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DEVELOPMENT OF ALTERNATIVE INVESTMENT INSTRUMENTS WITH THE AIM OF ACHIEVING OF ECONOMIC GROWTH

SPECIALITY 522.01 – FINANCE

SUMMARY

of the thesis for the degree of Doctor of Economics

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CONTENTS

1	CONCEPTUAL GUIDELINES FOR THE RESEARCH	4
2	CONTENT OF THE THESIS	8
3	GENERAL CONCLUSIONS AND SUGGESTIONS	20
4	BIBLIOGRAPHY	25
LI	IST OF THE AUTHOR'S PUBLICATIONS ON THE THEME OF THE	THESIS27
Αŀ	ННОТАЦИЯ	28
ΑI	DNOTARE	29
AN	NNOTATION	30

1 CONCEPTUAL GUIDELINES FOR THE RESEARCH

The relevance of the research topic. The 2008 global financial crisis significantly impacted the world economy, triggering a banking and credit system crisis. This led to increased capital adequacy requirements, higher interest rates on loans, and a shortage of accessible bank financing, particularly affecting technological startups and small and medium-sized innovative technology companies. The development of advanced information technologies and the flow of capital and demand into unregulated sectors of the economy have resulted in the formation of a new alternative investment instruments market. The year 2020 was unlike any other: the global economies were tested by the onset of the COVID-19 pandemic, which led to a series of unprecedented restrictive measures, causing a sharp decline in sales levels and lack of liquidity, forcing many small and medium-sized enterprises to cease operations. Additionally, geopolitical tensions and the military conflict in Ukraine in 2022 contributed to a more cautious investment climate, affecting trade relations, and leading to volatility in financial markets.

To combat rising inflation, central banks in many countries began implementing stricter monetary policies by raising interest rates and reducing monetary stimuli. In this context, the use of online peer-to-peer lending platforms has become relevant, enabling remote attraction of financial resources without the need for various procedures inherent in the traditional banking sector, such as thorough risk assessments, collateral requirements, and mandatory bank visits. Despite the significant annual growth of the alternative investment instruments sector worldwide and the development of new investment tools, the crowdfunding market in the Republic of Moldova is currently in its nascent stage. The "Law on Collective Finance Services" has been adopted and has just come into force. Therefore, the study of issues and opportunities for the application of alternative investment instruments becomes an important subject of scientific analysis, especially in the context of the need for investments for the long-term development and sustainable economic growth of the Republic of Moldova, highlighting the **relevance of the research problem**.

The degree of scientific development and identification of the problem of the research topic. The market of alternative investment instruments is a new economic phenomenon that can potentially have a significant impact on the development of economic systems around the world, which is why research in this field is carried out by such scientific centers and research institutions from the European Union, the United States, Great Britain, Romania and the Republic of Moldova as: the World Bank Research Department, the European Central Bank, the European Commission, the Organization for Economic Cooperation and Development, the International Monetary Fund, the Alliance for Financial Inclusion, the Financial Stability Board, the International Organization of Securities Commissions, the World Economic Forum, the Massachusetts Institute of Technology, the Stevens Institute of Technology, the Cambridge Centre for Alternative Finance, the Bucharest Academy of Economic Studies, Babeş-Bolyai University, the Moldovan Academy of Economic Studies, the National Institute for Economic Research of the Republic of Moldova, the State University of Moldova, and others.

Among the scientific works reflecting the theoretical basis of this thesis, one can highlight the works of such economists as: J. Schumpeter, C. Perez, H. Hanusch, A. Pyka, S. Berumen and others.

The problem of access of small and medium-sized enterprises to financing was studied by such domestic economists as: A. Stratan, L. Cobzari, C. Cuşnir, L. Erhan, T. Moroi, A. Fala, Z. Toacă and others.

In the domestic literature, research on the issue of alternative financial instruments is presented by the works of: A. Ianioglo, S. Biloocaia, A. Paslari, L. Munteanu, S. Stratan, etc.

A significant contribution to the analysis of the impact of information technology on the development of finance in the domestic literature was made by: A. Belobrov, A. Stratan, S. Biloocaia, E. Lica and others.

In the world literature, the problem of financing using crowdfunding has been studied both at the theoretical and practical level by: R. Botsman, R. Rogers, D. Allen, C. Berg, M. Möhlmann, P. Rau, H. Zheng, R. La Porta, Q. Zhao, B. Zhang, and other scientific researchers.

These scientific studies provide a comprehensive theoretical and practical research foundation for studying the alternative investment instruments market. However, considering the relative novelty of this market, there is a need for further in-depth analysis within the framework of this thesis. The topic of this research opens the possibility to explore new aspects and address current issues of the alternative investment market, representing an additional step of scientific research. The analysis of the findings of this thesis related not only contributed to the formation of the author's own opinion regarding the studied aspects, but also contributed to the development of specific suggestions for the development of the alternative investment instruments market.

The field of the study is defined by the necessity for the effective utilization of the alternative investment instruments market with the aim of achieving economic growth.

The object of the study are the international financial institutions that study the alternative investment instruments market, its theoretical basis, application practices and legislative framework, in particular: the World Bank, the International Monetary Fund, the Alliance for Financial Inclusion, the Financial Stability Board, the International Organization of Securities Commissions, the World Economic Forum.

The subject of this study is the role of the alternative investment instruments market in maintaining sustainable economic growth.

The identified problems and objectives of the study allowed to formulate the following scientific **hypothesis of the study:** ensuring sustainable economic growth in the Republic of Moldova through the research and development of alternative investment instruments mechanisms that consider the impact of social, regulatory, economic, and technological determinants.

The purpose and objectives of the study. The main purpose of the thesis is to identify the factors driving the development of the alternative investment instruments market, enhance the efficiency of the investment process with aim of achieving of sustainable

economic growth, and increase the competitiveness of the alternative investment instruments market in the Republic of Moldova.

To achieve the fundamental goal of this thesis, the following research tasks were identified:

- analysis of the international usage practices of alternative investment instruments;
- identification of the classification and real-world usage scenarios of alternative investment instruments;
- determination of the mechanisms and techniques for using instruments in the alternative investment market;
- study of the national legislation and development strategies of the Republic of Moldova to identify the possibilities of using alternative investment instruments at the local level;
- assess the impact of lending through alternative investment instruments on the economic growth of the Republic of Moldova;
- develop an econometric model of alternative investment instruments market and the social, regulatory, economic, and technological determinants affecting it;
- propose an action plan for the implementation of the mechanism for the formation of the alternative investment instruments market in the Republic of Moldova.

Methodology and research methods. The work underwent four phases of a unified research process in the following sequence:

- a) the exploratory phase, the purpose of which was to study the possibility of using alternative investment instruments that are novel for the Republic of Moldova;
- b) the descriptive phase involved describing the characteristics and types of alternative investment instruments, as well as the market volumes and trends in different regions;
- c) the cause-and-effect phase focused on assessing the validity of the proposed hypotheses regarding the relationships between the selected dependent and independent variables using the apparatus of econometric modelling;
- d) the evaluation phase included an analysis of the impact of the alternative investment instruments market on economic growth, assessing the influence of each identified factor on the market volume, and evaluating the effectiveness of various strategies and mechanisms aimed at stimulating market development in the Republic of Moldova.

The scientific novelty of the thesis lies in the following aspects:

- identification of new elements, formulation of the definition and development of the graphical model of the sharing economy;
- development of the author's definition and graphical model of the alternative investment instruments;
- determination of the degree of influence of investment volumes through the alternative investment instruments market on economic growth in the Republic of Moldova;
- development of the econometric model of the strength and vector of the correlation between the determinants of the alternative investment market and its volume, as well as the explanation of causal relationships to determine priority areas for market development;

- development of suggestions for the implementation and improvement of the functioning of the mechanism for the formation of the alternative investment market in the Republic of Moldova with the aim of achieving of economic growth.

