# "Marketing and education: directions of distance learning development"

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# MARKETING AND EDUCATION: DIRECTIONS OF DISTANCE LEARNING DEVELOPMENT

#### Abstract

The COVID-19 pandemic has forced educational institutions to urgently introduce distance learning (DL), which has resulted in an unprecedented experiment in the sphere of higher education in Ukraine that requires scientific analysis. The aim of the work was to identify the possible potential directions of DL development in institutions of higher education as a result of marketing research of satisfaction/dissatisfaction of students with DL. The survey method was used in the study. The results of marketing research (an online survey of students) (Kharkiv, 2020, n = 316) allowed the authors to identify the factors of satisfaction and dissatisfaction of students with DL. Students considered the most important factors of satisfaction with DL as follows: development of competencies, self-organization, discipline, self-motivation, responsibility, taking an active position as participants of the educational process, comfort. Students expect that lectures secure improvement of teacher-student communication process; flexibility of educational approaches; use of interactive tools and constant change of activities to maintain the attention, interest, concentration of students on studying process. The latter will maximize students' involvement in activities during training; improvement of digital competencies. The students' expectations are: flexibility of the DL platforms compared to full-time in-person education; creation of the "map" of the educational process in a distance mode.

It is noted that the results of marketing research (the online survey) demonstrated the factors of satisfaction and dissatisfaction of students with DL. This information was considered as the arguments for identifying the possible potential directions of DL development in higher education institutions.

**Keywords** marketing, education, directions of DL development, online

surveys, satisfaction of students with DL

JEL Classification M13, I21

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# МАРКЕТИНГ І ОСВІТА: НАПРЯМИ РОЗВИТКУ ДИСТАНЦІЙНОГО НАВЧАННЯ

# Анотація

Пандемія COVID-19 змусила заклади освіти терміново запровадити дистанційне навчання (ДН), що спричинило безпрецедентний експеримент у сфері вищої освіти в Україні, який потребує наукового аналізу. Мета роботи - визначити можливі потенційні напрями розвитку дистанційного навчання у вищих навчальних закладах як результат маркетингового дослідження задоволеності/незадоволеності студентів ДН. Для досягнення зазначеної мети був використаний метод опитування. Результати маркетингового дослідження (онлайн-опитування студентів) (Харків, 2020, п = 316) дозволили авторам ідентифікувати фактори задоволеності та незадоволеності студентів ДН. Студенти вважають найважливішими факторами задоволеності ДН: розвиток компетентностей, самоорганізацію, дисциплінованість, самомотивацію, відповідальність, формування активної позиції як учасників навчального процесу, комфорт. Студенти очікують, що викладачі забезпечать поліпшення процесу комунікації викладач-студент; гнучкість освітніх підходів; використання інтерактивних інструментів та постійну зміну діяльності для підтримки уваги, інтересу, концентрації студентів на навчальному процесі. Останнє максимізує залучення студентів до діяльності під час навчання; вдосконалення цифрових компетентностей. Від навчальних закладів студенти очікують: гнучкість платформ ДН у порівнянні з денною формою навчання; створення "карти" навчального процесу у дистанційному режимі.



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Зазначається, що результати маркетингового дослідження (онлайн опитування) продемонстрували фактори задоволенності та незадоволенності студентів ДН. Отримані дані розглядалися як аргументи для визначення можливих потенційних напрямів розвитку ДН у вищих навчальних закладах.

Ключові слова маркетинг, освіта, напрями розвитку ДН, онлайн опитування, задоволеність студентів ДН

Класифікація JEL M13, I21

# INTRODUCTION

The COVID-19 pandemic forced educational institutions to urgently introduce distance learning (DL), which resulted in an unprecedented experiment in the sphere of education in Ukraine that requires scientific analysis by economists, sociologists, psychologists and IT professionals. Failure or success of distance learning was determined by the level of readiness of: 1) the educational institutions: (for example, the availability of an online platform for organization of DL), 2) teachers (competence in organizing the DL process and readiness for change), 3) students (motivation and technical capability to study at home / in the dormitory),4) a number of other external (technical, economic) and internal (psychological, social) factors. Marketing research in higher education allow us to have information about the problems of participants of educational process. Marketing interaction paradigm presupposes active participants of educational process. These are students, teachers and institutions of higher education. Such activity of participants coincides with the concept of relationship marketing. Relations of the participants of educational process are oriented to support long term activity. An analysis of DL in institutions of higher education and its assessment by teachers and students allow us to see the problems of DL and identify areas of growth in the quality of DL.

Students of institutions of higher education are the ultimate beneficiaries, recipients of educational services. This fact determines the urgency of the necessity to study the factors of satisfaction and dissatisfaction of students with distance learning (DL), understanding the factors influencing satisfaction and dissatisfaction of students with DL.

# 1. LITERATURE REVIEW

There are several terms used in modern scientific discourse to define new forms of learning: e-Learning, on-line learning, and distance learning. Distance learning is some form of instruction which occurs between two parties (a learner and an instructor), it is held at different times and/or places, and uses varying forms of instructional materials.

According to Moore, Dickson-Deane, Galyen (2011) e-Learning is defined as strictly being accessible, using technological tools that are either web-based, web-distributed, or web-capable forms e-resources: applications, programs, objects, websites, etc. Online learning is described by those authors as an access to learning experiences via the use of some technology. On-line learning is identified as a more recent version of distance learning which improves access to educational opportunities for learners and is described as both nontraditional and disenfranchised. Other authors discuss not only the accessibility of online learning but also its connectivity, flexibility and ability to promote varied interactions.

Thus, the most common term is DL, as it includes both e-Learning, online learning, which in turn should be used to focus on web-based tools (e-Learning), or to expand access to learning (online learning). To study the features of DL, the relationship marketing paradigm seems to be promising, which allows us to consider education as a service in a competitive environment and opens opportunities for marketing research. This contributes to the quality of education in order to improve and develop the educational product, create a unique trade proposition, use a human-oriented approach: building a learning strategy based on the needs and interests of consumers and participants in the educational process.

A series of scientific papers in the field of marketing education demonstrates the main trends in this area: the work of Ivy (2008) on the study of education in an aggressive competitive environment, the work of Granitz, Greene (2003) on e-commerce tools and e-marketing strategies in education, the work of Rippé et al. (2021) explore the socio-psychological consequences of COVID-19 pandemic crisis.

The work of Smørvik and Vespestad (2020) has marketing focus on education, in which the authors study values in a teaching-learning context, which, in turn, allows them to consider distance learning through the prism of the needs, interests and values of all participants of the learning process: students, teachers, educational institutions. In our opinion, human-oriented character of education is the basis for its development.

The relationship between students, teachers and universities has been the subject of analysis by Rayburn, Anderson, Sierra (2020), who were able to identify factors of shared responsibility for continuity of learning on the basis of the survey.

The article of Camilleri (2020) examines the marketing environment of today's higher education and raises the problems of autonomy of educational institutions, student-centered education, updates integrated marketing communications and makes emphasis on the fact that it is the marketing efforts of educational institutions that allow them to develop and interact with stakeholders.

Hall (2020) when studying how COVID-19 affects the future of education management notes that many business schools have responded quickly to COVID-19 by increasing their online presence as a temporary measure in the short term. Some business schools, in order to remain competitive in a fairly dense market, offer online programs at prices 50 percent lower than their traditional programs. In addition, in order to facilitate the rapid transition to distance learning, many business schools have turned to the online software development community, whose popularity is now gaining momentum. At the same time, as Hall (2020) points out, job performance and financial processes are complicated by the growing disparity between the business community and the performance of many business schools. After all, today employers are looking for graduates who can quickly adapt to the unstable conditions of society, aimed at solving problems, as well as those who can skillfully operate on the Internet.

Researchers Brammer, Clark (2020) in their article on COVID-19 and education management, note that COVID-19 spreading in January and February 2020, had its influence on universities and business schools and affected the academic year. The most vulnerable stakeholders were students, and it was their interests that became the first focus of business schools in the development and implementation of relevant activities.

Open universities of distance education have been established in Europe, i.e., a group of educational institutions that implement distance learning programs. Methods of such training include the use of new information technologies, which include satellite television, computer networks, multimedia, etc.

Among the world's leading educational institutions, such as the National University of Technology (USA), Shanghai University (PRC), relatively new distance education and self-education institutions such as TV universities, tutoring centers (multimedia learning), and information centers (Internet learning) have been established and gained popularity) (2017).

The emergence of distance education is not accidental, it is a natural stage of development and adaptation of education to modern conditions. All over the world, distance education exists and occupies its socially significant place in the field of education. Distance learning is acquiring particular importance in a COVID-19 pandemic. It should be noted that before the pandemic period, distance learning in Ukraine was considered as an alternative to extramural form of study and tuition fees were at the level of extramural form of study. But during the coronavirus pandemic, intramural students are also at the distance form of education. Tuition is not reduced, which causes student dissatisfaction.

Ukranian researchers Berezhna, Prokopenko (2020) note that COVID-19 encourages institutions of higher education in Ukraine to implement innovative solutions in a relatively short period of time and introduce distance learning using various web servers, platforms, resources and social networks. Issues of training foreign students

abroad during the crisis have become particularly acute. At the same time, Berezhna and Prokopenko (2020) note that the large-scale economic consequences of COVID-19 have led to a significant number of students experiencing difficult financial times, including foreign students who are stuck in the country throughout the pandemic. Research and teaching staff have also undergone significant changes as a result of COVID-19, as the pandemic has necessitated the application of the largest and fastest transformation of pedagogical activities and methods of assessing student knowledge that has ever been observed in modern universities. This has increased the workload on research and teaching staff and requires them to join forces, including software training and joint practical activity.

Distance learning provides students with new opportunities of higher education: expanding access to educational services due to digital platforms and interactive instruments; improvement of competencies: responsibility, time management, creativity, adaptability; multichannel technologies, teacher - student communication.

