

BUCHAREST UNIVERSITY OF ECONOMIC STUDIES



Doctoral School of Finance

DOCTORATE THESIS

Submitted and publicly presented by the author:

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Title of doctoral thesis:

**PROTECTION OF PERSONAL DATA IN THE
FINANCIAL SYSTEM**

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Bucharest, September 2025

TABLE OF CONTENTS

SUMMARY IN ROMANIAN.....	VII
ABSTRACT IN ENGLISH.....	VII
INTRODUCTION	1
PART I – CURRENT STATE OF KNOWLEDGE	7
DEFINITION OF KEY TERMS AND CONCEPTS	8
1.1. INTRODUCTION.....	8
1.2. HISTORICAL DEVELOPMENT OF DATA PROTECTION	9
1.3. DEFINITION OF FUNDAMENTAL CONCEPTS	10
1.4. CJEU CASE LAW ON THE DEFINITION OF PERSONAL DATA	12
1.5. DIRECT AND INDIRECT IDENTIFICATION	13
1.6. LEGAL NATURE OF PERSONAL DATA.....	14
1.7. THE ECONOMIC NATURE OF PERSONAL DATA – BROAD DEVELOPMENT	14
1.8. DOCTRINAL DEBATES AND PRACTICAL IMPLICATIONS	17
1.9. EXTENDED CJEU AND ECHR CASE LAW	18
1.10. SPECIAL CATEGORIES OF DATA UNDER THE GDPR.....	21
1.11. FINANCIAL DATA AND SECTORAL REGULATIONS	23
1.12. BEHAVIORAL AND INFERENTIAL DATA	25
1.13. BIOMETRIC DATA AND ASSOCIATED RISKS.....	27
1.14. ANONYMIZED AND AGGREGATED DATA	29
1.15. DATA PROTECTION PHILOSOPHY	31
1.16. CONCLUSIONS	33
DATA PROTECTION IN IT&C COMPANIES WITH FINANCIAL ACTIVITY	37
2.1. INTRODUCTION.....	37
2.2. THE SPECIFICITY OF THE FINANCIAL SECTOR IN DATA PROCESSING	38
2.3 THE ROLE OF SUPERVISORY AUTHORITIES (ANSPDCP, EDPB, BNR, ASF)	41
2.4. THE ROLE OF CASE LAW AND SANCTIONING PRACTICE IN THE FIELD OF FINANCIAL DATA PROTECTION	44
2.5. THE INTERACTION BETWEEN GDPR AND THE FINANCIAL IT&C ECOSYSTEM	46
2.6. MIGRATION OF FINANCIAL FUNCTIONS TO THE IT SECTOR – GENERAL CONTEXT ...	48
2.7. FINTECH – EVOLUTION, MODELS, AND DATA PROTECTION	50
2.8. INSURTECH AND SENSITIVE DATA	54
2.9. REGTECH AND PERSONAL DATA PROTECTION	55
2.10. COMPARATIVE CONCLUSION BETWEEN FINTECH, INSURTECH, AND REGTECH	57
2.11. CRITICAL SYNTHESIS AND CONCLUSIONS ON DATA PROTECTION REGULATION IN THE FINANCIAL SECTOR	58
FINTECH AND FINANCIAL INCLUSION	61
3.1. INTRODUCTION AND CONCEPTUAL FRAMEWORK	61
3.2. FINTECH AND REDUCING FINANCIAL EXCLUSION.....	63
3.2.1. Expanding access to payments.....	63
3.2.2. Alternative lending and digital microfinance	64
3.2.3. Savings and digital financial education	64
3.2.4. Democratized investments and robo-advisors.....	65
3.2.5. Social and economic benefits	65
3.3. REGIONAL MODELS OF FINANCIAL INCLUSION THROUGH FINTECH	66
3.3.1. Africa: the mobile money revolution.....	66
3.3.2. Asia: large-scale digital infrastructures	66
3.3.3. Latin America: accelerated innovation and structural instability	67
3.3.4. Europe: diversity between West and East	68
3.4. RISKS AND DILEMMAS	69
3.4.1. Excessive credit and over-indebtedness	69