The solution of the scientific problem was achieved by identifying possible economic impact multipliers of the alternative investment instruments market on macroeconomic indicators; structuring factors, and their degree of impact on the alternative investment market and developing suggestions to improve the functioning of the alternative investment market with the aim of achieving of economic growth.

The theoretical significance of the study lies in:

- definition of proxy indicators in the form of investment multipliers through credit, tax revenues through credit, and GDP through investments, which allows assessing the impact of each financial unit invested through the alternative investment instruments market in monetary terms on these macroeconomic indicators;
- development of the econometric model of the influence of various groups of factors (regulatory, social, economic development, information-technology) on the ratio of the volume of the alternative investment market per capita, which serves as a tool for more precise analysis of market processes.

The practical significance of the study consists in:

- determination of priority areas of state policy and of the mechanism for forming the alternative investment market to increase the efficiency of the lending process;
- application in strategic planning, namely findings of the study can be utilized to identify priority directions for public policy aimed at enhancing the efficiency of the alternative investment instruments market for the purpose of economic growth, improving the "Law on Collective Finance Services," and developing specific steps to implement the objectives of the National Development Strategy "European Moldova 2030".

Implementation of scientific results. The significance of the results of the study was confirmed by the National Commission for the Financial Market of the Republic of Moldova and the Ministry of Finance.

Approbation of the scientific results of the dissertation research. The results of the thesis research were reflected in the materials of the following specialized scientific conferences: Annual International Scientific Conference "Competitiveness And Innovation In The Knowledge Economy" (Chisinau, 2023); International Scientific-Practical Conference, XVIIth edition, "Economic growth in the conditions of globalization" (Chisinau, 2023); Virtual International Scientific Conference "Development Through Research And Innovation -2023", IV-th Edition (Chisinau, 2023); Conferința științifică internațională "Strategii și politici de management în economia contemporană", ediția a 7-a (Chisinau, 2022).

Thesis structure. The thesis consists of an introduction, three chapters, conclusions and suggestions, bibliography, and appendices.

Keywords: alternative investment instruments market, digital financing, crowdfunding, sharing economy.

2 CONTENT OF THE THESIS

The first chapter of the thesis research "Theoretical foundations of the alternative investment instruments market". Technological progress is a central factor in the growth and dynamism of the modern economy. Innovations, understood as the process of unpredictable and discontinuous displacement of existing and emergence of new products, production technologies, and organizational solutions, underpin the most critical processes of knowledge generation and dissemination. This study examines processes characteristic of the current, fifth techno-economic paradigm, associated with the consolidation of finance and mass production, as well as the emergence of the knowledge economy—the highest stage of development of the post-industrial and innovative economy. Initiated by rapid progress in cognitive and information technologies, the fifth wave of technological innovations is characterized by a trend towards the globalization of economic mechanisms and information platforms, which has fundamentally transformed the business ecosystem and eased market entry conditions. Fifth-wave entrepreneurship is a part of Schumpeter's idea of innovation, which prioritizes the dynamics of knowledge driving innovations.

The Comprehensive Neo-Schumpeterian Economy is characterized by the following *key theses*: emphasis on qualitative, innovation-based development; innovations and uncertainty as ubiquitous and inseparable factors of economic development; interconnection and interaction (coevolution) between sectors (real, financial, and public sectors); and necessity to steer the national economy within the Schumpeterian corridor for sustainable and dynamic development.

The role of the financial banking sector is very important in Neo-Schumpeterian sustainable growth. J. Schumpeter emphasized the role of both the creative entrepreneur and the risk-taking banker. A future-oriented approach prompts a re-evaluation of the role of monetary policy and central banks. In monetarism and the neoclassical approach, this role is to control inflation and stability of the national currency, with the real sector playing a secondary role. From a Neo-Schumpeterian perspective, the central bank's task is to support policies aimed at Schumpeterian growth and provide enterprises with the necessary liquidity. Another task is to prevent speculative fluctuations in the financial market.

The sharing economy serves as a theoretical foundation for studying the market of alternative investment instruments. *The sharing economy*, as defined by the author, is a system of peer-to-peer mutually beneficial socio-economic relationships, unrestricted geographically, aimed at efficient exchange of underutilized resources for tangible or intangible benefits using technology and online platforms, characterized by low transaction costs and high operation speed. Considering this definition, the following graphical model of the sharing economy was proposed (Figure 1).

Like many other countries in the Eastern European region, the Republic of Moldova, is an emerging market country facing economic and financial development challenges arising from low levels of income and industrialization. *Emerging markets theory* analyses the factors and strategies aimed at developing and improving investments, technological progress, trade, infrastructure, and education, contributing to the acceleration of economic progress, especially in developing countries. The provisions of this theory help to deepen the

understanding of the potential for creating of favorable conditions that promote the expansion and efficient functioning of alternative forms of investment in Moldova.

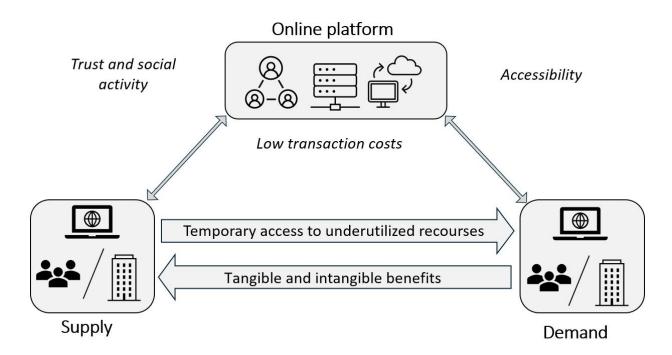


Figure 2. Sharing Economy Model

Source: Developed by the author

Since the beginning of the 1960s, there has been a significant shift in the sources of financing - from the dominance of the "state" to the participation of private capital. With the growth of electronic financial services, peer-to-peer lending has gained great popularity in recent years as a convenient way to lend financial resources, becoming an alternative to the banking system by providing the necessary funding for individuals, households, and small businesses that face difficulties accessing bank credit. Peer-to-peer lending starts working at the stage of enterprise creation, before the firm can seek funding from traditional banking sources, which are not available to new enterprises[7]. The high risk of the borrowers does not attract funding interest from the banks, whereas on alternative investment platforms, the risk of demand can be met with the risk of financing. The absence of intermediaries allows for more efficient operations with lower interest rates for borrowers and higher returns for investors.

The terminology of such innovative operations is under discussion in scientific circles. Based on the identified characteristics and concepts, the author proposes the following definition of the *alternative investment instruments market*: it is a segment of the non-banking financial market characterized by high risk and cross-border activity, where investors through online peer-to-peer platforms can directly place their capital with borrowers in exchange for interest or equity participation. Using this interpretation, we will graphically present in Figure 2 the model of the alternative investment market.

It is obvious that the market of alternative investment instruments is in the process of formation and further analysis of its state and dynamics forms an analytical basis for the development of strategies aimed at effective functioning in the future.

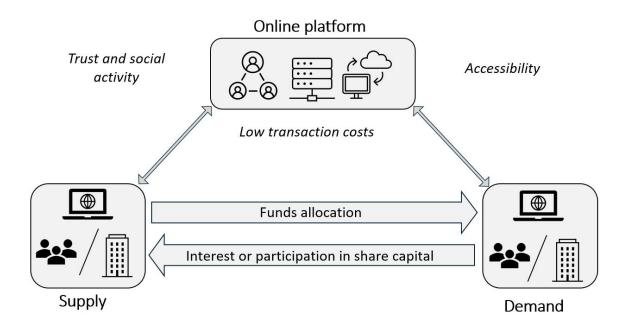


Figure 2. Alternative Finance Market Model

Source: Developed by the author

The second chapter "Analysis of the models and the state of the alternative investment instruments market". Competition between online platforms in the growing alternative investment market has led to an expansion of opportunities for both borrowers and investors. This dynamic environment has given rise to various models, which can be divided into the following three categories: debt models, equity models, and non-investment models.