# 2. AIMS

The aim of the article is to identify the possible potential directions of distance learning development in institutions of higher education as a result of marketing research of satisfaction, dissatisfaction of students with DL. To achieve the aim it was necessary to solve the following tasks: 1) to analyze the peculiarities of the perception of DL by students, 2) to study the problems of students in the process of adaptation to DL; 3) to outline potential competencies that will be in demand in the digital future; 4) to identify the perspective directions of DL development in modern academic space.

# 3. METHODS

The online survey method with the Google Forms service was used. 316 students of Kharkiv institutions of higher education were interviewed during May-October 2020.

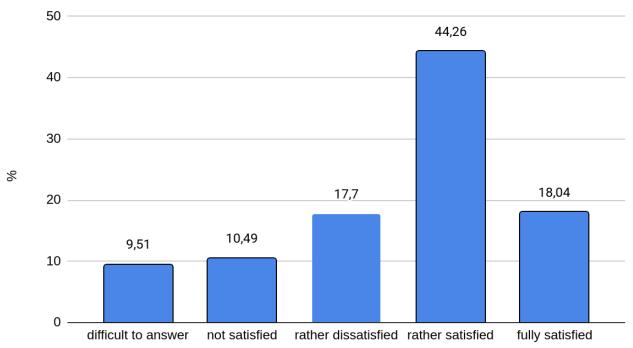
## 4. RESULTS

According to the results of the online survey of students (Kharkiv, n = 316 May-October 2020, students of universities were interviewed) the following answers were obtained to questions about satisfaction with the quality of distance learning. 10.49% - dissatisfied with the quality of distance learning, 17.7% more dissatisfied than satisfied, 44.26% more satisfied than dissatisfied, 18.03% - satisfied with the quality of distance learning, 9.5% of students find it difficult to answer questions (see Figure 1). That is, the majority of students (62.29%) are satisfied or rather satisfied with the quality of distance learning.

As a result of looking for a correlation between students' satisfaction with distance learning and other studied characteristics, it was found that there were no correlations with such features as age, course of study. At the same time, significant statistical differences were found depending on the form of education (students studying on a fee-paying basis, students studying at the expense of state budget). Thus, students studying on a fee-paying basis are less satisfied with distance learning compared to students studying at the expense of the state budget (see Figure 2). Among students studying on a fee-paying basis, 15.6% of students are satisfied with the quality of distance learning, 44.3% – rather satisfied, 15.6% – rather dissatisfied, 11.5% – dissatisfied with the quality of distance learning, another 13% of students chose the answer "difficult to answer", which indirectly indicates dissatisfied students who are not ready to openly express their dissatisfaction.

Among students studying at the expense of state budget 23.6% of students are satisfied with the quality of distance learning, 46.2% – rather satisfied, 20.8% – rather dissatisfied, 6.6% – dissatisfied with the quality of distance learning, 2.8% of students chose the answer "difficult to answer".

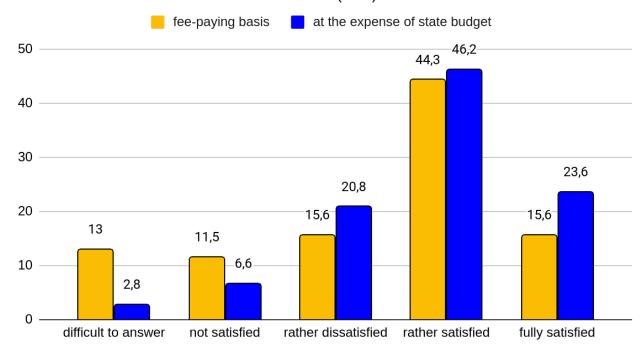
# Satisfaction of students with the quality of distance learning (in %)



Source: Compiled by the authors on the results of survey of students.

Figure 1. Satisfaction of students with the quality of distance learning (in %)

# Satisfaction of students with the quality of distance learning depending on the form of education (in %)



Source: Compiled by the authors on the results of survey of students.

**Figure 2.** Satisfaction of students with the quality of distance learning depending on the form of education (in %)

It is clear that the cost of in-person learning and distance learning should be different. At the same time, students paid the full cost of in-person learning, in fact receiving educational services according to distance type of learning, which affected their greater dissatisfaction with distance learning compared to students studying at the expense of state budget.

In addition, students had the opportunity to explain their answer to the question concerning the satisfaction with the quality of distance learning in the open question. Answers were received that allow us to identify factors of satisfaction and dissatisfaction of students with distance learning.

Most factors of satisfaction / dissatisfaction are the same, i.e., in fact, it is the presence / absence of certain characteristics that determine the degree of students satisfaction.

Factors of satisfaction with distance learning include (quotes from students' answers to the open question are given in quotation marks):

# 1. Convenience, comfort, accessibility:

"Everything is very convenient, especially meetings in Zoom", "convenient", "there is time for own needs", "I am more comfortable", "the quality of knowledge is at the same level as with in-person learning", "everything is accessible and a lot of material", "psychological comfort, this is a significant advantage", "the possibility to combine things that take a lot of time".

# 2. Saving time on commuting:

"No time is spent to get to the place of study", "it is not possible to watch lectures another time, but it is very convenient to be able to do everything at a distance, it saves time", "no need to go anywhere, no one is distracting".

# 3. Security:

"Distance learning helps not to put myself and others at risk", "It's more convenient and comfortable for me to study at home than to go to university", "I'm less likely to get infected and infect others".

# 4. Good organization of the educational process:

"The work was fast and of high quality", "classes are on schedule, teachers are doing their job, training continues".

# 5. Simplicity, ease of learning:

"I was able to prepare fully, it was easier" "for me, personally, distance learning is much easier, but less effective".

## 6. Acquisition of material:

"I have mastered the material well", "I have more time to study the material remotely", "convenient format, you can return to the materials at any time, at any speed", "improved my grades during distance learning, because I became more focused on tasks".

# 7. Combination of study and work; study and recreation:

"The opportunity to study without leaving the main place of work", "I had the opportunity to study and work at the same time", "there is time for work, study, leisure and time for family".

# 8. Communication with the teacher (clarity of tasks, assessment, efficiency):

"Satisfied with the quality of distance learning, because teachers always clearly explained the material and arranged lectures, practical classes, which gave the opportunity to ask questions in person".

Factors of dissatisfaction with distance learning included:

# 1. Variety of approaches to the organization of training:

"In my opinion, everything is a bit unorganized", "there was a lack of consistency, structure, practical training", "we need a clear system of organization of the educational process, as different platforms are offered.

#### 2. Insufficient communication with the teacher:

"Sometimes there is a lack of person to person communication with the teacher", "sometimes the internet is bad".

3. Increased work load, fatigue, lack of concentration, misunderstanding of the process, discomfort, inconvenience:

"Learning online is certainly very convenient, but there is even more fatigue than with offline classes", "difficult to understand the material, many tasks for self-study", "the work load was greater than within the university", "difficult to concentrate", "there is discomfort, which is manifested in the working moments".

4. Problems with acquisition of material:

"During distance learning it is not possible to master the material completely", "there are many questions that are difficult to get answered quickly", "distance learning does not provide complete and high-quality information".

5. Lack of motivation:

"There is no desire and motivation to perform tasks at home", "while at home you start to be very lazy", "there are problems with self-organization, the desire to learn disappears", "it is difficult to adjust to learning, to new information".

6. Price / quality mismatch:

"I went to university for in-person learning, not the distance one".

7. Technical problems (unstable internet connection, incorrect operation of the university online platform, lack of equipment):

"Failed to get better results due to internet connection problems", "Poor internet quality, which causes some difficulties".

8. Unclear criteria for assessing students' knowledge:

"The assessment criteria were not always clear".

The considered factors of satisfaction and dissatisfaction with distance learning give the chance to single out the directions of its development.

Students expect from educational institutions: 1) flexibility of distance learning payment system in comparison with in-person education; 2) creation of the clearest and simplest for both students and teachers "map" of the educational process in the distance mode (step-by-step instructions for the organization of training, transparent assessment system, clear from the beginning assessment criteria); providing access to all materials and tasks in an asynchronous mode (for this, most universities use the Moodle platform); 3) revision of work load norms in the direction of reduction, first of all, for synchronous distance learning in order to avoid work overload, fatigue, discomfort for both students and teachers.

Students expect that teachers secure: 4) improvement of the teacher-student communication process (use of several communication channels, prompt feedback, consultation meetings / separate allocated time for questions / answers); 5) flexibility of educational approaches that take into account the diversity of students in terms of their technical capabilities, psychological peculiarities, social conditions and family and domestic circumstances; 6) the use of interactive tools and continuous change of forms of activity to hold the attention, interest, concentration of students, maximum involvement of students in learning (both lecture and seminar learning, practical, laboratory work), the use of various forms of doing tasks (mandatory group work); 7) increase of digital competencies (mastery of tools, settings and work with various services and platforms).

Students considered the most important factors of satisfaction are: 8) development of competencies, self-organization, discipline, self-motivation, responsibility; 9) formation of an active position: not only as a consumer of education, but also as a participant of the educational process (provides for inclusion, involvement during synchronous classes, initiation of communication); 10) the ability to find compromise solutions for all participants of the learning process (understanding that even a well-tuned system fails, recognition and acceptance of the possibility of errors, alternatives, taking into account technical problems, including absence from classes).

Controversial is the proposal of students, which was voiced in the process of answering an open question about the unification of tools, platforms and approaches in the learning process. On the one hand, indeed, within an educational institution, as a rule, there is a single platform that provides learning in asynchronous mode. On the other hand, requiring teachers to use common applications and tools to organize synchronous learning is a limitation of professional activity. Because each teacher should be able to independently decide which applications, tools, methods of working with students meet the objectives and contribute to the formation of the necessary competencies in the discipline.

One of the tasks of the work was to study the problems of students to adapt to digital learning and identify potential competencies that will be in demand in the future.

The number of students dissatisfied / partially dissatisfied with the quality of DL indirectly reflects the number of students who have difficulty of adapting to digital learning. The consequences of the low level of adaptive abilities were work overload, fatigue, lack of concentration, lack of motivation, misunderstanding of the process, discomfort, inconvenience, which were pointed out by students.

