



D. A. TSENOV ACADEMY OF ECONOMICS – SVISHTOV

REVIEW

for awarding the educational and scientific degree of doctor in the professional field 3.8. Economics, doctoral programme “Accounting, Control and Analysis of Economic Activity (Accounting)” under procedure announced by the D. A.

Tsenov Academy of Economics – Svishtov

This review has been prepared in compliance with the sample template of the structure, format and content of a review written by a member of the scientific jury for awarding the educational and scientific degree of doctor under the procedure announced by the D. A. Tsenov Academy of Economics – Svishtov.

Reviewer: *Prof. Atanas Blazhev Atanasov, PhD*, with a scientific specialty in “Accounting, Control, and Analysis of Economic Activity”, member of the Department of Accounting at D. A. Tsenov Academy of Economics – Svishtov, and member of the scientific jury, in accordance with Order No. 62/29.01.2026 of the Rector of D. A. Tsenov Academy of Economics – Svishtov, pursuant to Article 70 of the Regulations for the Development of the Academic Staff at D. A. Tsenov Academy of Economics – Svishtov, by the decision of the Faculty Council of the Faculty of Economic Accounting (Protocol No. 17/28.01.2026), and decision of a meeting of the Scientific Jury from 05.02.2026 (Protocol No. 1/05.02.2026).

Author of the dissertation: *Miglena Trifonova Marinova*, regular doctoral student at the Department of Accounting at D. A. Tsenov Academy of Economics – Svishtov, doctoral number d010123290.

Topic of the dissertation: “*Accounting information support for effective management of mining industry enterprises*”

Scientific adviser: *Assoc. Prof. Galya Ivanova-Kuzmanova, PhD*

I. General presentation of the dissertation:

The *aim* of the dissertation is to propose an integrated approach for environmentally oriented accounting information support for strategic management and sustainability in mining industry enterprises.

The *object* of the research is the accounting system of mining industry enterprises in Sector B Mining and Quarrying, 08 Quarrying of non-metallic minerals, 08.1 Quarrying of stone, sand, and clay, 08.11 *Quarrying of building and decorative stone, limestone, raw gypsum, chalk, dolomite, and shale* and 08.12 *Quarrying of crushed stone, gravel and sand, extraction of clay and kaolin* (according to the Classification of Economic Activities-2025 in the Republic of Bulgaria).

The *subject* of the study is the methodology and organization of accounting for specific assets, costs, and environmental liabilities, with the aim of improving information support for decision-making in the sector.

The main *thesis* of the dissertation is that through the improvement and integration of specific accounting approaches and methods (particularly in the areas of environmental cost accounting and activity-based costing), a detailed and strategically relevant accounting information base can be established to support effective management, investment decision-making, and the achievement of sustainability in mining industry enterprises.

The dissertation has a length of 215 pages and consists of: a title page; table of contents (3 pages); list of figures and tables (2 pages); list of abbreviations and acronyms (2 pages); introduction (3 pages); main body (three chapters), (181 pages); conclusion (2 pages); list of references (bibliography) (including 127 sources in Cyrillic and Latin scripts), (10 pages). The dissertation also includes 6 appendices (11 pages).

The introduction highlights the relevance, aim, objectives, as well as the object and subject of the study, and formulates the research thesis. It specifies the research methodology, the scope of empirical studies, and existing limitations in the course of the activity.

Chapter One characterizes the current state and trends in accounting for mining industry enterprises. In this context, the study examines the features of the assets and operations of mining industry enterprises as objects of accounting. The specific characteristics of the accounting system in these enterprises are analyzed, with emphasis on the possibilities for integrating accounting into the strategic approach of mining industry enterprises toward sustainability.

Chapter Two outline opportunities for improving the accounting treatment of business transactions and processes specific to the mining industry. The

accounting aspects of securing quarrying areas in enterprises for quarrying stone, sand, and clay are examined. The concession model in the quarrying of stone, sand, and clay and its accounting dimensions, is analyzed. The economic and accounting aspects of land recultivation are substantiated as a stage in the life cycle of the mining asset.

Chapter Three examines the environmental aspects of mineral extraction in the context of accounting and corporate responsibility. This part of the dissertation focuses on the accounting, informational, and tax treatment of waste in the mining industry, as well as on the modern accounting approach to recognizing expenses for environmental protection and restoration, including provisioning. Opportunities for the transition toward sustainability and the development of environmental reporting are analyzed. Approaches for integrating environmentally related accounting information into the budgeting process are also outlined.

The conclusion summarizes the results achieved through the research work.

The main body includes 4 figures and 16 tables.

II. Assessment of the structure and content of the dissertation:

The proposed doctoral dissertation is characterized by clearly defined object, subject, aim, and objectives, as well as a successfully formulated and well-argued research thesis. This provides grounds to consider it not only as a complete and timely study, but also as a necessary and relevant effort to adequately address current theoretical and applied needs regarding accounting and informational support for the effective management of mining industry enterprises.