Debt models include non-deposit platforms of online lending from individual lenders, or institutional investors to individuals and businesses. Debt obligations can take the form of secured or unsecured loans, bonds, or other types of receivables. Types of debt models include:

- Peer-to-peer lending: individual or institutional investors provide loans to consumer or business borrowers. The platform acts as a marketplace connecting borrowers and investors in such a way that the risk of financial loss in case of loan default lies with the investor, not the platform;
- *Balance sheet lending*: the platform directly provides consumer or business loans using funds from its balance sheet. The financial loss risk in case of loan default lies with the platform operator, who functions more like a non-bank credit intermediary;
- *Invoice trading*: private or institutional donors purchase invoices or accounts receivables at a discount but with immediate payment;
- Securities: private or institutional donors purchase debt securities, typically bonds or fixed-rate debentures.

Equity models include investments by individuals or organizations in shares that are not traded on the stock exchange, or in securities issued usually by small and medium-sized enterprises. Types of equity models include:

- Equity-based crowdfunding: private or institutional investors buy shares issued by companies;
- Real estate crowdfunding: private or institutional investors provide funds for the purchase of real estate in the form of a subordinated loan or equity financing;
- *Profit sharing:* Private or institutional investors purchase shares from a company and participate in the distribution of profits or royalties from the business.

Non-investment models provide project financing to individuals or businesses without any obligation from the fundraisers to ensure a financial return on the raised funds.

Compared to traditional banking, alternative investment platforms offer significant *competitive advantages* for both lenders and borrowers:

- merging of social networking with entrepreneurship financing to improve capital access for small and medium-sized enterprises;
- the ability to simultaneously explore numerous potential investments online and quickly determine whether a company fits their portfolio strategy, acceptable risk parameters, or other criteria;
- the opportunity for new and fast-growing enterprises to bypass a series of traditional banking formalities and credit requirements by presenting their proposal to a broader range of investors within their social network;
- expanding the geographical range of investments;
- testing the market, support networks, measuring demand for the products or services, checking the potential viability of their product, and attracting early adopters with minimal costs and low entry barriers [8];
- low transaction and administrative costs are achieved using innovative online technologies;
- portfolio diversification, an extensive selection of projects and the ability to invest in several projects at the same time without a minimum amount limit.

However, securing funding in the alternative investment market can also come with significant obligations and *risks* for both investors and lenders:

- high degree of information asymmetry: partial information opacity, low level of platform scoring systems;
- lack of platform responsibility for the technical feasibility of the project, absence of guarantees or guaranteed income, as it is in the case of bank deposits;
- intellectual property issues: innovative ideas on crowdfunding platforms, especially in technological projects, can be copied and implemented by competitors;
- lack of control measures for the use of collected but not yet transferred funds and for the fund returns to sponsors if the collection does not reach the required level;
 - underdevelopment or absence of legislative regulations;
 - low financial literacy and awareness among market participants;
- entry of BigTech companies into the alternative investment market creates issues of market concentration and data management.

Given the wide range of potential issues in the alternative investment market and its novelty, we consider the following **measures to mitigate risks in its operation**:

- Regulation and improvement of the legislative framework should provide incentives for the development of the alternative investment market ensuring its safety and efficiency and include: the development of algorithms and procedures for mandatory disclosure of information; implementing investor insurance mechanisms; imposing loan amount limits based on annual income; setting interest rate caps; the implementation of transparent tax policies and financial incentives;
- *Technology:* Ensuring the security and continuous operation of online platforms is crucial, considering potential fraud risks and possible technical failures in information systems;
- Social media: platforms play a key role in creating social capital. Users on social networks are the primary drivers of crowdfunding activities and trust growth;
- *Cultural and educational:* creation of educational programs and consulting spaces for the training in the field of financial technologies.

The presented taxonomy of the alternative investment market, along with its advantages and challenges, allows us to proceed to the empirical study of the volumes and dynamics of the alternative investment market, as well as to describe its current trends.

A detailed description and current trends of the investment instruments market can be found in the annual reports published by the Cambridge Centre for Alternative Finance (CCAF) since 2013 [6, 5, 12, 13, 14, 17, 16, 19, 18]. The CCAF database is an important source of global information on crowdfunding.

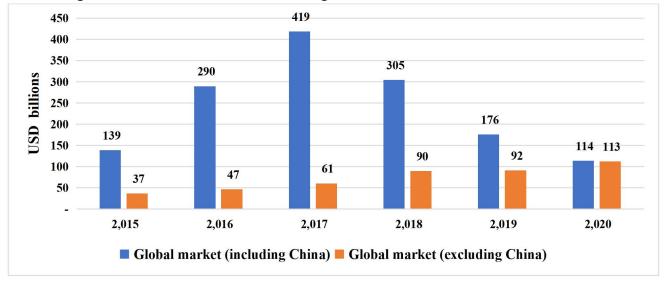


Figure 3. Size and growth of the global alternative investment market *Source*: Developed by the author [14, 17, 16, 19, 18]

The size of the global alternative investment market in 2020 amounted to \$114 billion USD (Figure 3). The United States and Canada (\$73.93 billion) were leading the market share globally, followed by the United Kingdom (\$12.64 billion), and Europe (excluding the UK) at \$10.12 billion. It's worth noting that in 2017, when the global market size was at its peak (\$419 billion), 85% of the market volume was attributed to China, while the European market accounted for only 2.8%. China dominated the global online alternative investment

market until 2019 but faced significant challenges due to tightened regulations aimed at combating financial fraud, resulting in the practical disappearance of this market.

Accordingly, when China's market volumes were included in the global analysis, the overall volume of the global market noticeably decreased, dropping by 42% in 2019 and an additional 35% in 2020, from \$304.5 billion in 2018 to \$176 billion in 2019 and \$114 billion in 2020. Excluding the Chinese market from the analysis reveals that the global online alternative investment market steadily grew from 2015 to 2020. Global volumes (excluding China) increased by 51%, from \$44 billion in 2015 to \$91 billion in 2019. In 2020, despite COVID-19, the global market volume increased by an additional 24% year-on-year, reaching \$113 billion.

The analysis of the structure of the alternative investment instrument market (Table 1.) in terms of models' market share shows that the peer-to-peer consumer lending has been the largest alternative investment model since 2013. However, it experienced a significant decline in absolute volume from \$103 billion in 2019 to \$34 billion in 2020 due to a decline in Chinese consumer lending.

Business balance sheet lending became the second-largest model both in 2019 at \$19 billion and in 2020 at \$28 billion USD. Currently, an increasing number of institutional investors are becoming partners with business borrowers under balance sheet models.

Property peer-to-peer and balance sheet lending models market share decreased in absolute volume from 2019 to 2020, which is understandable considering that real estate lending was suspended or reduced during the first half of 2020 due to COVID-19.

The market share of the donation-based crowdfunding model showed exponential growth, rising from ninth place in 2019 to fifth place in 2020. The year-on-year growth rate exceeding 160% can be directly attributed to the vast number of charitable, social, and health-related fundraising events during the COVID-19 pandemic at regional and global levels.

Table 1. Structure of the Global Alternative Investment Market in 2019-2020

	2019		2020	
Alternative Finance Model	Volume	Market	Volume	Market
	(USD bn)	share (%)	(USD bn)	share (%)
Peer-to-peer consumer lending	103.1	59%	34.7	31%
Balance sheet business lending	19.8	11%	28.0	25%
Peer-to-peer business lending	20.8	12%	15.4	14%
Balance sheet consumer lending	10.7	6%	13.0	12%
Donation-based crowdfunding	2.6	2%	7.0	6%
Invoice trading	3.7	2%	3.9	3%
Peer-to-peer property lending	4.6	3%	3.1	3%
Real estate crowdfunding	2.9	2%	2.8	2%
Balance sheet property lending	4.0	2%	1.8	2%
Equity crowdfunding	1.1	1%	1.5	1%

Reward-based crowdfunding	0.9	1%	1.3	1%
Others	1.3	1%	1.2	1%
Total	175.5		113.5	

Source: Developed by the author [14, 17, 16, 19, 18]

The analysis of the global market of alternative investment instruments reveals the following **trends**:

- *Institutionalization:* institutional investors (banks, trusts, investment dealers, and others) play a significant role in the alternative investment market. In 2020 they funded 42% of the total market volume;
- Internationalization and foreign financial inflows: the inflow of cross-border transactions through platforms from international investors is steadily growing. For example, in the CIS, this indicator is 79%, which also characterizes the Moldovan market[16];
- *Financial inclusion:* alternative financing is an effective solution in the fight against financial isolation and promotes an expanding access to financial services, especially in developing markets. The volumes of financing aimed at the SME sector in Europe have been steadily increasing in recent years;
- Risks and legislation: in the CIS countries, platform operators highlight the following key risks: the entry of BigTech companies, legislative changes, fraud, and the absence of regulatory frameworks, indicating a low level of market regulation.