According to Parsons, adaptation is one of the four functional requirements that social systems must meet in order to survive: that is, during COVID-19, education had a choice to adapt or cease its activities. At the individual level, adaptability is a soft skill that means being able to rapidly learn new skills and behaviors in response to changing circumstances. According to the World Economic Forum (2019), adaptability is included in the TOP-5 soft skills companies need in 2019. We can predict that in the context of the 2020-2021 pandemic, the importance of adaptability will increase. In addition to Adaptability, TOP-5 needed soft skills included Creativity, Persuasion, Collaboration and Time Management.

Other soft skills also influenced the process of adaptation to rapid social change. It was Time Management that helped to prevent work overload and fatigue: students noted that a good tool to organize their studies at home was to create a daily routine in which there was a place not only for learning, but also for recreation, sports and communication with friends, even work. We can consider Adaptability as a basis for the development of the dimension of creativity -flexibility, which is the ability to produce a variety of responses.

In general, the level of satisfaction with distance learning indicates the high adaptability of most students and demonstrates a high level of digital readiness. At the same time, the question of students' competencies that will be in demand in the future remains relevant. In the conditions of distance learning such competences (soft-skills) as ability to adapt to the new environment, sociability, self-motivation, time management, emotional intelligence and creativity-flexibility become especially relevant.

The data obtained during the study correlate with the data of other surveys in Ukrainian universities. Thus, the survey of the quality of distance learning in the sphere of educational services at Lviv University of Trade and Economics (2020) also demonstrates mostly satisfaction of students with distance learning. The advantages of DL according to this survey (2020) included: individualization of training, comprehensive acquaintance with the entire course of the discipline, the ability to continue in time mastering the material. The shortcomings of distance learning have also been studied, which include: insufficient provision of educational content on the subject, excessive workload of the student, lack of communication with classmates, insufficient personal contact with the teacher. However, since the data about the advantages and disadvantages of training were obtained as a result of closed questions (ie with answer options). This suggests that other factors that were not included in the questionnaire and may affect the satisfaction / dissatisfaction of students with DL, which justifies the need of further study

of this problem. Similar features of building tools and conducting a survey of students are presented in other studies, such as "Distance Learning Through the Eyes of Students: Results of an Online Survey" of the University of KROK (2020).

It should be mentioned that the obtained data also correlate with the data of international studies of Rayburn, Anderson, Sierra (2020). Thus, students identify university, professor, and personal actions and circumstances that contribute to positive educational experiences during global pandemic crisis: universities establish policies, procedures, and systems that facilitate a shared responsibility-grounded continuous learning experience. As the frontline of the organization, professors are charged with implementing such guidelines. Lastly, students must be proactive and accountable to ensure their educational success. However, it is clear that surveys in other countries reflect the national characteristics of both educational institutions and cultural policies, which may differ in the Ukrainian context.

# CONCLUSION

Thus, the article further develops the issue of determining the promising areas of development of DL, which allowed us to identify the possible potential directions of distance learning development in institutions of higher education as a result of marketing research of satisfaction/ dissatisfaction of students with DL. The obtained results can be used by speakers of trainings, master-classes, web-seminars, as well as by teachers and managers of institutions of higher education.

Further research may be focused on the ways of reducing the gap between existing competencies and desirable student competencies which are in demand in contemporary educational activity and labor market. It may be devoted to the role of distance learning which becomes an important part of contemporary, global, technological world, the aim of which is expanding access to the possibilities for education and professional development of young people.

## **AUTHORS CONTRIBUTIONS**

Conceptualization: Yuliya Byelikova, Nadiia Lysytsia, Maryna Martynenko, Tamara Prytychenko.

Data curation: Yuliya Byelikova. Formal Analysis: Nadiia Lysytsia.

Funding acquisition: Yuliya Byelikova, Nadiia Lysytsia, Maryna Martynenko, Tamara Prytychenko.

Investigation: Yuliya Byelikova, Maryna Martynenko, Tamara Prytychenko.

Resources: Maryna Martynenko. Validation: Yuliya Byelikova.

Visualization: Nadiia Lysytsia, Maryna Martynenko.

Writing – original draft: Yuliya Byelikova, Nadiia Lysytsia, Tamara Prytychenko.

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# "Strategic and tactical benchmarks for restructuring the financial system of Ukraine"

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# STRATEGIC AND TACTICAL BENCHMARKS FOR RESTRUCTURING THE FINANCIAL SYSTEM OF UKRAINE

#### **Abstract**

General trends of the current stage of development of the world and domestic economies confirm the most important trends of financial systems of the leading countries, including Ukraine. Among them, it is advisable to highlight the following: financial inclusion, formation of an unassailable reputation by financial institutions, reducing the volume of shadow banking, increasing the level of the population's financial literacy, developing financial technologies, and deepening the financial system. All of this involves increasing the size of financial assets in relation to the size of the economy based on the GDP indicator. Based on the results of generalizing the approaches of scientists to the list of determining factors affecting the development of the country's financial system, the key role of the level of financial literacy of the population was established. The article presents the total index of financial literacy of the population of individual countries of Europe and the world based on the index components.

The development of the financial system in all these areas creates conditions for a gradual transition to the development of a new quality financial ecosystem. The article proposes a definition of the financial ecosystem in the context of established hybrid of real and digital space based on the integration of financial institutions as key players with technology companies, public service providers and other participants. To ensure development, the advantages and disadvantages are specified based on the results of the SWOT analysis, which allowed to systematize the strengths and weaknesses, as well as the opportunities and threats of the financial ecosystem development. Based on the results of the analysis, four basic strategies for restructuring the financial system were developed, which are the basis for proposals for the development of the financial ecosystem and changing the business models of functioning of its subjects in Ukraine.

**Keywords** financial system restructuring, financial inclusion, financial

ecosystem, SWOT analysis

JEL Classification G30, G38, G39

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# СТРАТЕГІЧНІ І ТАКТИЧНІ ОРІЄНТИРИ РЕСТРУКТУРИЗАЦІЇ ФІНАНСОВОЇ СИСТЕМИ УКРАЇНИ

# Анотація

Загальні тенденції сучасного етапу розвитку глобальної та вітчизняної економіки підтверджують найважливіші напрямами розвитку фінансових систем країн провідних країн світу, в тому числі й України, серед яких доцільно виділити наступні: фінансова інклюзія, формування фінансовими установами бездоганної репутації, зменшення обсягів тіньового банкінгу, підвищення рівня фінансової грамотності населення, розвиток фінансових технологій, а також нарощення глибини фінансової системи, що передбачає збільшення розміру фінансових активів відносного розміру економіки на основі показника обсягу валового внутрішнього продукту. За результатами узагальнення підходів науковців до переліку визначальних факторів впливу на розвиток фінансової системи країни встановлено ключову роль рівня фінансової грамотності населення. У статті на основі складових індексу представлено сумарний індекс фінансової грамотності населення окремих країн Європи та Світу.

Розвиток фінансової системи за усіма зазначеними напрямами створює умови для поступового переходу до формування фінансової екосистеми нової якості. В роботі запропоновано визначення фінансової екосистеми в контексті створеного гібридного реально-цифрового простору на основі інтеграції фінансових установ як головних учасників з технологічними компаніями, установами, що надають публічні послуги та інших учасників. З метою



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забезпечення розвитку конкретизовано переваги та визначено недоліки на основі результатів використання SWOT-аналізу, що дозволило систематизувати сильні та слабкі сторони, а також можливості та загрози формування фінансової екосистеми. Виходячи з результатів аналізу, було сформовано чотири базові стратегії реструктуризації фінансової системи, які покладено в основу пропозицій щодо формування фінансової екосистеми та зміни бізнес-моделей функціонування її суб'єктів в Україні.

**Ключові слова** реструктуризація фінансової системи, фінансова інклюзія, фінансова екосистема, SWOT-аналіз

**Класифікація JEL** G30, G38, G39

# ПОСТАНОВКА ПРОБЛЕМИ

Фінансові кризи глобального масштабу виступають певним тригером змін у світовій фінансовій архітектурі. Зокрема світова фінансова криза 2008 року призвела до кардинальних змін в каркасі регулювання фінансової системи США та Європейського Союзу. Вивчення провідного світового досвіду, узагальнення підходів до вирішення проблемних практичних аспектів розвитку економік дозволить через реструктуризацію вітчизняної фінансової системи забезпечити в першу чергу фінансову стабільність і в подальшому зростання ВВП.

# 1. ЛІТЕРАТУРНИЙ ОГЛЯД

Питанням аналізу, функціонування та розвитку фінансової системи країн присвячено ряд публікацій як вітчизняних науковців, серед яких Благун [1], Довгань [4], так і зарубіжних науковців: Metrick, Rhee [12], Cerra, Saxena [2], Georgieva [6], Čihák, Sahay [3], Li, Liu, Wang [10]. Разом з тим певні проблемні питання реструктуризації в умовах фінансових криз, розвитку цифрової економіки, залишаються недостатньо дослідженими. Це обумовило вибір теми та мету дослідження.

# 2. МЕТА ДОСЛІДЖЕННЯ

Метою статті є дослідження теоретичних положень і практичних аспектів функціонування та розвитку фінансових систем країн світу, їх узагальнення та розробка рекомендацій щодо вибору стратегій реструктуризації фінансової системи України.