The research methodology is correctly applied, highlighting problems and proposing ways to address them, while conducting relevant analyses, summaries, conclusions, and recommendations. The author's ideas and positions are clearly and explicitly presented in the main body of the dissertation.

In conducting the study, appropriate scientific tools were used, as well as well-designed illustrative material in the form of figures and tables.

In terms of structure, technical execution, and style, the work is of a very high standard. The individual sections of the dissertation are logically connected, and its overall length is appropriate. This allows the research thesis to be substantiated and defended in both theoretical and practical-applied aspects.

Literary sources and applicable regulatory documents were used in good faith during the course of the research. This fact is also confirmed by the author's declaration of originality of the dissertation attached to the abstract.

From the lists included in the documentation for the procedure, personally signed by the doctoral candidate, covering publications related to the dissertation topic (6 in total) and participation in scientific forums (8 in total), it is evident that the main aspects of the researched issues have been made available to the specialized audience.

The abstract has a length of 39 pages. It objectively, clearly, accurately, and comprehensively reflects the content of the doctoral dissertation and faithfully presents its positive qualities. The structure of its presentation corresponds to the logical framework of the research.

III. Scientific and scientific and applied contributions in the dissertation:

The doctoral dissertation highlights the following scientific and scientific and applied contributions:

- As a result of an in-depth review of the specialized literature and the applicable regulatory framework, the role of accounting in the mining industry is substantiated as a primary information base and a factor for strategic management with the characteristics and specific features inherent to the accounting system.

- As a result of empirical research, the author argues that the integration of environmental and social costs, as well as non-financial indicators, is a necessary prerequisite for increasing transparency and adapting mining enterprises to the new regulatory requirements for sustainable reporting. An accounting approach for the recognition and measurement of the acquisition and use of land for extraction in enterprises engaged in the quarrying of stone, sand, and clay is systematized.

- The capitalization of costs for the acquisition of mining areas as non-current assets is substantiated, together with the application of the unit-of-production method or the functional method of depreciation, linked to the depletion of geological reserves. The time-limited use of land through restricted real rights and contractual arrangements is analyzed as an economically appropriate mechanism for ensuring control over a key production resource, accompanied by the assumption of long-term environmental obligations. With a view to achieving more reliable cost calculation, effective internal control, and a more comprehensive presentation of the economic dimensions of mining

activities, a model is proposed for integrating environmental costs and recultivation obligations into the cost of extraction.

- Based on a Gap analysis, an author's benchmarking study of good practices, and applied research conducted in Bulgarian enterprises engaged in the quarrying of stone, sand, and clay, the need for improving their accounting systems is substantiated. It is demonstrated that integrating environmental protection costs into financial reporting requires a precise differentiation and accurate accounting treatment of environmental CAPEX and OPEX, as well as the systematic recognition of provisions for recultivation and decommissioning.

- As a result of the practical study, gaps are identified in relation to homogeneous provisioning and insufficient analytical detail in the accounting of current environmental costs, which requires the need for technological integration of non-financial data with accounting systems. Proposals are formulated for incorporating environmental indicators into the budgeting process through the use of ECA within OPEX and adjusted NPV in CAPEX in order to optimize risk management, investment decisions, and financial security for future environmental commitments.

IV. Critical comments, questions and recommendations regarding the doctoral dissertation:

With regard to the dissertation, the following *comments* and *recommendations* can be made, which do not diminish its undoubtedly positive qualities:

- Regardless of the author's stated ambition, in certain parts of the exposition, the declarative nature still prevails over the research nature;

- I would kindly recommend that the doctoral candidate continue and further expand her research on this interesting and thought-provoking subject;

I would like to ask the following *question* about the dissertation:

- What are the main guidelines that the doctoral student sees in the short term for optimizing accounting information as a factor for effective management of mining industry enterprises?

V. Summary conclusion and statement:

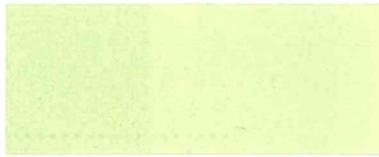
In conclusion, it may be summarized that the doctoral dissertation entitled "Accounting information support for effective management of mining industry enterprises" contains scientific and scientific and applied research results that represent an original contribution to the field and meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the

Regulations for its Implementation, as well as the relevant Regulations of D. A. Tsenov Academy of Economics – Svishtov.

The dissertation shows that doctoral student Miglena Trifonova Marinova possesses in-depth theoretical knowledge and professional skills in the doctoral program “Accounting, Control, and Analysis of Economic Activity (Accounting)”, demonstrating the ability and potential to conduct independent scientific research.

Based on all of the above, I am pleased to express my *positive statement* and recommend that the distinguished academic jury vote *to award* the educational and scientific degree of “Doctor” in professional field 3.8. “Economics”, Doctoral programme “Accounting, Control, and Analysis of Economic Activity (Accounting)” to *Miglena Trifonova Marinova*.

March, 09 2026

Reviewer: 
(Prof. At. Atanasov, PhD)