In the recent years, the economy of the Republic of Moldova has undergone significant changes, adapting to global trends, economic shifts, and technological advancements. The share of small and medium-sized enterprises, which play a major role in the economic development of the Republic of Moldova, in 2022 amounted to 99.3% of the total number of enterprises, with a share of employed workers of 65.6%. Small and medium-sized enterprises' access to traditional financial instruments is limited due to the lack of real or personal guarantees, high interest rates, short repayment terms, and high costs loans. According to the National Bank of Moldova (as of 31.12.2023) [4], out of the total volume of loans issued by the banking sector amounting to 62.7 billion lei, only 18.68 billion lei (29.79%) were provided to small and medium-sized enterprises.

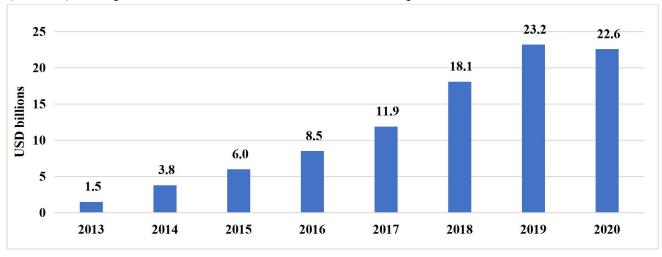


Figure 4. Size and growth of the European alternative investment market

Source: Developed by the author [14, 17, 16, 19, 18]

To consider the position of the Republic of Moldova on the alternative investment instruments market, it is necessary to thoroughly analyze the European market (Figure 4), which includes the Republic of Moldova. From 2013 to 2020, the European online alternative investment market grew steadily from \$1.5 billion in 2013 to \$23.2 billion in 2019. However, in 2020, in the context of the COVID-19 pandemic and Brexit, the total market volume decreased for the first time and amounted to \$22.6 billion.

As for the Republic of Moldova, according to the reporting data (Figure 5.), in 2016–2020 only foreign online platforms were active, local platforms did not exist. The market size in 2020 was \$93.8 million, or 0.41% of the European market. It should be noted that in 2016–2017 the market was almost undeveloped, but in 2018 two more platforms began operating and the market size grew to \$118 million from \$420 thousand in 2017 [18, 19]. Further development followed the trends of the European market with growth in 2019 and decline due to the impact of COVID-19 in 2020.

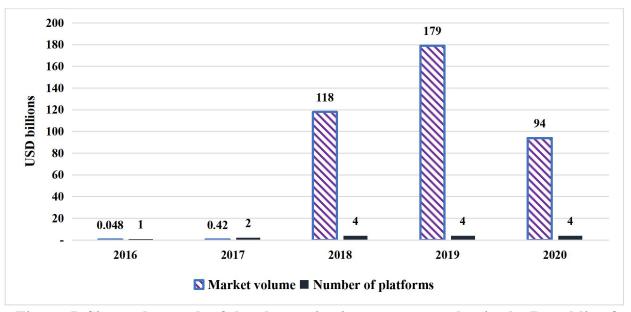


Figure 5. Size and growth of the alternative investment market in the Republic of Moldova Source: Developed by the author [14, 17, 16, 19, 18]

After conducting a detailed analysis of the current state of the market in the Republic of Moldova, it is advisable to consider the fundamental characteristics influencing the business environment and investment climate to further substantiate decisions and recommendations for the development of the alternative investment instruments market. The SWOT analysis of the alternative investment instruments market in Moldova is presented as follows:

• *Strengths:* low labor costs; availability of public and private initiatives aimed at supporting the small and medium-sized enterprises sector; highly educated population; growing community of start-ups and innovative companies;

- Weaknesses: unclear and constantly changing legislation; high degree of bureaucratization; lack of entrepreneurial skills in the small and medium-sized enterprise sector; limited resources and experience of regulatory authorities for effective market supervision and development; the highest inflation and interest rates in the region; geopolitical risks associated with military aggression in Ukraine;
- Opportunities: improving the quality of entrepreneurial education and consulting support; agreement on a Deep and Comprehensive Free Trade Area between the European Union and Moldova, as well as the start of negotiations on Accession to the European Union; specific legislative framework.
- *Threats:* the possibility of fraud in the field of alternative investment instruments; the risks of cyberattacks and information security violations; macroeconomic instability; vulnerability to external economic shocks.

In the context of the Republic of Moldova, the use of alternative investment instruments can become an important factor for stimulating entrepreneurship and economic growth, despite the existing challenges and risks.

Chapter three "Pathways and factors for the development of the alternative investment instruments market in the Republic of Moldova with the aim of achieving economic growth". The potential for the development of alternative investment instruments and their positive impact on the economy and financial stability underscore the necessity and importance of improving regulatory framework with the aim of achieving economic growth. In the Republic of Moldova, there were no specific legislative frameworks governing the activities of the alternative investment instruments market until recently. Instead, various non-core laws were used. However, as of March 1, 2024, the "Law on Collective Financing Services" [3] came into force, providing regulations for general operating conditions, introducing the concepts of process participants, principles, investor protection, categories of peer-to-peer financing, licensing, regulation, and supervision of collective financing activities, and reorganization and liquidation of service providers. The National Commission for Financial Markets acts as the supervisory and control authority, responsible for issuing and revoking licenses for the service providers. Service providers of collective financing through specialized platforms act as intermediaries between potential investors and small and medium enterprises and other borrowers developing projects, as well as consumer debtors (individuals) in the case of consumer credit. The small and medium-sized enterprises now can attract financing or accumulate investments of up to €1,000,000 for their projects through these platforms.

Improvement of the legislative framework, as one of the fundamental factors in the functioning of alternative investment market with aim of achieving of economic growth, plays a significant role in its development, creating a more stable and transparent environment for investors and lenders. The development of the regulatory framework increases confidence in the market and reduces risks, which contributes to the growth of lending volumes. Credit, in turn, plays a key role in economic development, as it stimulates investment, consumption and overall economic activity. J. Schumpeter [11] assessed the role of finance in the process of economic development as essential and noted that the primary

function of credit is to enable the entrepreneur to withdraw from producers the goods he needs, thereby creating demand for them and compelling the economic system to move in new directions. The following general aspects of the impact of lending on economic development can be highlighted:

- *stimulating investment* in production activities, expanding operations, purchasing equipment, infrastructure;
- consumer lending allows individuals to purchase durable goods such as housing, cars, education, which contributes to increased production;
- *multiplier effect* on economic activity, stimulating the circulation of money in the economy and leading to generation of additional income for businesses and individuals, which they then reinvest or use for current expenses, increasing the total volume of economic activity.

Considering the diverse potential multiplier effects associated with financing through the alternative investment instruments market and the limited amount of information available on the Republic of Moldova, the author conducted a study of the reports from specialized non-profit organizations and the analysis of the laws' regulatory impact. (Table 2).