# 3. РЕЗУЛЬТАТИ

Основною метою змін функціонування фінансових систем було визначено регулювання та контроль за системним ризиком. При цьому аналіз всього спектру регулювання системного ризику з точки зору діючих та запроваджених нормативних регулятивних актів умовно поділено на три групи: превентивні повноваження, надзвичайні повноваження та повноваження щодо вирішення та реструктуризації. Представники школи менеджменту Єльського університету Метрік та Рі [12], систематизувавши основні заходи, що були здійснені в сфері фінансового регулювання визначили ключові елементи регулювання системним ризиком, з якими цілком погоджуємось. Найбільш вагомим в системі фінансового регулювання є, по-перше, реформування Базельської системи банківського нагляду. Зокрема зміни в банківському регулюванні та нагляді, що знайшли своє відображення в Базель III, в першу чергу, були спрямовані на визначення адекватного розміру та якості капіталу, зростання рівня ліквідності в банківській системі. По-друге, важливим залишається формування зв'язків між учасниками фінансовими ринками та фінансовими системами різних регіонів та різних країн, що призвело до формування умов для переливу капіталу між різними сегментами фінансового ринку та між ринками різних країн. По-третє, значна увага приділяється процедурам забезпечення прозороїі діяльності банків. По-четверте, здійснюється і продовжує здійснюватись розробка нових підходів в стрес-тестуванні, в аспекті моніторингу фінансової стабільності, а також висунуті посилені вимоги до центрального клірингу похідних фінансових інструментів.

Варто зазначити, що за даними Церра та Саксен в середньому фінансова криза призводить до втрат обсягів виробництва в розмірі 10% [2]. В своєму виступі напочатку 2020 року директор-розпорядник МВФ Георгієва зазначала, що найбільш серйозними, є виклики, які обумовлені змінами клімату [6]. Водночас, ситуація 2020 року, яка склалась в наслідок пандемії коронавіруса COVID-19 показала, що цей виклик є дуже вагомим із значним впливом на стан фінансових систем. Це обумовило необхідність перегляду урядами багатьох країн фінансових програм та перенаправлення фінансових ресурсів на проведення досліджень в боротьбі з пандемією. В Україні ця проблема в основному вирішується за рахунок коштів державного та частково місцевих бюджетів. При цьому впровадження карантинних заходів, введення локдауну призводить до спаду економічної активності та, як наслідок, уповільнення темпів економічного зростання. Це матиме також наслідки на стан розвитку фінансової системи в цілому. Водночас варто очікувати ще й прогнозованого відкладеного негативного ефекту, що проявиться у зростанні обсягів непогашених кредитів. Особливо це, в першу чергу, стосуватиметься кредитів, наданих малому та середньому бізнесу.

В Стратегії розвитку фінансового сектору України до 2025 року [15], яка підписана всіма регуляторами фінансової системи України – Національним банком України, Міністерством фінансів України, НКЦПФР та Фондом гарантування вкладів фізичних осіб одним із напрямів визначено розвиток фінансової інклюзії, яка передбачає підвищення доступності та рівня користування фінансовими послугами; посилення захисту прав споживачів фінансових послуг а також підвищення рівня фінансової грамотності населення. Фінансова інклюзія за визначенням Організації економічного співробітництва та розвитку (ОЄСР) розглядається як «процес просування доступного, вчасного та повноцінного доступу до широкого спектру фінансових продуктів і послуг, поширення їхнього використання серед всіх прошарків суспільства через впровадження існуючих та інноваційних підходів включно з фінансовою обізнаністю та освітою з метою просування як фінансового добробуту, так і економічної та соціальної інклюзії» [14].

В контексті дослідження фінансової інклюзії варто зазначити, що рівень включення населення України до користування фінансовими послуг за даними Світового банку є достатньо низький. Так станом на початок 2018 року 63% населення, старше 15 років мають відкритий рахунок у фінансових установах, при цьому динаміка цього показника є позитивною, оскільки станом за 2011 рік частка населення становила лише 41%. Даний показник є дещо меншим ніж в середньому за світовий показник, який становить 69% станом за 2018 рік. Водночас в умовах пандемії суттєво зросли розрахунки онлайн, що могло спричинити і зростання зазначеного показника, але наразі офіційної статистики за даним показником немає. В кінці 2020 року Національний банк України розпочав роботу над Національною стратегією фінансової інклюзії. За даними Світового банку переважна більшість країн світу (понад 100) впроваджують національні стратегії фінансової інклюзії.

Національним банком України протягом останніх років здійснено низку заходів щодо забезпечення прозорості діяльності банків і наразі банківський сектор серед всіх сегментів фінансової системи є максимально прозорим, чого не можна відзначити про небанківські фінансові установи. Тому подальшу діяльність фінансових регуляторів, і, в першу чергу Національного банку, буде зосереджено саме в цьому напрямі.

Дослідження параметрів тіньового банкінгу дозволили зазначити, що в даному випадку розуміється діяльністьфінансовихкомпаній, якіздійснюють кредитування фізичних осібвсегментімік рокредитування, споживчих кредитів. Даний сегмент відрізняється низьким рівнем прозорості. Зростання його обсягів обумовлено цілим рядом чинників: по-перше, низьким рівнем кредитоспроможності населення, що змушує звертатись не до банківських установ, що здійснюють перевірку документів та оцінюють ризики, а до фінансових установ, які надають кредити під більш високі відсотки, але не вимагають підтвердження кредитоспроможності; по-друге, діяльність фінансових установ в частині надання кредитів, повністю не врегульована, а тому надає можливість вести недобросовісну підприємницьку діяльність, надавати неправдиву інформацію щодо фінансових послуг, зокрема в частині «безвідсоткових» кредитів; потретє низький рівень фінансової грамотності населення, в результаті чого споживачі послуг не можуть визначити свої реальні ризики, визначити загальну вартість отриманих кредитів, яка є надто висока.

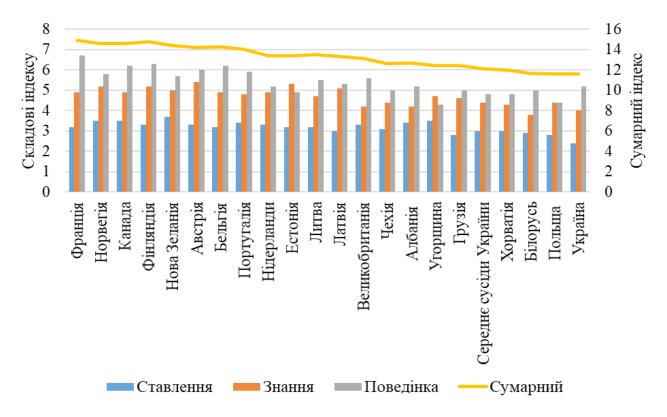
Передача нагляду за діяльністю фінансових установ до повноважень Національного банку України передбачає створення максимально прозорих умов їх діяльності, врегулювання джерел фінансових ресурсів, запровадження ризик-орієнтованого підходу у нагляді за діяльністю, але при цьому, на відміну від банків, регуляторне середовище повинно бути спрощеним.

Доведено, що суттєву роль в реструктуризації фінансової системи відіграє рівень фінансової грамотності населення. Україна станом на початок 2019 року за індексом фінансової грамотності має найнижчі показники, порівняно з країнами ОЕСР (Рисунок 1).

Так при максимальному значенні індексу в 14.9, яке належить Франції, Україна має значення в 11.6, аналогічний показник має Польща та дещо вищий – 11.7 має Білорусь.

Даний показник включає три складові: ставлення до фінансових питань, що передбачає наявність короткострокового чи довгострокового мислення, бажання витрачати чи заощаджувати; фінансова поведінка – вміння планувати, заощаджувати, здатність порівнювати фінансові продукти; знання своїх прав як споживача фінансових послуг, вміння користуватись фінансовими послугами, в тому числі банківськими рахунками, укладанням страхових договорів, розуміння гарантованої суми відшкодування за вкладами в банках.

В сумарному індексі фінансової грамотності населення України ставлення до фінансових питань має найнижче значення на рівні 2.4; рівень знань також один із найнижчих – 4, менше значення має лише Білорусь. Водночає показник, що характеризує фінансову поведінку населення є досить високим – 5.2, аналогічний рівень мають Нідерланди та Албанія. Польща, яка має значно вищий рівень розвитку економіки в цілому та фінансової системи зокрема, має значення таке ж як і Україна, але інше співвідношення: вище значення показника ставлення до фінансових питань та знання, але значно нижче від України значення фінансової поведінки населення. Прийняття Національної стратегії фінансової інклюзії дозволить також суттєво підвищити рівень фінансової грамотності населення, що також буде мати позитивний вплив і на стан фінансової системи.



Джерело: Складено авторами на основі [17].

Рисунок 1. Індекс фінансової грамотності населення (станом на початок 2019 року)

Посилення фінансової грамотності та фінансової інклюзії буде сприяти нарощенню глибини фінансової системи. Певний рівень глибини фінансової системи супроводжується зростанням нерівності та менш інклюзивним зростанням [3].

Сучасний стан фінансової системи, система фінансових відносин, знаходиться під впливом розвитку фінансових технологій (ФінТех). Вплив ФінТех має прояв в появі нових інститутів таких як необанки, іншуртех. Але найбільші зміни відбуваються саме в технічній фінансовій інфраструктурі – це розвиток краудфандингових платформ, поява технологій блокчейн, розвиток маркет-плейсів, мобільних гаманців, тощо. Про значимість розвитку фінансових технологій свідчить прийнятий Міжнародним валютним фондом і Групою Світового банку Балійський пакет в області фінансових технологій. В ньому визначено 12 стратегічних напрямів, які рекомендовані на основі існуючого досвіду країн, які є членами Міжнародного валютного фонду та Світового банку.

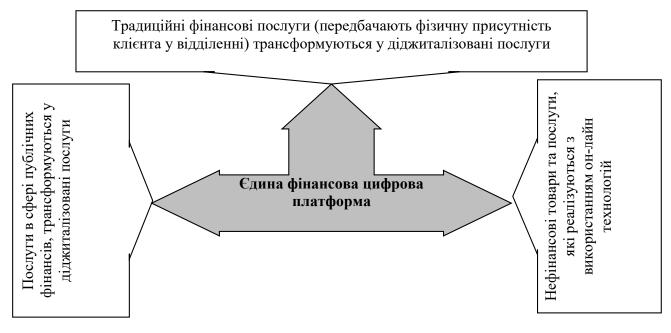
Розвиток країн за визначеними напрямами може суттєво змінити як світову так і національну фінансову архітектуру. По-перше це передбачає використання потенціалу фінансових технологій для розвитку фінансових послуг, а також створення відповідних умов. Це передбачає здійснення інвестицій в підтримуючу інфраструктуру, що дозволить в тому числі вирішити питання фінансової інклюзії. Розвиток фінансових технологій може сприяти формуванню конкурентного середовища, запровадженню єдиних «правил гри», розширенню доступу до якісних фінансових послуг (Рисунок 2).

