

ACADEMY OF ECONOMIC STUDIES FROM BUCHAREST
Doctoral School of Accounting



DOCTORAL THESIS

Presented and publicly supported by the author:
ALINA I. CHIRIAC (married MATEI)

Doctoral thesis title:

**THE IMPLICATIONS OF INFORMATION MANAGEMENT IN THE
DETECTION OF TAX FRAUD AND THE UNDERGROUND
ECONOMY**

Ph.D supervisor: Prof.univ.dr. Ileana NIȘULESCU

Doctoral thesis support committee:

Prof.univ.dr. Mihai Păunică (chairman)

Prof.univ.dr. Nicoleta Farcane (reviewer)

Conf.univ.dr. Rodica Gabriela Blidișel
(reviewer)

Prof.univ.dr. Cleopatra Șendroiu (reviewer)

Prof.univ.dr. Ileana Nișulescu
(PhD supervisor)

Academy of Economic Studies from Bucharest

Western University of Timișoara

Western University of Timișoara

Academy of Economic Studies from Bucharest

Academy of Economic Studies from Bucharest

Bucharest, January 2025

ACADEMY OF ECONOMIC STUDIES FROM BUCHAREST
Council for Doctoral University Studies
Doctoral School of Accounting

**THE IMPLICATIONS OF INFORMATION MANAGEMENT IN THE
DETECTION OF TAX FRAUD AND THE UNDERGROUND
ECONOMY**

ALINA I. CHIRIAC (married MATEI)

Motto: When you give up being better you have already given up being good.

PhD supervisor: Prof.univ.dr. Ileana NIȘULESCU

Bucharest, 2025

SUMMARY

SUMMARY IN ROMANIAN	I
SUMMARY	II
ACKNOWLEDGMENTS	III
1. INTRODUCTION.....	1
1.1. The importance of the researched theme and the motivation of its approach	1
1.2. Research objectives.....	3
1.3. The relevance of the research	8
1.4. The structure of the doctoral thesis.....	14
2. CURRENT STATE OF RESEARCH.....	19
2.1. The dichotomy of accounting. Creativity and compliance	20
2.2. Tax fraud and tax evasion.....	22
2.3. Shadows of the economy: from informal activities to tax evasion.....	33
2.3.1. Gray, informal, underground economy	34
2.3.2. The impact of the grey economy on fair competition	35
2.3.3. The impact of the grey economy on the state budget.....	36
2.4. Tax non-compliance risk management	37
2.5. General considerations regarding economic intelligence	53
2.6. Mapping knowledge: A bibliometric review of the accounting fraud literature	61
2.7. The conclusions of the theoretical chapter.....	71
3. THE CONCEPTUAL FRAMEWORK FROM THE ANALYSIS OF PATTERNS IN THE RESERCH OF TAX FRAUD AND THE ASSESSMENT OF THE IMPACT OF SANCTIONS AND NON-COMPLIANCE WITH REGULATIONS ON FINANCIAL INDICATORS	74
3.1. Trends and patterns in the investigation of foiscal fraud.....	76
3.2. Exploratory analysis of non-conformity of assets from financial statements.....	78
3.3. Financial implications of non-compliance with regulations in transport business	82
3.4. Multivariate analysis of the relationships between non-compliance and financial uncertainty in the transport sector	85
3.5. Claryfing the impact of sanctions on financial indicators in transport: an empirical comparative analysis	92
4. RESEARCH METHODOLOGY	96
5. RESULTS AND DISCUSSIONS	103
5.1. The evaluation and inplication of new detection methods of the tax fraud: a trend analysis.....	104
5.2. Discrepancies in asset reporting: finding from the exploratory analysis of financial statements.....	112

5.3. The costs of compliance: the financial impact of non-compliance regulations in the transport sector	117
5.4. The dynamics of financial non-compliance and uncertainty: overview from multivariate analysis in transports	126
5.5. The effects of sanctions on financial performance in the transport industry	143
6. CONCLUSIONS	163
REFERENCES	172
LIST OF ABBREVIATIONS AND ACRONYMS	186
LIST OF TABLES	187
LIST OF FIGURES	189
LIST OF APPENDICES	190

SUMMARY

This PhD thesis explores the effects of tax fraud and the shadow economy on fair competition and the national budget, with a particular focus on the transport sector in Romania. . In addition, it investigates the implications of inadequate information management in uncovering tax fraud and the underground economy. By introducing key concepts such as creative accounting and tax fraud, the paper highlights how tax avoidance distorts the market and undermines social equity, causing substantial revenue losses to the state.

The analysis adopts a bibliometric approach to identify major influences and current directions in research, providing a solid foundation for in-depth understanding of tax evasion. It also proposes strategies for strengthening tax compliance, including strengthening legislation, promoting tax awareness and simplifying tax systems.

The detailed studies in the thesis analyse the impact of non-compliance with regulations in the transport sector and their effects on financial performance, using advanced statistical methods to highlight correlations and causalities. By integrating techniques such as Principal Component Analysis and Brunswik's Lens Method, the thesis proposes pragmatic solutions to combat tax fraud and the grey economy and shows how information and data collected from other state institutions can be processed and analyzed in order to discover the facts of tax evasion and fraud or to uncover the gray economy.

In conclusion, the thesis contributes to the literature through a thorough understanding of the interactions between economic behaviour and tax regulations, providing recommendations for more effective tax policies with a positive impact on economic stability and equity in Romania.

Keywords: fraud, tax evasion, underground economy, tax non-compliance risk management, economic intelligence, transports.