3.4.2. Algorithmic discrimination	69
3.4.3. The digital divide.....	70
3.4.4. Data security and confidentiality.....	70
3.4.5. The balance between innovation and consumer protection	71
3.5. EMPIRICAL STUDIES AND STATISTICAL DATA.....	71
3.5.1. Global Findex and expansion of bank accounts.....	72
3.5.2. IMF reports: fintech and financial stability	72
3.5.3. BIS perspectives on digital inclusion.....	73
3.5.4. The OECD and the issue of inclusion' quality.....	73
3.5.5. Regional comparative analyses.....	73
3.5.6. Correlations between banking penetration and fintech adoption.....	74
3.5.7. Empirical synthesis	74
3.6. ROMANIA AND CENTRAL AND EASTERN EUROPE.....	74
3.7. CONCLUSIONS AND OVERALL PERSPECTIVES.....	77
PART II RESEARCH METHODOLOGY.....	80
II.1 PURPOSE, OBJECTIVES, HYPOTHESES, AND RESEARCH QUESTIONS	81
II.2 PRESENTATION OF THE DATA SET: THE SAMPLE OF 100 COMPANIES	82
II.3 DESCRIPTION OF RESEARCH VARIABLES	85
II.4 DESCRIPTIVE STATISTICS AND NORMALITY TESTING	87
II.5 STATISTICAL METHODS APPLIED IN THE EMPIRICAL RESEARCH AND THEIR JUSTIFICATION.....	101
PART III – ORIGINAL CONTRIBUTION. RESULTS OF THE EMPIRICAL RESEARCH	105
THE ECONOMIC VALUE OF PERSONAL DATA IN ONLINE IT COMPANIES (QUANTITATIVE ANALYSIS)	106
ETHICAL IMPLICATIONS AND RISKS REGARDING DATA PROTECTION IN THE DIGITAL ERA (QUALITATIVE ANALYSIS).....	127
2.1 ETHICS OF ALGORITHMS AND DECISION AUTOMATION IN THE FINANCIAL SECTOR ..	127
Algorithmic bias and fairness correction.....	129
Examples of documented discrimination.....	130
Algorithmic audit models and good practices.....	130
International comparisons	131
Interim conclusions.....	131
Actors' responsibility and accountability dilemmas.....	132
Accountability as an ethical and legal principle	132
The ethics of explainability	133
Substantial human intervention	133
Case studies and European good practices.....	134
Algorithm ethics and cybersecurity	134
The impact of generative artificial intelligence.....	135
Convergence of the AI Act and GDPR.....	136
Future scenarios for algorithm ethics in finance.....	136
Interim conclusion	137
Critical synthesis	137
Public policy recommendations	138
Good organizational practices	139
Overall conclusion.....	140
2.2 RIGHTS OF DATA SUBJECTS: ACCESS, PORTABILITY, DELETION	140
Introduction: The Rights of the Data Subject in the Context of Digital Finance	140
Right of Access: Transparency and Explainability	141
Right to data portability.....	142
Right to erasure.....	145
International comparative analysis	147

Critical conclusions and recommendations for good practices	150
2.3 RISK OF DISCRIMINATION AND FINANCIAL EXCLUSION	153
Introduction and algorithmic discrimination.....	153
Financial exclusion and vulnerable groups	154
Case studies and international implications	156
Ethical and legal responses	157
Critical synthesis and recommendations	159
2.4 THE RESPONSIBILITY OF COMPANIES AND GOVERNMENTS IN PROTECTING DATA	161
2.5 FUTURE SCENARIOS: ARTIFICIAL INTELLIGENCE, BLOCKCHAIN, AND DIGITAL	
IDENTITY	163
2.6. OVERALL RESEARCH FINDINGS	165
CONCLUSIONS AND RECOMMENDATIONS	169
1. GENERAL CONCLUSIONS ON THE RELATIONSHIP BETWEEN PERSONAL DATA AND	
ECONOMIC VALUE.....	169
2. CONFIRMATION/INVALIDATION OF HYPOTHESES.....	171
3. PROPOSALS FOR PUBLIC POLICIES AND LEGISLATIVE AMENDMENTS	174
4. FUTURE RESEARCH DIRECTIONS	177
5. SUMMARY CONCLUSION	180
REFERENCES	182
APPENDICES.....	191
LIST OF ABBREVIATIONS AND ACRONYMS	220
LIST OF TABLES	222
LIST OF FIGURES.....	223

Abstract:

This doctoral thesis provides an original contribution by demonstrating the link between the complexity of personal data processing and the economic value of online IT&C companies listed on international stock exchanges. Based on a sample of 100 firms, a Data Complexity Index (score 1–5) was built and statistically correlated with current market capitalization. Results confirm a significant positive relationship: companies handling more complex datasets (biometric, inferential, algorithmic profiling and AI-driven) reach higher valuations. Moreover, compliance with the GDPR emerges as a key predictor of market value, validating data protection not only as a legal duty but also as a competitiveness factor. From an ethical perspective, the thesis highlights the risks of algorithmic discrimination and financial exclusion, stressing the need for algorithm audits, explainability of decisions, and meaningful human oversight. The conclusions include public policy proposals such as mandatory independent audits for financial algorithms and a stricter regime for inferential and sensitive data. Overall, the thesis confirms that personal data are both fundamental rights and economic resources, and their proper governance is essential for financial system stability and sustainability.

Keywords: personal data, GDPR compliance, complexity of personal data processing, economic value of personal data, financial stability and sustainability, online IT&C companies, algorithmic discrimination, FinTech, InsurTech, RegTech.