Класичні фінансові установи впроваджують фінтех-підходи та укладають угоди з фінтех компаніями. Формуванню фінансової екосистеми передує перехід від надання фінансових послуг у традиційний спосіб до надання їх з використанням онлайн технологій. При цьому поступово онлайн послуги із інноваційних перетворюються в традиційні послуги.

Варто також зазначити, що в Україні ведеться активна робота щодо можливості запровадження цифрової валюти – е-гривні. Це також було підтверджено представниками Національного банку України під час опитування Світовим банком. Близько 20% від опитуваних центральних банків (всього було опитано 96 представників банків) підтвердили, що вони досліджують дане питання. Так в пілотному режимі випуск цифрової валюти здійснено в Уругваї, при цьому Китай, Швеція, Багамські острови та Східно-Карибський валютний союз та Україна підтвердили, що планують здійснити такий випуск.

Зокрема в Стратегії розвитку фінансового сектору України до 2025 року [15], зазначається про створення фінансової екосистеми. Зазначено, що «потреби всіх суб'єктів економічної діяльності мають бути задоволені через надання відповідних фінансових послуг учасниками фінансової екосистеми» [15]. Визначено також 4 групи суб'єктів – провайдери фінансових послуг, інфраструктура та технології, регуляція та контроль, експертиза – які в сукупності створюють всю екосистему. Водночас варто відзначити, що в даному документі, як і в будь-якому іншому офіційному документі в Україні не надано визначення, що таке фінансова екосистема, та в чому її ключова відмінність від традиційного розуміння фінансової системи.

Пяняття екосистема почали активно використовувати в інформаційних технологіях і поступово, з врахуванням вагомої ролі останніх в розвитку фінансової системи став застосовуватись і при формуванні учасниками фінансових відносин. Наразі в наукових публікаціях українських авторів та авторів з інших країн проводяться дослідження щодо змісту фінансової екосистеми та особливостей її формування. Зокрема в роботі Благуна [1] зазначається, що «зародження екосистеми наразі відбувається навколо банків і передбачає зміну концепції надання послуг, а також перехід до клієнтоцентризму – тобто коли послуга здійснюється електронним каналом обслуговування під індивідуальний запит клієнта». І відповідно під фінансовою екосистемою автором запропоновано розуміти «як сукупність провайдерів послуг (фінансових і нефінансових установ), інститутів інфраструктури (професійних учасників фінансового ринку, технологічних компаній, стартапів), органів регуляції та контролю, а також експертного середовища, які діють на засадах колаборації з дотриманням принципів сталого розвитку задля надання інтегрованих послуг з орієнтацією на індивідуальний профіль споживачів – економічних



Джерело: Складено авторами.

**Рисунок 2.** Надання послуг через єдину цифрову платформу як передумова формування фінансової екосистеми

агентів» [1]. Таке визначення по суті опирається на ту суб'єктну структуру, яка визначена в Стратегії розвитку фінансового сектору України до 2025 року з уточненням відносин між ними.

На думку Довгань «Фінансова екосистема це логічне продовження вирішення всіх питань у режимі онлайн, у тому числі за допомогою мобільних додатків, чат-ботів, онлайн-помічників і т. д.» [4]. В роботі Лі, Ліу, Ванг [10] зазначено, що «фінансова екосистема відноситься до динамічної системи рівноваги, в якій фінансова галузь та її зовнішнє середовище для виживання та розвитку взаємодіють між собою за допомогою власних механізмів коригування».

З врахуванням результатів проведеного аналізу в аспекті вивчення особливостей формування фінансової екосистеми на прикладі потужних міжнародних корпорацій нами запропоновано під фінансовою екосистемою розуміти створений гібридний реально-цифровий простір внаслідок інтеграції фінансових установ як головних учасників з технологічними компаніями, установами, що надають публічні послуги (в т.ч. в сфері публічних фінансів) та інших учасників, об'єднаних єдиною ідеологією надання клієнту (фізичній чи юридичній особі) широкого спектру послуг фінансового та нефінансового характеру за принципом єдиної точки доступу на базі єдиної цифрової платформи. При цьому акцент в отриманні прибутку зміщується з отримання прибутку за рахунок конкретної операції до отримання прибутку за рахунок сформованого синергетичного ефекту від комплексного обслуговування клієнта в умовах функціонування цифрової економіки.

Формування фінансової екосистеми з одного боку має значні переваги, а з іншого – може формувати суттєві ризики як для клієнтів, так й для фінансових установ. Для визначення переваг та недоліків доцільно використати SWOT-аналіз, за результатами якого систематизуються сильні та слабкі сторони, а також можливості та загрози. Запровадження інструменту SWOT-аналізу дозволяє здійснювати саме коригування стратегічних орієнтирів та визначати оперативні завдання розвитку (Таблиця 1).

Отже сильними сторонами для клієнтів є насамперед доступ до послуг за допомогою єдиного вікна, тобто клієнт може отримати максимальну кількість послуг як фінансового так і нефінансового характеру, використовуючи єдину точку доступу. Високий рівень фінансової свободи для клієнта означає можливість

швидко змінити фінансову установу, у випадку, якщо остання не відповідає очікуванням щодо якості обслуговування, при цьому під якістю обслуговування мається на увазі кількість запропонованих послуг та швидкість отримання послуги, що вимірюється кількістю кліків (процедур), які потрібно зробити для отримання такої послуги.

**Таблиця 1.** Результати SWOT-аналізу формування фінансової екосистеми

Джерело: Складено авторами.

Сильні сторони (Strengths)	Слабкі сторони (Weaknesses)	
Для клієнтів:		
- доступ через єдине вікно;		
- високий рівень фінансової свободи;	Для клієнтів:	
- висока швидкість обслуговування;	- низький рівень фінансової грамотності (низька здатність до самостійного планування фінансових потоків);	
- прозорість установи для клієнта;	- зниження рівня закритості персональної фінансової	
- клієнтоцентризм;	інформації;	
- можливість здійснення операцій будь-де і будь-коли за принципом доступ 24/7.	- відсутність якісного доступу до інтернету.	
Для установи:	Для установи:	
- єдина цифрова платформа;	- низький рівень фінансової інклюзії населення;	
- створення більш точного комплексного профілю клієнта;	- суттєва нерівномірність доступу до фінансових послуг між міським та сільським населенням;	
- зміна фінансової культури;		
- прозорість клієнта для компанії;	- слабка можливість утримати зв'язок з клієнтом за відсутності фізичного контакту;	
- інноваційність діяльності;	- непристосованість законодавства та нездатність швидко реагувати на потреби ринку.	
- партнерство та апетит до ризику;		
<ul> <li>- побудова ефективних партнерських відносин з технологічними компаніями та старт-апами.</li> </ul>		
Можливості (Opportunities)	Загрози (Threats)	
Для клієнтів:	Для клієнтів:	
- персоналізовані пропозиції та винагороди для клієнтів.	- знеособленість клієнта;	
	- низький рівень довіри до фінансових установ;	
	- високий рівень кіберзлочинності.	
Для установи:		
- створення нових бізнес-моделей для фінансових установ;	Для установи:	
- єдність стратегій фінансових та нефінансових установ,	- монополізація фінансового ринку;	
об'єднаних в еко-систему;	- високий рівень кіберзлочинності;	
- залучення широкого кола клієнтів.	- відсутність єдиних технологічних стандартів надання послуг.	

Прозорість установи для клієнта є важливою перевагою при формуванні фінансової екосистеми. Варто зазначити, що НБУ розроблено та оприлюднено Проєкт Постанови Правління «Про затвердження Положення про вимоги до структури власності надавачів фінансових послуг» [18], який сприятиме формуванню прозорої структури власності установами, які надають фінансові послуги. Згідно документу, фінансові установи зобов'язані розкривати інформацію про всіх ключових учасників, а також власників істотної участі. При цьому в разі набуття істотної участі у власності установи, такий крок має бути погоджений з регулятором – НБУ, а також в структурі власності не мають бути присутніми особи, яким відповідно до чинного законодавства заборонено бути власником корпоративних прав або ж у інший спосіб мати суттєвий вплив на діяльність фінансової установи. В даному документі також враховано, що вимоги до небанківських фінансових установ щодо транспарентності їх структури власності є спрощеними, порівняно з банками.

Прозора структура власності є основою для відновлення довіри клієнтів до діяльності фінансової установи. Крім того НБУ планує до впровадження вимоги щодо дотримання фінансовими установами належної ринкової поведінки. Під останньою розуміється «спосіб ведення діяльності фінансовою установою,

який передбачає її відкритість і прозорість, бездоганну ділову репутацію власників та менеджменту, доброчесність і справедливе ставлення фінансової установи до клієнтів, увага до їх потреб, добросовісну конкуренцію відносно інших фінансових установ, недопущення шахрайства чи іншої протиправної діяльності, а також належну внутрішню організацію фінансової установи, яка забезпечує контроль за дотриманням вищезгаданих правил» [13].

Особливістю функціонування фінансової екосистеми є клієнтоцентризм, тобто концентрація на інтересах клієнта. Зміна концепції функціонування банків як головних фінансових посередників на клієнтоцентризм передбачає і зміну стратегічних фінансових таргетів – зміщення акцентів з максимізації прибутку від здійснення конкретних операцій доотримання синергетичного ефекту від надання комплексних послуг. Важливою перевагою такого підходу для клієнтів є можливість здійснення операцій будь-де і будь-коли за принципом доступ 24/7.