Table 2. Multipliers of the alternative investment market

	Multiplier			
Source	Investment	Tax revenue	GDP	
Source	through	through	through	
	credit	credit	investments	
Law on Collective Financing Services	1,42	0,563	-	
"START for YOUTH" Program	1,83	-	-	
Independent Analytical Center "Expert-Grup"	-	-	1,15	
Institute for Development and Social	1.66	-	-	
Initiatives "Viitorul"	1.00			
Economic Council to the Prime Minister of	-	0.528	-	
the Republic of Moldova				
Average value	1,64	0,55	1,15	

Source: Developed by the author [3, 2, 9, 10, 1]

Considering the predicted by the authors of the "Law on Collective Finance Services" volume of transactions in alternative investment instruments market in the amount of 100 million lei within three years from the date of its entry into force, the positive economic effect can be assessed as follows:

- attracting additional investments of 164 million lei;
- increase in budget revenues by 55 million lei;
- GDP growth by 188 million lei.

The obtained results confirm the theoretical assumptions that alternative investment instruments have the potential to stimulate economic growth and ensure sustainable

development of the country. Therefore, it is necessary to identify the determinants of the market and develop an econometric model of their impact on the alternative investment market.

The process of factors analyzing and determining the extent to which each of them influences the dynamics of the alternative investment market involves several key stages, starting with the selection and justification of variables. This stage is the basis for the subsequent development of the model of factors influencing the development of the alternative investment instrument market.

An analysis of various scientific studies has been conducted to assess the factors influencing the development of the alternative investment instruments market. These studies examine many potentially explanatory variables classified into the following groups:

- Regulatory variables consider the rigidity and effectiveness of local regulation. The impact of legislative regulation on crowdfunding can vary: on one hand, investor protection encourages them to invest in financial crowdfunding, on the other hand, excessively stringent regulation reduces the number of qualified investors and harms the motivation of fundraiser;
- Social capital, as a certain potential of society arising from the trust among its members, plays a more important role when legal institutions are less developed, and conversely, the influence of trust begins to play a less important role when the legal system is more effective. A high level of public trust, interacting with other aspects of social capital, acts as a catalyst for economic initiatives, reducing the likelihood of manipulative and dishonest actions in the economic sphere;
- Variables related to information technology and Internet access infrastructure show that the more developed is the infrastructure the more people have access to the internet and, therefore, the opportunity to participate in such alternative investment systems;
- Variables characterizing the state of the economy: economists note that GDP growth is positively correlated with venture capital activity and there is a strong correlation between GDP per capita and the size of the alternative online finance market.

As a result of determinant categories identifying, it becomes possible to move on to the operationalization of the scientific hypothesis and solving the research problem using econometric techniques for quantitative assessment of their role. Such an approach provides a basis for a comprehensive study of inter-variable relationships, as well as for their formalization in the form of functional relationships.

All identified factors have a multidimensional nature, and in this regard, we propose to use indexes and universal indicators to qualitatively characterize the state of economic, financial, regulatory, technological, and innovative aspects, which will also contribute to the global comparability of research data.

For the econometric analysis we used a panel sample of 90 longitude observations for the period 2018–2020 across 30 countries characterized by diverse level of development of the financial market, technological capabilities, and informal institutions. The share of the alternative investment instruments market volume per capita (AFM_{cap}) is considered as an endogenous variable. The following were used as exogenous variables:

- The Index of Economic Freedom (IEF) an annual index and ranking to measure the degree of economic freedom;
- The Index of Regulatory Restrictions on Foreign Direct Investment (REG) measures legislative restrictions on foreign direct investment in 22 sectors of the economy;
- Social Capital variable (SOCIAL) is a component of the Global Competitiveness Index, which assesses the level of social cohesion, community interaction, as well as political participation and institutional trust;
- The Global Innovation Index (GII) an annual ranking of countries based on their potential and achievements in the field of innovation;
- The World Digital Competitiveness Ranking (IMD) evaluates countries' ability and readiness to implement and explore digital technologies as a key factor in economic transformations;
- The Financial Development Index (FD) represents a relative ranking of countries by the degree of development of financial institutions.

As a result of econometric analysis, the following regression was obtained and approved:

Formula 1

$$\begin{split} \log{(AFM_{CAP})} &= & -9,28 \\ &= & +1,53\log{(FD)} + 0,66\log{(SOCIAL)} + \\ &+ & 0,38\log{\left(\frac{IMD + GII}{2}\right)} + 2,38\log{\left(\frac{REG + ECF}{2}\right)} + \varepsilon \end{split} \qquad R^2 = 0,95 \end{split}$$

Where $\varepsilon = random \ errors$

The model's fit to the data, as determined by the coefficient of determination, indicates a high level of explained variance and statistical significance. Based on the obtained regression, we can note that exogenous factors have a positive influence on AFM_{CAP} , confirming economic theory principles. Moreover, the logarithmic form allows us to determine the percentage influence of each exogeneous factor as follows:

- a) An increase in the development of financial institutions (**FD**) by one percent has a significant positive impact on the volume of alternative investment per capita, increasing it by 1.53%, indicating a strong relationship between the development of financial infrastructure and the stimulation of alternative investment activities in the economy;
- b) When the social capital variable (**SOCIAL**) increases by 1%, the volume of alternative investment per capita AFM_{CAP} increases by 0.66%, i.e. the level of social trust has a positive impact on the volume of alternative investment, although such impact is not as strong as in the case of financial development;
- c) When the average value of **IMD** and **GII** variables increases by 1%, the volume of alternative investment per capita AFM_{CAP} increases by 0.38%. Although this relationship is the least pronounced compared to other factors in the model, its positive nature indicates that

¹ Student's t-test

- the development of information technology can stimulate the growth of alternative investment markets;
- d) The indicator with the highest level of correlation is the increase in AFM_{CAP} by 2.38% when the average value of the **REG** and **IEF** variables increases by 1%. This indicates that economic freedom and regulation of foreign direct investment have a substantial influence on alternative investment volumes.

Considering the results of econometric modelling, theoretical and practical analyses of the alternative investment instruments market, we propose to develop a specific action plan for the improvement of market formation mechanisms in the Republic of Moldova:

- implementation, stabilization, and improvement of legislation and regulation;
- comprehensive market participants informing;
- stimulating innovation and investment, creating of state platform for collective financing;
- monitoring and evaluating the implementation of the "Law on Collective Finance Services" and the development of the alternative investment instruments market.

3 GENERAL CONCLUSIONS AND SUGGESTIONS

The research has successfully achieved its initial goal, namely conducting an analysis of the factors influencing the development of the alternative investment instruments market with the aim of achieving of sustainable economic growth, development of the investment mechanism, as well as identifying ways to improve the efficiency of the alternative investment market in the Republic of Moldova.

Conclusions:

- 1. A synthesis of theoretical foundations has been conducted, defining both philosophical frameworks within the context of economic constructivism and conceptual frameworks within neo-Schumpeterian economics. We also considered the principles of the fifth wave of technological innovations, based on which the technical capabilities for the formation of alternative investment instruments market were realized.
- 2. The concept of the sharing economy and the theory of emerging markets complement and allow for a more comprehensive description of the theoretical basis of the alternative investment market research. A graphical representation of the sharing economy has been proposed, along with the definition characterizing it as a "system of peer-to-peer mutually beneficial socio-economic relationships, unrestricted geographically, aimed at efficient exchange of underutilized resources for tangible or intangible benefits using technology and online platforms, characterized by low transaction costs and high operation speed".
- 3. Based on the study of the nature and characteristics of alternative investment instruments market, author proposed its following definition: "a segment of the non-banking financial market characterized by high risk and cross-border activity, where investors through online peer-to-peer platforms can directly place their capital with borrowers in exchange for interest or equity participation". Using this interpretation, a graphical model of the alternative investment market was also presented.

