entities in terms of innovative - investment stage of economic development.

Appendix I. Table to calculate the total rate of methodological deformation and analytical accounting indicators of Enterprise A for the period (indicating the period)

Appendix II. Generalization of quality values of accounting and analytical information of Enterprises A for the period (specify for that same period)

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Appendix I

Table to calculate the total rate of methodological deformation and analytical accounting indicators of Enterprise A for the period (indicating the period)

| Actual value of accounting / analytical indicator | | Calculated (expert) values of accounting / analytical indicator | | Match (A) / mismatch (B) signs of deviations of settlement accounting / analytical indicators of actual | Indicator of methodological deformation MDi = (n _a - n _b)/(n _a + n _b) |
|---|---------|---|---------|---|---|
| indicator | meaning | indicator | meaning | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| intangible assets | | | | | |
| unity valuation principles | yes | unity valuation principles | yes | A | 0,6 |
| unity of timeframe of indicator calculation | yes | unity of timeframe of indicator calculation | yes | A | |
| unifying of index name | yes | unifying of index name | no | B | |
| unity of method of calculation indicator | yes | unity of method of calculation indicator | yes | A | |
| unity of composition of accounting indicator | yes | unity of composition of accounting indicator | yes | A | |
| capital | | | | | |
| unity valuation principles | yes | unity valuation principles | no | B | 0,2 |
| unity of timeframe of indicator calculation | yes | unity of timeframe of indicator calculation | yes | A | |
| unifying of index name | yes | unifying of index name | yes | A | |
| unity of method of calculation indicator | yes | unity of method of calculation indicator | yes | A | |
| unity of composition of accounting indicator | yes | unity of composition of accounting indicator | no | B | |
| general liquidity rate | | | | | |
| unity valuation principles | yes | unity valuation principles | yes | A | 1 |
| unity of timeframe of indicator calculation | yes | unity of timeframe of indicator calculation | yes | A | |
| unifying of index name | yes | unifying of index name | yes | A | |
| unity of method of calculation indicator | yes | unity of method of calculation indicator | yes | A | |
| unity of composition of accounting indicator | yes | unity of composition of accounting indicator | yes | A | |
| rate of return on assets | | | | | |
| unity valuation principles | yes | unity valuation principles | yes | A | 1 |
| unity of timeframe of indicator calculation | yes | unity of timeframe of indicator calculation | yes | A | |
| unifying of index name | yes | unifying of index name | yes | A | |
| unity of method of calculation indicator | yes | unity of method of calculation indicator | yes | A | |
| unity of composition of accounting indicator | yes | unity of composition of accounting indicator | yes | A | |

| | | | | | |
|---|-----|--|-----|---|-----|
| profit margin | | | | | |
| unity valuation principles | yes | unity valuation principles | yes | A | |
| unity of timeframe of indicator calculation | yes | unity of timeframe of indicator calculation | yes | A | |
| unifying of index name | yes | unifying of index name | yes | A | |
| unity of method of calculation indicator | yes | unity of method of calculation indicator | yes | A | |
| unity of composition of accounting indicator | yes | unity of composition of accounting indicator | yes | A | |
| fixed costs | | | | | |
| unity valuation principles | yes | unity valuation principles | yes | A | |
| unity of timeframe of indicator calculation | yes | unity of timeframe of indicator calculation | yes | A | |
| unifying of index name | yes | unifying of index name | yes | A | |
| unity of method of calculation indicator | yes | unity of method of calculation indicator | yes | A | |
| unity of composition of accounting indicator | yes | unity of composition of accounting indicator | yes | A | |
| Other indicators | | | | | |
| Overall rate of methodological deformation is calculated by the formula (4) | | | | | 0,7 |

Appendix II

Generalization of quality values of accounting and analytical information of Enterprises A for the period (specify for that same period)

| Indicators | value of indicator | weight |
|---|--|--------|
| indicator of arithmetic deformation | 0,6 | 0,4 |
| indicator of methodological deformation | 0,8 | 0,4 |
| indicator of availability of information | 0,69 | 0,2 |
| indicator of the integral quality factor of accounting and analytical information | $0,6 \times 0,4 + 0,8 \times 0,4 + 0,69 \times 0,2 = 0,69$ | |