Створення фінансової екосистеми дає цілий ряд переваг для фінансових установ. В першу чергу це створення єдиної цифрової платформи на якій можна пропонувати не тільки фінансові, а і нефінансові послуги, а також пропонувати придбання різноманітних товарів своїх партнерів. Для ефективного функціонування фінансових установ є створення більш точного комплексного профілю клієнта з використанням сучасних технологій, що дозволить досягати синергетичного ефекту, про який зазначено вище. Це також можливо за умови, якщо інформація про клієнта є максимально прозорою. Компанії, які впроваджують концепцію клієнтоцентризму змушені впроваджувати і фінансову культуру високого рівня, в тому числі залучати до цього процесу клієнтів. Надання комплексних послуг повинно супроводжуватись і системною роботою по підвищенню фінансової грамотності клієнта, який повинен реально оцінювати свої ризики, а також планувати свої доходи та видатки.

Створення фінансової екосистеми базується на формуванні ефективних партнерських відносин з технологічними компаніями та старт-апами. Саме банки є одними із основних ініціаторів, що впроваджують сучасні фінансові технології, в багатьох випадках об'єднуючись із технологічними компаніями і інвестуючи кошти в високоефективні стартапи. За даними Міжнародного валютного фонду 13% патентів в сфері фінансових послуг приходиться на ФінТех компанії, при цьому останні отримали ¼ суми фінансування венчурних та стартап-проєктів в розвитку фінансових послуг. Вони отримали 18 млрд дол, що становить 20% від обсягу здійснених операцій первинного публічного розміщення акцій у фінансовому секторі на світовому фінансовому ринку.

Стосовно слабких сторін клієнтів - низький рівень фінансової грамотності клієнтів. Зниження рівня закритості персональної фінансової інформації, що може сприйматись клієнтами як загрози їх фінансовому стану. Також негативний вплив на формування фінансової екосистеми має відсутність якісного доступу до інтернету.

Слабкими сторонами в діяльності фінансових установ є низький рівень фінансової інклюзії населення. Крім того для України є характерною ситуація щодо суттєвою нерівномірністю доступу до фінансових послуг між міським та сільським населенням. Крім того, за умови відсутності фізичного контакту може бути складно утримувати зв'язок з клієнтами, в перш чергу з фізичними особами, оскільки обслуговування юридичних осіб, особливо тих, які відносяться до категорії VIP-клієнтів в основному відбувається в традиційному режимі.

Однією з найбільш слабких сторін функціонування установ та подальшого розвитку фінансової екосистеми є непристосованість законодавства та нездатність уряду і фінансових регуляторів швидко реагувати на появу нових фінансових інструментів. В зв'язку з цим важливим є застосування нових підходів в регулюванні з використанням SupTech та RegTech.

Розвиток фінансової екосистеми створює нові можливості як для клієнтів, так і для самих установ. Впровадження концепції клієнтоцентризму передбачає створення профілю клієнта і дозволить задовольняти їх потреби шляхом формування персоналізованих пропозицій та винагороди. Водночас

розвиток ФінТех та впровадження концепції клієнтоцентризму призводить до трансформації існуючих бізнес-моделей банків та інших фінансових установ та в подальшому може сприяти залученню широкого кола клієнтів. Зокрема в роботі [1] авторами визначено 4 рівні розвитку банків: «традиційний банкінг (роздрібний і приватний банкінг, корпоративний та інвестиційний банкінг); діджитал-банкінг (формування профілю клієнта та омніканальність); відкритий банкінг (початок формування екосистеми із залученням третіх осіб із кола нефінансових установ, налагодження співпраці на основі використання АРІ технологій); відкритий X (банки здатні використовувати інформацію й створювати спільний ринок через ефективну співпрацю з фінансовими та нефінансовими установами задля всебічного задоволення потреб клієнтів)».

Водночас особливості формування фінансової екосистеми створюють загрози як для клієнтів, так і для фінансових установ, які є спільними для обох. Найбільшою загрозою є високий рівень кіберзлочинності. Зокрема за даними огляду компанії PwC [16] станом на 2020 рік кіберзлочини посіли другу позицію, поступившись місцем шахрайству з боку клієнтів. На третій позиції серед всіх економічних злочинів знаходиться незаконне заволодіння активами, а на четвертій – корупція.

При цьому, якщо аналізувати в розрізі видів економічної діяльності, зокрема при наданні фінансових послуг, то злочини розподілились наступним чином: шахрайство з боку клієнтів – 27%, кіберзлочини – 15%; шахрайство з бухгалтерською та/або фінансовою звітністю – 14%. За даними компанії Форіншурер протягом 2018 – 2020 років збитки від кіберзлочинів та витрати на захист від них збільшились майже в два рази – з 600 млрд дол у 2018 до 1.1 трлн дол у 2020 році. При цьому крадіжка інтелектуальної власності та злочини у фінансовій сфері становлять 75% отриманих збитків [5].

На основі проведеного SWOT аналізу було сформовано чотири базові стратегії реструктуризації фінансової системи, які покладено в основу пропозицій щодо формування фінансової екосистеми та зміни бізнес-моделей функціонування її суб'єктів (Рисунок 3).

Системне вирішення проблемних питань дозволить створити умови щодо нівелювання можливих загроз та перетворити наявні слабкі сторони функціонування на сучасному етапі, на сильні та створити реальні перспективи для ефективної реструктуризації фінансової системи України.

Інтенсивний інноваційний розвиток. Посилення фінансової стійкості. Зниження ризиків прояву кризи.		Інтенсивний інноваційний розвиток за умови запровадження заходів нівелювання впливу зазначених загроз. Висока ймовірність формування кризових явищ.		
S	W	S	W	
0	T	О	T	
Повільний розвиток фінансової системи, який стає результатом запиту з боку обмеженого кола споживачів фінансових послуг на фоні низького рівня фінансової грамотності та фінансової інклюзії, в умовах непристосованого законодавчого поля. Високий рівень прояву кризи, обумовлений зростанням кількості неякісних фінансових активів.		Уповільнення економіч стискання фінансової слабких сторін на фо основою для перманен нестабі.	иного розвитку на фоні і системи. Поєднання ні зростання загроз є гного стану фінансової пьності.	
S	W	S		
0	T	0	T	

Джерело: Складено авторами.

**Рисунок 3.** Стратегії розвитку фінансової системи України за результатами проведеного SWOT аналізу

# висновки

Результати проведеного дослідження дозволили сформувати рекомендації щодо реалізації варіантів стратегій розвитку фінансової системи України з врахуванням досвіду провідних країн світу. Перша стратегія передбачає поєднання на основі сформованих сильних сторін та потенційних можливостей, по суті передбачає інноваційний розвиток фінансової системи та перетворення її на таку фінансову екосистему, що базується на використанні вже існуючих та постійному впровадженні новітніх фінансових технологій, які роблять зручними та доступними фінансові послуги для широкого кола клієнтів як фізичних так і юридичних осіб. Формування фінансової екосистеми з врахуванням визначених сильних сторін та можливостей передбачає і зростання довіри до фінансових інститутів, що сприятиме нарощенню фінансової глибини економіки та посиленню її фінансової стійкості, а отже дозволить забезпечити зниження ризику прояву кризових явищ в національній економіці.

Друга стратегія характеризується підходами на основі забезпечення інтенсивного інноваційного розвитку, з орієнтацією на сильні сторони. Але за умови виникнення визначених в роботі загроз це може привести до зниження рівня фінансової стійкості в цілому. Особливо це стосується можливої перспективи монополізації фінансового ринку та приведення його до стану, коли спостерігається значна залежність від стану публічних фінансів України, що проявляється через зростання розміру активів державних банків на фоні стискання розмірів фінансової системи.

Обгрунтовано, що не менш важливим буде необхідність вирішення питання щодо формування стандартів надання діджиталізованих послуг та захисту інформації. В цьому контексті важливим залишається у подальому активність не лише фінансових регуляторів, а й саморегулівних організацій фінансового ринку. Їх активність може в значній мірі сприяти корекції існуючих слабких сторін на етапі формування фінансової системи в Україні.

Третя стратегія базується на використанні потенційних можливостей, що отримують клієнти і фінансові установи в умовах розвитку фінансової системи з низьким рівнем фінансової інклюзії та фінансової грамотності за наявності невідповідної законодавчої бази, яка не дозволяє реалізувати існуючі переваги.

В залежності від темпів і параметрів розвитку економіки характер зміни стратегій діяльності окремих фінансових установ, зміни їх бізнес-моделей та інтенсивності просування ними нових видів фінансових послуг може суттєво покращитись рівень фінансової грамотності населення та зрости рівень фінансової інклюзії. Саме під тиском таких змін фінансові регулятори будуть змушені вживати заходи з врегулювання процедур надання фінансових послуг, зміни вимог щодо відповідності фінансового стану установ, а також посилення законодавчих вимог в частині забезпечення достатнього рівня їх кібербезпеки. Водночас, якщо визначені слабкі сторони не будуть нівелюватись, то загрози зниження фінансової стабільності можуть суттєво зростати, оскільки клієнти, не будуть мати можливості реально прогнозувати параметри своїх грошових потоків, та не в змозі будуть об'єктивно оцінювати свої ризики. Такий стан речей може привести до зростання розміру фінансових активів низької якості, формування значного пулу непрацюючих кредитів, тощо. Наслідком цього може стати активізація проявів фінансової кризи.

Четверта стратегія є найгіршим варіантом можливого розвитку фінансової системи, який характеризується перспективою уповільнення всіх процесів, подальшого стискання розміру фінансової системи країни, зростання домінуючої ролі держави, що буде призводити у подальому до зниження рівня конкурентоздатності фінансових установ. Наслідком реалізації такого варіанту стратегії розвитку є неминуче зниження фінансової стійкості та значна ймовірність виникнення кризових явищ в національній економіці.