- 4. A detailed analysis of the taxonomy of the international alternative investment market and numerous existing models has served as the basis for conducting the comparative analysis between the global market and the market in the Republic of Moldova, which made possible to recommend the use of balance sheet models which are not accounted for in the current version of the Law on Collective Finance Services.
- 5. The identified advantages of alternative investment instruments market stem from their nature as socio-economic phenomena based on information technologies. These new financial instruments provide efficient additional financing unavailable within traditional banking systems, thereby contributing to sustainable economic growth.
- 6. The identified problems of the alternative investment instruments market are mainly related to its novelty and innovative nature, as an integral part of the new techno-economic paradigm. Insufficient development of the regulatory framework and the absence of established application practices in the Republic of Moldova pose challenges for market development.
- 7. The identified methods for reducing risks in the alternative investment market have laid the foundation for selecting and justifying market determinants, indicating directions for possible areas of suggestions for the development of the alternative investment instruments market in the Republic of Moldova with aim of achieving of economic growth.
- 8. The analysis of volumes, dynamics, and current trends of the alternative investment instruments market confirmed the sustainability of its growth stability, even in conditions economic uncertainty. Thus, the applicability of these instruments with the framework of economic relations in the Republic of Moldova is justified, underscoring the importance and relevance of their development.
- 9. Detailed study and analysis of the characteristics of the alternative investment market in the Republic of Moldova have identified a wide range of opportunities, highlighted strengths, and weaknesses, and evaluated typical risks. This analysis was complemented by a critical review and assessment of the existing legislative environment.
- 10. The results obtained by quantifying the impact of the growth of the alternative investment instruments market on economic indicators in the Republic of Moldova confirm theoretical concepts and allow for the determination of the specific magnitude of economic impact within efforts to develop the market. Key proxy indicators used by analytical centers and government bodies in the context of financing small and medium-sized enterprises were employed for this purpose.
- 11. The selection of factors influencing the alternative investment instruments market is supported by an extensive theoretical foundation, enabling their high-confidence utilization in choosing specific determinants for econometric modelling. The developed model incorporated a set of panel data covering the period from 2018 to 2020 across 30 countries with varying levels of economic development and resulted from the selection of numerous indicators encompassing regulatory, social, information technology, and economic aspects. The model confirmed the theoretical foundations and revealed a

- positive correlation between all groups of factors and the market volume per capita. The regulatory determinants group demonstrated the strongest correlation.
- 12. The empirical results of the study provided an extensive answer to the research problem regarding the extent to which the development of the alternative investment instruments market influences economic growth and which factors impact the development of this market. These findings served as the basis for developing an action plan to formulate a mechanism and strategies to enhance the efficiency of the alternative investment instruments market in the Republic of Moldova with the aim to achieve economic growth. Thus, the study's objective was accomplished, and all research tasks were successfully solved.

The study significantly expanded the theoretical basis of the alternative investment instruments market, analyzed the existing operational problems, and highlighted the importance of its development as a source of accessible financial resources, stimulating economic growth, especially during crises and economic instability. Based on the analysis and synthesis of the results obtained, the following recommendations were formulated.

Suggestions.

The author has proposed an action plan for implementing the mechanism for forming the alternative investment instruments market in the Republic of Moldova, which includes the following four specific strategic directions:

- 1. Implementation, stabilization, improvement of legislation and regulation to stimulate the development of all segments of crowdfunding:
 - The reliability and efficiency of the alternative investment system, especially at the initial stage, can be achieved by introducing and *standardizing due diligence and scoring* systems, which will help to reduce information asymmetries and increase confidence in projects and fundraising;
 - The National Commission for Financial Markets can provide *training and* certification of specialists in the field of alternative investments, as well as monitor and regularly update standards and requirements in accordance with market changes and the development of new technologies;
 - Development of coordination mechanisms with foreign supervisory authorities, particularly from Romania, as many alternative investment platforms operate in different jurisdictions;
 - Platforms should be allowed to provide *additional services* for fundraisers to conduct successful crowdfunding campaign;
 - Ensuring the safety and continuous operation of online platforms;
 - The introduction *of balance sheet and guaranteed* models of collective lending has the potential to increase the accountability of operators and provide guarantees to creditors for the reimbursement of funds or interest.
- 2. The purpose of **comprehensive informing** both representatives of small and medium-sized businesses and individual investors about the use of alternative investment

instruments is to attract more participants to the market and increase their understanding of its functioning. Specific measures include:

- conducting information campaigns and organizing educational events, such as courses, seminars, press conferences and webinars, aimed at raising awareness among entrepreneurs, the public and potential investors about the advantages and opportunities of the alternative investment instruments market;
- *creation of consulting centers*, such as coworking spaces, business incubators and accelerators, where entrepreneurs and investors can receive financial, economic, consulting, educational, legal, and organizational support;
- incorporating courses on financial technologies and innovative investing into the curricula of higher education institutions, covering key aspects of modern financial technologies and investment methods, enabling course participants to acquire practical skills and tools for analyzing and evaluating innovative projects.
- 3. Within the **strategy to stimulate innovation and investment**, significant mechanisms could include:
 - creation of the state platform for collective financing, where the government participates in financing socially important projects, thus increasing the trust of potential investors and ensuring transparency and protection of interests for both borrowers and investors. Utilizing advanced blockchain and cryptography technologies for data and transaction security would contribute to creating a sustainable and transparent investment environment, with the platform itself serving as an example for other operators;
 - *stimulating co-investment*, involving local authorities in various socially significant projects for joint investment together with small and medium-sized enterprises using alternative investment platforms;
 - Use *of tax incentives*: conducting a transparent tax policy and providing tax benefits to investors in business projects through alternative investment instruments market; reducing the income tax rate could make investing in startups more attractive;
 - Control over the level of interest rates on alternative finance platforms will ensure stable conditions for investors and borrowers, contributing to the sustainable development of the financial system and preventing the accumulation of excessive debts to creditors.
- 4. The development of an online monitoring and evaluation system may include:
 - establishing key performance indicators to assess the effectiveness of the strategy, creating data collection tools, conducting regular data analysis and its compliance with the goals;
 - adjusting the strategy and action plan in accordance with the results of monitoring and changes in the alternative investment instruments market.

The developed econometric model for assessing of the influence of determinants on the volume of financing, along with the proposed recommendations and strategic directions in the context of the action plan for establishing of alternative investment market in the Republic of Moldova, as outlined in the thesis, can be applied and is relevant for countries with different levels of economic development.

Given geopolitical and pandemic risks limiting opportunities for physical visits to banks, coupled with the digitization of the economy and the development of high-risk technological business models, there is a need to stimulate investment activity and expand financing instruments usage to achieve sustainable economic growth. These goals represent universal requirements for the development of any economy and can be achieved by creating a competitive alternative investment infrastructure. Therefore, the results of this study will remain relevant and in demand over time and can be adapted to the specific characteristics of market development in each country.

Continuing the discussion of this research topic, it is advisable to consider the following potential directions for future research after the publication of the official data on the alternative investment instruments market in the Republic of Moldova:

- conducting an analysis of actual market development and assessing the results of legislative changes implementing, followed by formulating recommendations for improving market conditions and legislative regulation;
- development of an econometric model to assess the impact of various factors on the alternative investment market, specifically adapted to the conditions of the Republic of Moldova;
- development of an econometric models for comparative analysis of alternative investment markets in the region, followed by comparison with market data in the Republic of Moldova;
- determination and assessment of actual impact multipliers of the alternative investment market in Moldova and neighboring countries to assess the market effectiveness in the context of regional economic dynamics.