Отже, з метою здійснення ефективної рестуктуризації національної фінансової системи, перетворення її на сучасну фінансову екосистему необхідно дотримуватись підходів з реалізації комплексу заходів визначених варіантів першої або ж другої стратегії, які передбачають активну позицію всіх учасників фінансових відносин. З одного боку фінансових установ, які мають максимально швидко запроваджувати якісні види фінансових послуг на основі сучасних фінансових технологій, з іншого боку – клієнтів, які мають підвищити рівень фінансової обізнаності, навчитись планувати свої доходи та видатки, оцінювати свої фінансові ризики, надаючі перевагу тим чи іншим видам фінансових послуг.

Важливим моментом визначеної проблематики залищається наявність проактивної поведінки фінансових регуляторів в частині реалізації спільних зусиль влади щодо створення нормативної бази, адекватної змінам і стратегічним орієнтирам розвитку фінансової системи, що вбачається напрямом подальших наукових досліджень.

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# "Effects of foreign direct investment on economic growth in Ghana: the role of institutions"

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# EFFECTS OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH IN GHANA: THE ROLE OF INSTITUTIONS

#### Abstract

The role of institutions in both the inflow and the impact of foreign direct investment is of great importance. The quality of institutions in a country can direct investment towards improving growth. This paper analyzes the individual and combined effect of foreign direct investment and institutions on economic growth in Ghana. The paper used the Auto Regressive Distributed Lag (ARDL) technique for secondary data obtained from 1995 to 2019. All data series, except for the quality institution index, were drawn from the World Bank Development Indicators. Institutional Quality Index data was obtained from the Heritage Foundation's Economic Freedom Index website. The results of the ARDL model indicate that foreign direct investment and a quality institutional index together have a significantly positive effect on a country's economic growth compared to their individual effects in both the short and long run. The study recommends that government policies should be aimed at attracting foreign direct investment while strengthening institutions and regulations to enhance output growth.

**Keywords** foreign direct investment, institutional quality, economic growth,

Ghana, aggregate production function, ARDL

JEL Classification F43, E02, O43

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# ВПЛИВ ПРЯМИХ ІНОЗЕМНИХ ІНВЕСТИЦІЙ НА ЕКОНОМІЧНЕ ЗРОСТАННЯ В ГАНІ: РОЛЬ ІНСТИТУТІВ

## Анотація

Роль установ як з точки зору припливу, так і впливу прямих іноземних інвестицій має велике значення. Якість інституційного середовища в країні може спрямувати інвестиції на прискорення зростання. У статті аналізується індивідуальний і сукупний вплив прямих іноземних інвестицій та інститутів на економічне зростання в Гані. Використано метод авторегресійного розподіленого лагу (ARDL) для вторинних даних, отриманих з 1995 по 2019 рік. Усі ряди даних, за винятком індексу якості інститутів, взято зі щорічної доповіді Світового банку «Показники світового розвитку». Дані про індекс якості інституційного середовища отримано з веб-сайту Індексу економічної свободи Heritage Foundation. Результати моделі ARDL свідчать про те, що прямі іноземні інвестиції та індекс якості інституційного середовища разом мають суттєвий позитивний вплив на економічне зростання країни порівняно з їх індивідуальним ефектом як у короткостроковій, так і в довгостроковій перспективі. У дослідженні рекомендується, щоб державна політика була спрямована на залучення прямих іноземних інвестицій при одночасному зміцненні інститутів і нормативних актів для прискорення зростання виробництва.

Ключові слова прямі іноземні інвестиції, інституційна якість, економічне

зростання, Гана, сукупна виробнича функція, авторегресійний

розподілений лаг

**Класифікація JEL** F43, E02, O43



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# INTRODUCTION

Achieving economic growth is a macroeconomic objective that most economies seek to accomplish. Over the years, a variety of channels through which this objective will be realized have been implemented by different countries. Investment being a key component of aggregate expenditure in any economy, is vital to growth through improved productivity levels and employment (Okwu, Oseni & Obiakor, 2020). Most developing countries are using the attraction of Foreign Direct Investment as a means to enhance economic growth. Some significant reforms have been undertaken regarding terms of legal, governance, political and regulatory frameworks in the attempt to provide an enabling investment for investors (Bissoon, 2011). In 1983, the introduction of the Economic Recovery Programme (ERP) in Ghana comprised the attraction of FDI as another core objective. The Ghana Privatization Programme introduced in the 1990s as well as the establishment of the Ghana Investment Promotion Centre in 1994 are all significant efforts to magnetize investors (Yakubu, 2020). In the quest to position itself as a hub in West Africa for foreign investors, Ghana hosts summits annually known as the Ghana Investment Summit.

The main sectors that attract FDI in Ghana are the mining and oil exploration sectors. The World Investment Report, (2020) presents that between 2018 and 2019, the flows of FDI in Ghana have reduced from 3 mln USD to 2.3 mln USD. Some challenges that impaired investment were identified. They include corruption, weak productivity, and unskilled labor, cumbersome administrative processes. Other main issues include inadequate water and power supply as well as the minimal protection given to investors. The identified challenges will be well addressed if institutions are made to work. The effective functioning of institutions directly or indirectly linked to investment helps to improve the inflows of FDI and accelerate its perceived positive effect on growth. In stimulation of investments and fostering of socioeconomic growth, the institutions noted for these roles include property rights, political stability, and quality of bureaucracy (Knack & Keefer, 1995).

Primarily, literature existing indicates a direct influence of institutions on economic growth. However, a cautious review of the literature leads to the conclusion that the effect of institutions on economic growth differs from country to country (Feddeke & Klitgaard, 2013; Nawaz et al., 2014). Various factors such as social norms, community rules of a particular group as well as individual's perception about institutions contribute to the positive functioning of institutions. This reechoes the fact that studies on institutions at best, need to be done at the country level in other to avoid biases from the noise introduced by some influential countries. In Sub-Saharan Africa countries especially Ghana, weak institutional quality is largely the contributor of the recorded unimpressive economic performance (Akpalu et al., 2017).

# 1. LITERATURE REVIEW

The growing debate on the FDI-growth relationship has attracted several studies in this area. Using 30 leading global economics for the period 1998 to 2017. Okwu et al. (2020) analyzed how the flow of FDI affects economic growth. Controlling for variables such as consumer price index, trade openness, unemployment gross fixed capital formation, and credit to the private sector, the findings from the econometric analysis showed that during the period under study, there is a positively significant influence of FDI on economic growth. Again, Melnyk et al. (2014) in their analysis used data on macroeconomic variables obtained from the European Bank of Reconstruction and Development (EBRD) for 12 years (1998 to 2010) period. The study that aimed at investigating the impact of FDI on the economic growth of post-communism transition economies, found a significant and positive FDI effect on the host countries' economic growth.

The effect of FDI on a host country's economic growth is argued to be dependent on the sector (agriculture, services, and manufacturing, and so on) in which FDI is directed (Again, Melnyk et al., 2014). For instance, Alfaro (2003) studied the relationship between FDI flows and economic growth for the period 1981 to 1999 using 47 countries. The econometric analyses were made using both the primary and manufacturing sectors separately. it was revealed that the flow of FDI into the primary sector affects economic growth negatively while FDI flows into the manufacturing sector influence economic growth positively. Aitken and Harrison (1999) argue that there is little spillover effect in the agriculture and mining sectors hence, the flows of FDI are of minimal efficiency. Even

in the same sector, the nexus between FDI and economic growth has not been obvious. The direction of an impact sometimes varies with time. As found by Gui-Diby (2014). Thus, the effect of FDI on economic growth in Africa was analyzed for the period 1980 to 2009. The system generalized method of moment (SYS GMM) estimators was used and found that the flows of FDI significantly impacted the economic growth of the 50 host Africa countries. The study further found that the low level of human resources did not affect FDI and that for the period 1980 to 1994, the impact of FDI on economic growth was negative while the impact was positive for the period 1995 to 2009.

Yabi (2010) settled that FDI flows do not affect economic growth all the time. Thus, estimations based on a panel of 57 developing countries for the period 1980 to 1999 showed that countries with high economic growth observed the direct influence of FDI but this was not found in countries with low economic growth, owing to the heterogeneity of countries. The results were obtained with the inclusion of instrumental variables and some control variables that influence economic growth such as government consumption, the number of telephone lines per thousands of people, inflation, local investment.

The role of institutions on both the inflow and effect of FDI is of much importance. Based on time series data for Ghana between the period 1985 and 2016, a positive and statistically significant effect of institutional quality on FDI was found by Yakubu (2020). The estimations using the autoregressive distributed lag (ARDL) approach also found that inflation significantly affects FDI in both the short run and long run while variables such as trade and growth in per capita GDP significantly affect FDI in the short run. Also, Nawaz et al. (2014) investigated the effect of institutions in promoting economic growth. The study used both static and dynamic panel systems. Generalized Method of Moments (GMM) on data for Asian economies for the period 1996 to 2012. The findings revealed that institutions play a significant role in promoting economic growth in Asian economies. The effect identified is explained to differ across economic development hence the Asian economies. Thus, it was found that in developed Asia, institutions are more effective than in developing Asia.

The observed gap in the studies reviewed is that an external force that could affect the role of FDI in economic growth has been given limited attention. The influence of institutional quality on the FDI-economic growth relationship is worthy to be investigated. Also, judging from the conclusion of Nawaz et al (2014) that different countries need a varied set of institutions in promoting long term growth coupled with the fact that institutions and FDI inflows affect the economic growth of countries differently, a country-specific analysis will reveal the true relationship better as compared to a panel analysis.

# 2. METHODOLOGY

# 2.1. Data Description and Sources

The paper utilized an annual time series data covering the period 1995 to 2019. All data series, except for the institutional index, are taken from World Bank Development Indicators. These variables include Gross Domestic Product, Foreign direct investment, Capital, Labor, and real exchange rate. The depend-ent variable, economic growth was measured as annual real GDP per capita, Foreign Direct Investment was measured by FDI net inflows, the capital was measured by gross fixed capital formation, labor was measured by population and the real exchange rate was measured as the Ghanaian cedi per United State dollar. The measurement for all the variables were based on empirical literature and has been wide-ly employed in the growth literature. Data on the institutional index was obtained from the Heritage Foundation index of economic freedom website. We considered the Open markets index category of economic freedom which is the average of trade freedom, investment freedom, and financial freedom. Economic freedom advances economic opportunity, economic security, and individual empowerment and prosperity (Meierrieks & Renner, 2017; Justesen, 2008). Eldomiaty, Al Qassemi, Mabrouk and Abdelghany (2016) also maintained that a high degree of economic freedom can be described as an indicator of high institutional quality and vice versa.