4 BIBLIOGRAPHY

- 1. *Matricea COVID* [online]. Consiliul Economic pe lângă Prim-ministrul Republicii Moldova. 2020 [citat 14.04.2024]. Disponibil: https://consecon.gov.md/wp-content/uploads/2020/10/Studiul-de-impact-al-pandemiei-COVID-19-asupra-sectoarelor-economice-%C8%99i-Matricea-de-politici-1.pdf
- 2. *Programul "START pentru TINERI: o afacere durabilă la tine acasă"* [online]. Guvernul Republicii Moldova. 2022 [citat 14.04.2024]. Disponibil: https://gov.md/sites/default/files/document/attachments/subiect-03-nu-362-me-2022 site 0.pdf
- 3. Proiectul de lege privind serviciile de finanțare participativă [online]. Parlamentul Republcii Moldova. 2023 [citat 30.07.2023]. Disponibil: https://www.parlament.md/ProcesulLegislativ/Proiectedeactelegislative/tabid/61/Legislati vId/6324/language/ro-RO/Default.aspx
- 4. *Baza de date interactivă cu statistica* [online]. 2024 [citat 15.01.2024]. Disponibil: http://bnm.md/bdi/
- 5. BAECK, Peter, COLLINS, Liam, ZHANG, Bryan. *Understanding Alternative Finance: The UK Alternative Finance Industry Report* [online]. Cambridge Centre for Alternative Finance. 2014 [citat 26.11.2019]. Disponibil: https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2014-uk-alternative-finance-benchmarking-report.pdf
- 6. COLLINS, Liam, SWART, Richard, ZHANG, Bryan. *The Rise of Future Finance: The UK Alternative Finance Benchmarking Report* [online]. University of Cambridge. 2013 [citat 05.01.2019]. Disponibil: https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/the-rise-of-future-finance/
- 7. HERVÉ, Fabrice, SCHWIENBACHER, Armin. Crowdfunding and innovation. *Journal of Economic Surveys*. 2018, vol. 32, nr. 5, pp. 1514-1530. DOI: 10.1111/joes.12274.
- 8. LEE, Eunkyoung, LEE, Byungtae. Herding behavior in online P2P lending: An empirical investigation. *Electronic Commerce Research and Applications*. 2012, vol. 11, nr. 5, pp. 495-503. DOI: 10.1016/j.elerap.2012.02.001.
- 9. LUPUŞOR, Adrian, CENUSA, Denis, MORCOTILO, Iurie, PROHNITCHI, Valeriu. *Republic of Moldova 2018. State of the country report* [online]. Expert-Grup Centru

- Analitic Independent. 2018 [citat 14.04.2024]. Disponibil: https://www.expert-grup.org/media/k2/attachments/State of the Country Report 2018.pdf
- 10. MINCU, Georgeta. Evaluarea stimulentelor economice pentru dezvoltarea IMM-urilor [online]. Institutul pentru Dezvoltare și Inițiative Sociale "Viitorul". 2018 [citat 14.04.2024]. Disponibil: http://www.viitorul.org/files/Evaluare%20StimulenteWEB.pdf
- 11. . SCHUMPETER, Joshep Alois. *The theory of economic development; an inquiry into profits, capital, credit, interest, and the business cycle*. Oxford: Oxford University Press, 1961. 255 p. ISBN 978-0195-004-61-8.
- 12. WARDROP, Robert, ZHANG, Bryan, RAU, Raghavendra, GRAY, Mia. *Moving Mainstream: The European Alternative Finance Benchmarking Report* [online]. Cambride Centre for Alternative Finance. 2015 [citat 04.04.2020]. Disponibil: https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2015-uk-alternative-finance-benchmarking-report.pdf
- 13. ZHANG, Bryan, WARDROP, Robert, ZIEGLER, Tania, LUI Alexis. *Sustaining Momentum: The 2nd European Alternative Finance Industry Report* [online]. Cambridge Centre for Alternative Finance. 2016 [citat 06.02.2020]. Disponibil: https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2016-european-alternative-finance-report-sustaining-momentum.pdf
- 14. ZHANG, Bryan, ZIEGLER, Tania, GARVEY, Kieran, RIDLER, Samantha. *Entrenching Innovation: The 4th UK Alternative Finance Industry Report* [online]. Cambridge Centre for Alternative Finance. 2017 [citat 15.02.2019]. Disponibil: https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2017-12-21-ccaf-entrenching-innov.pdf
- 15. ZIEGLER, Tania, CARVAJAL, Ana Fiorella, PROPSON, Drew, KEKRE, Neha. *The Global COVID-19 Fintech Market Impact and Industry Resilience Study* [online]. Cambridge Centre for Alternative Finance, 2022 [citat 30.11.2022]. Disponibil: https://www.jbs.cam.ac.uk/wp-content/uploads/2022/06/2022-global-covid19-fintechmarket-study.pdf
- 16. ZIEGLER, Tania, SHNEOR, Rotem, GARVEY, Kieran, WENZLAFF, Karsten. *The 3rd European Alternative Finance Industry Report* [online]. Cambridge Centre for Alternative Finance. 2019 [citat 15.09.2022]. Disponibil: https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2018-02-ccaf-exp-horizons.pdf
- 17. ZIEGLER, Tania, SHNEOR, Rotem, WENZLAFF, Karsten, ODOROVIC, Ana. *Shifting Paradigms: The 4th European Alternative Finance Benchmarking Report* [online]. Cambridge Centre for Alternative Finance. 2018 [citat 05.05.2020]. Disponibil: https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centres/alternative-finance/downloads/2019-05

- 18. ZIEGLER, Tania, SHNEOR, Rotem, WENZLAFF, Karsten, SURSEH, Krishnamurthy. *The 2nd Global Alternative Finance Market Benchmarking Report* [online]. Cambridge Centre for Alternative Finance. 2021 [citat 12.06.2021]. Disponibil: https://www.jbs.cam.ac.uk/wp-content/uploads/2021/06/ccaf-2021-06-report-2nd-global-alternative-finance-benchmarking-study-report.pdf
- 19. ZIEGLER, Tania, SHNEOR, Rotem, WENZLAFF, Karsten, WANG, Britney Wanxin. *The Global Alternative Finance Market Benchmarking Report* [online]. Cambridge Centre for Alternative Finance. 2020 [citat 15.05.2020]. Disponibil: https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2020-04-22-ccaf-global-alternative-finance-market-benchmarking-report.pdf

LIST OF THE AUTHOR'S PUBLICATIONS ON THE THEME OF THE THESIS Articles in scientific journals:

in journals from other databases accepted by ANACEC

- 1. **PASLARI, Andrei.** Impact analysis of the factors influencing the development of the alternative finance market in Moldova. *Financial Internet Quarterly*. 2023, vol. 19, nr. 2, pp. 78-90. DOI: 10.2478/fiqf-2023-0014.
- 2. **PASLARI, Andrei.** Blockchainul și Criptomoneda: Forțe Distructive sau Facilitatori Economici? *Economica*. 2023, vol. 3, nr. 125, pp. 66-77. DOI: 10.53486/econ.2023.125.066.
- 3. **PASLARI, Andrei.** Inflation Surge Of 2021-2023 And Monetary Policy In Eastern European Countries. *Economy and Sociology*. 2023, nr. 1, pp. 95-108. DOI: 10.36004/nier.es.2023.1-08.
- 4. **2PASLARI, Andrei.** Microfinance Institutions in Times of Economic Crisis. Case of Republic of Moldova. *Journal of Social Sciences*. 2023, vol. 6, nr. 3, pp. 55-67. DOI: 10.52326/jss.utm.2023.06(1).01.

Articles in conference proceedings and other scientific events: in the works of scientific events included in other databases accepted by ANACEC:

- 5. **PASLARI, Andrei.** Theoretical Basis Of Alternative Financial Instruments Market's Development = Теоретические Основы Становления Рынка Альтернативных Финансовых Инструментов. In: *Strategii şi politici de management în economia contemporană*: conf. şt. intern., ed. a 7-a, 9-10 iunie 2022. Chisinau: ASEM, 2022, pp. 406-415. DOI: 10.53486/icspm2022.64.
- 6. **PASLARI, Andrei.** Alternative Finance: A Modern Econometric Exploration Into Global Trends And Influences. In: *International Scientific Conference "Competitiveness And Innovation In The Knowledge Economy"*, September 22-23, 2023. Chisinau: ASEM, 2023, pp. 554-563. DOI: 10.53486/cike2023.5.
- 7. **PASLARI, Andrei.** The Role of Artificial Intelligence and Automation in Shaping Labor Markets. In: *Virtual International Scientific Conference "Development through Research*"

and Innovation - 2023", 4-th Ed. Chisinau: ASEM, 2023, pp. 137-151. DOI: 10.53486/dri2023.10.

8. **PASLARI,** Andrei. Analyzing Factors Influencing Moldovan Agricultural Yields. In: *Economic growth in the conditions of globalization: conference proceedings*: International Scientific-Practical Conference, 15th ed. Chisinau: Institutul National de Cercetări Economice, 2023, pp.142-152. DOI: 10.36004/nier.cecg.I.2023.17.14.

АННОТАЦИЯ

к диссертации на соискание ученной степени доктора экономических наук «Развитие альтернативных инвестиционных инструментов в целях достижения экономического роста», Пасларь Андрей, научная специальность 522.01 Финансы, Кишинев, 2024

Структура диссертации: введение, три главы, общие выводы и рекомендации, библиография из 206 источников, 6 приложений, 8 таблиц, 9 фигур. Исследование отображено в 8 научных публикациях.

Ключевые слова: рынок альтернативных инвестиционных инструментов, цифровое финансирование, краудфандинг, экономика совместного потребления.

Область исследования: 522.01 Финансы

Цель исследования: анализ возможностей развития рынка альтернативных инвестиционных инструментов и его влияния на экономический рост.

Задачи исследования: определение факторов влияющих на рынок альтернативных инвестиционных инструментов, повышение эффективности его использования с целью обеспечения устойчивого экономического роста.

Научная новизна и оригинальность исследования состоит в: выявлении новых элементов и формулировки определения экономики совместного потребления и рынка альтернативных инвестиционных инструментов; определении степени влияния объёмов инвестирования на экономический рост в Республике Молдова через рынок альтернативных инвестиционных инструментов; разработке эконометрической модели корреляции между детерминантами рынка альтернативных инвестиций и его объемом; разработке рекомендаций по внедрению и усовершенствованию функционирования механизма формирования альтернативного инвестиционного рынка в Республике Молдова с целью обеспечения устойчивого экономического роста.

Важная научная проблема, разрешенная в процессе исследования заключается в определении экономических мультипликаторов воздействия рынка альтернативных инвестиционных инструментов на макроэкономические показатели; формировании и факторов степени воздействия структурировании И альтернативный ИХ инвестиционный разработке усовершенствования рынок; предложений ДЛЯ функционирования альтернативного инвестиционного рынка в целях достижения экономического роста.

Теоретическая значимость исследования заключается в определении влияния мультипликаторов рынка альтернативных инвестиций на показатели экономического роста; разработке эконометрической модели влияния различных групп факторов на объём рынка альтернативных инвестиционных инструментов.

Практическая значимость исследования: Результаты исследования могут применяться с целью определения приоритетных направлений государственной политики для увеличения эффективности рынка альтернативных инвестиционных инструментов с целью экономического роста, совершенствования «Закона об услугах коллективного финансирования», выработки конкретных шагов реализации целей Национальной стратегии развития «Европейская Молдова 2030».

Внедрение научных результатов было подтверждено: Министерством Финансов Республики Молдова, Национальной комиссией по финансовому рынку Республики Молдова.

ADNOTARE

la teza pentru obținerea titlului științific de doctor în științe economice cu tema "Dezvoltarea instrumentelor investiționale alternative în vederea realizării creșterii economice", Paslari Andrei, Specialitatea 522.01, Finanțe, Chișinău, 2024

Structură: introducere, 3 capitole, concluzii generale și recomandări, bibliografie din 206 surse, 6 anexe,8 tabele, 9 figuri. Cercetarea este reflectată în 8 publicații științifice.

Cuvinte cheie: piața instrumentelor investiționale alternative, finanțare digitală, finanțare prin crowdfunding, economie colaborativă.

Domeniul de studiu: 522.01 Finante

Scopul cercetării: analiza posibilităților de dezvoltare a pieței instrumentelor investiționale alternative și impactul acesteia asupra creșterii economice.

Obiectivele cercetării: identificarea factorilor care influențează piața instrumentelor alternative de investiții, creșterea eficienței utilizării acestora în vederea asigurării dezvoltării economice durabile.

Noutatea si originalitatea științifică: identificarea unor elemente noi și formularea definițiilor a economiei colaborative și a pieței instrumentelor investiționale alternative; determinarea gradului de influență a volumelor de investiții prin intermediul pieței instrumentelor investiționale alternative asupra creșterii economice în Republica Moldova; elaborarea unui model econometric de corelare între determinanții pieței și volumul acesteia; elaborarea de recomandări pentru implementarea și îmbunătățirea funcționării mecanismului de formare a pieței instrumentelor investiționale alternative în Republica Moldova în vederea asigurării creșterii economice durabile.

Rezultatele obținute care contribuie la soluționarea problemei științifice: determinarea multiplicatorilor economici ai impactului pieței instrumentelor investiționale alternative asupra indicatorilor macroeconomici; formarea și structurarea factorilor și a gradului lor de impact asupra pieței de investiții alternative; elaborarea unor propuneri pentru îmbunătățirea funcționării pieței de investiții alternative în scopul realizării creșterii economice.

Semnificația teoretică a cercetării: determinarea impactului multiplicatorilor pieței instrumentelor investiționale alternative asupra indicatorilor de creștere economică; dezvoltarea unui model econometric al influenței diferitelor grupe de factori asupra volumului pieței instrumentelor investiționale alternative.

Valoarea aplicativa a cercetării: Rezultatele studiului pot fi utilizate pentru determinarea direcțiilor prioritare ale politicii publice pentru creșterea eficienței pieței instrumentelor investiționale alternative în scopul dezvoltării economice, perfectarea "Legii privind serviciile de finanțare participativă", elaborarea pașilor specifici pentru implementarea obiectivelor Strategiei Naționale de Dezvoltare "Moldova Europeană 2030".

Implementarea rezultatelor științifice a fost confirmată de: Ministerul Finanțelor al Republicii Moldova, Comisia Națională pentru Piața Financiară a Republicii Moldova.

ANNOTATION

to the thesis to obtain the scientific degree of doctor in economic sciences "Development of alternative investment instruments with the aim of achieving of economic growth",

Paslari Andrei, Specilaity:522.01 Finance, Chisinau, 2024

Structure: introduction, 3 chapters, general conclusions and recommendations, bibliography consisting of 206 sources, 9 appendices, 8 tables, 9 figures. The research is reflected in 8 scientific publications.

Keywords: alternative investment instruments market, digital financing, crowdfunding, sharing economy.

Field of study: 522.01 Finance

Research goal: analysis of the possibilities for the development of the market of alternative investment instruments and its impact on economic growth.

Research objectives: identifying the factors influencing the market of alternative investment instruments, increasing its usage efficiency to ensure sustainable economic growth.

Scientific novelty and originality: identifying new elements and formulating definitions of the sharing economy and of the market of alternative investment instruments; determining the degree of influence of investment volumes through the market of alternative investment instruments on economic growth in the Republic of Moldova; development of an econometric model of correlation between the determinants of the alternative investment market and its volume; development of recommendations for the implementation and improvement of the mechanism for formation of the alternative investment market in the Republic of Moldova aiming to ensure sustainable economic growth.

Results contributing to the solution of an important scientific problem: determining the economic multipliers of the impact of the market of alternative investment instruments on macroeconomic indicators; forming and structuring of factors and assessing their impact on the alternative investment market; developing proposals to improve the functioning of the alternative investment market to achieve economic growth.

Theoretical significance: determining the influence of alternative investment market multipliers on economic growth indicators; development of an econometric model of the influence of various groups of factors on the volume of the market for alternative investment instruments.

Applicative value: The findings of the study can be utilized to identify priority directions for public policy aimed at enhancing the efficiency of the alternative investment instruments market for the purpose of economic growth, improving the "Law on Collective Finance Services," and developing specific steps to implement the objectives of the National Development Strategy "European Moldova 2030".

Implementation of scientific results was confirmed by the Ministry of Finance of the Republic of Moldova, the National Commission for the Financial Market of the Republic of Moldova.

ACADEMIA DE STUDII ECONOMICE DIN MOLDOVA

PASLARI ANDREI

DEVELOPMENT OF ALTERNATIVE INVESTMENT INSTRUMENTS WITH THE AIM OF ACHIEVING OF ECONOMIC GROWTH

522.01 - FINANCE

Summary of the doctoral thesis in Finance

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