# 2.2. Model Specification

The paper considered the Aggregate Production Function (APF) in modeling economic growth in Ghana. The APF indicates that growth can be achieved when capital and labor are augmented by various inputs in the production function. The APF is given below:

$$Y_t = A_t K_{\cdot}^{\beta 1} L_{\cdot}^{\beta 2}, \qquad (1)$$

where  $Y_t$  is the output,  $A_t$  represents the Total Factor Productivity,  $K_t$  represents capital while  $L_t$  is labor. While  $\beta_1$  and  $\beta_2$  are the coefficients for capital and labor respectively. It is significant to note that the Total Factor Productivity ( $A_t$ ) is not fixed. Following Asiedu (2013), Ayibor (2012), Quaicoe, Aboagye and Bokpin (2017), Seth and Kalyanaraman (2017) a growth equation for Ghana is estimated utilizing other macroeconomic factors as regressors which enter into equation (1) through the Total Factor Productivity ( $A_t$ ). The empirical model is specified in equation 2 as:

$$lnEG_t = \beta_0 + \beta_1 lnGDP_t + \beta_2 lnFDI_t + \beta_3 lnINST_t + \beta_4 (lnFDI * lnINST)_t + \beta_5 lnK_t + \beta_6 lnL_t + \beta_7 lnRER_t + \epsilon_t,$$
 (2)

where *EG* is economic growth, *GDP* is Gross Domestic Product, *FDI* is Foreign Direct Investment, *INST* is the institutional quality index, *FDI* \* *INST* is Foreign Direct Investment \* Institutional quality index, *K* is Capital, *L* is Labor and *RER* is the Real exchange rate.

# 2.3. The Autoregressive Distributed Lag (ARDL) Model

To empirically establish the effects of foreign direct investment on economic growth, we employed the ARDL cointegration technique as introduced by Pesaran, Shin, and Smith (2001). The ARDL cointegration technique was adopted since it is most efficient in a small sample size as in the case of this paper and largely due to the different order of integration of the variables. Thus, the ARDL model is expressed as follows:

$$\Delta \ln EG = \varphi_{0} + \varnothing \ln EG_{t-1} + a_{1} \ln GDP_{t-1} + a_{2} \ln FDI_{t-1} + a_{3} \ln INST + a_{4} \ln(FDI * INST)_{t-1} + a_{5} \ln K_{t-1} + a_{6} \ln L_{t-1} + a_{7} \ln RER_{t-1} + \sum_{i=1}^{\rho} \beta_{1} \Delta \ln EG_{t-i} + \sum_{i=1}^{\rho} \beta_{2} \Delta \ln GDP_{t-i} + \sum_{i=1}^{\rho} \beta_{3} \Delta \ln FDI_{t-i} + \sum_{i=1}^{\rho} \beta_{4} \ln INST_{t-i} + \sum_{i=1}^{\rho} \beta_{5} \ln(FDI * INST)_{t-i} + \sum_{i=1}^{\rho} \beta_{6} \Delta \ln K_{t-1} + \sum_{i=1}^{\rho} \beta_{7} \Delta \ln L_{t-i} + \sum_{i=1}^{\rho} \beta_{8} \Delta \ln REER_{t-i} + \varepsilon_{t},$$
(3)

where  $\emptyset$  and  $a_i$  are the long-run elasticities while  $\beta_i$  represents the short-run elasticities. We employed the bounds testing approach to establish cointegration among the variables before estimating the results. The Error Correction Model (ECM) (ECM) is thus specified to estimate the short-run adjustments to equilibrium in equation (4) as follows:

$$\begin{split} & \Delta \ln EG = \varphi_{0} + \sum_{i=1}^{\rho} \beta_{1} \Delta \ln EG_{t-i} + \sum_{i=1}^{\rho} \beta_{2} \Delta \ln GDP_{t-i} + \\ & \sum_{i=1}^{\rho} \beta_{3} \Delta \ln FDI_{t-i} + \sum_{i=1}^{\rho} \beta_{4} \ln INST_{t-i} + \\ & \sum_{i=1}^{\rho} \beta_{5} \ln (FDI * INST)_{t-i} + \sum_{i=1}^{\rho} \beta_{6} \Delta \ln K_{t-1} + \\ & \sum_{i=1}^{\rho} \beta_{7} \Delta \ln L_{t-i} + \sum_{i=1}^{\rho} \beta_{8} \Delta \ln REER_{t-i} + \delta ECM_{t-1} + \varepsilon_{t}, \end{split} \tag{4}$$

where,  $\delta$  is the speed of adjustment of the parameter to long-run equilibrium following a shock to the system and  $ECM_{t,1}$  is the error correction model.

# 3. RESULTS AND DISCUSSION

A trend analysis between economic growth and foreign direct investment is plotted in Figure 1, followed by a presentation on the statistical characteristics of the variables employed in the study presented in Table 1 and the state of stationarity of the variables was also tested using the Augmented Dickey-Fuller and Phillip-Perron tests. The subsequent section presents the estimated model using the ARDL model.

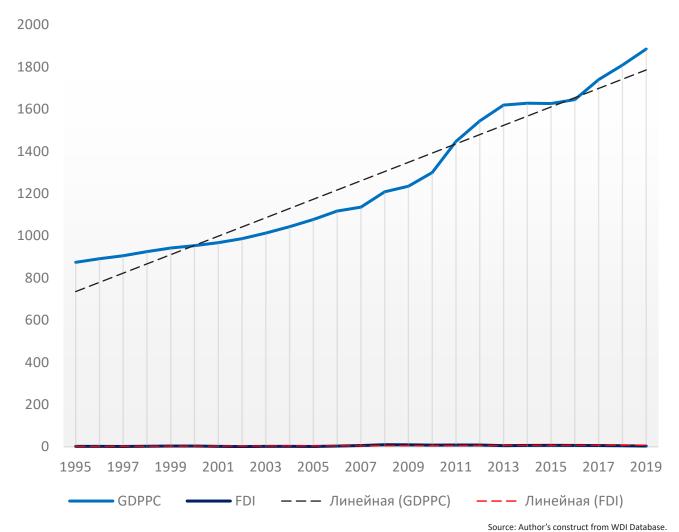


Figure 1. Trend Analysis of FDI and Economic Growth

Figure 1 above shows an analysis of the trend between foreign direct investment and economic growth over the sample period. It can be observed that FDI inflow has been relatively stable over the study period while economic growth measured by GDP per capita witnessed some increasing trend with periods of high and low growth.

Table 1. Descriptive Statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
LNGDPPC	25	7.1068	0.2570	6.7730	7.5413
LNFDI	25	1.2566	0.7186	-0. 0453	2.2478
LNNDEX	25	5.6243	1.5393	3.0838	7.6019
FDINDEX	25	3808.802	4117.505	35.9772	12684.50
LNK	25	3.0453	0.2595	2.4651	3.3758
LNL	25	4.2817	0.0342	4.2370	4.3274
LNREER	25	4.5685	0.2303	4.1688	4.9928

 $\textit{Note} : \mathsf{Std}. \ \mathsf{Dev}. \ \mathsf{Denotes} \ \mathsf{standard} \ \mathsf{deviation}, \ \mathsf{Min}. \ \mathsf{represents} \ \mathsf{minimum} \ \mathsf{and} \ \mathsf{Max}. \ \mathsf{represent} \ \mathsf{maximum}.$ 

The descriptive statistics presented in Table 1 above shows the statistical properties of the variables employed in the study over the sample period. A careful look at the statistics shows that the study employed 25 total observations. All variables used for the study also recorded positive mean values and there exists a minimum deviation of the variables from their average values.

# 3.1. Unit Root Test

To check the stationarity properties of the series used for the study, the Augmented Dickey-Fuller (ADF) and Phillips Perron (PP) test of unit root both with constant only and with constant and trend options were used. The unit root test was performed to guarantee that none of the variables were integrated of order above one before applying the ARDL bounds testing approach to cointegration. The null hypothesis that the series has unit root was rejected at the various levels of significance as specified in Table 2.

**Table 2.** Unit Root Test

Source: Computed by Author using E-views 10 package.

		Level		First difference	
Variable	Constant	Trend	Constant	Trend	Order of Integration
	<del>.</del>		DF TEST	·	<del></del>
LnGDPPC	0.432	-2.350	-2.865*	-2.982*	I(1)
LnFDI	-1.548	-1.456	-3.854***	-3.347**	I(1)
LnINST	-1.897	0.380	-3.737***	-4.130***	I(1)
FDI*INST	0.932	-2.007	-3.461***	-3.368*	I(1)
LnK	-2.614*	-2.579	-3.907***	-3.807**	I(0)
LnL	-1.560	-2.427*	-1.906	-1.849	I(0)
LnREER	-1.110	-2.615*	-4.572***	-4.451***	I(0)
	,	Р	-P TEST	•	
LnGDPPC	0.862	-1.887	-2.866*	-2.982*	I(1)
LnFDI	-1.641	-1.456	-3.783***	-3.753**	I(1)
LnINST	-1.828	0.350	-3.791***	-4.131***	I(1)
FDI*INST	-1.001	-1.758	-3.461***	-3.368*	I(1)
LnK	-2.041	-2.010	-3.835***	-3.725**	I(1)
LnL	-0.354	-2.048*	-1.948	-1.849	I(0)
LnREER	-1.153	-2.615*	-4.669***	-4.523***	I(0)

Note: \*\*\*, \*\* and \* denotes the rejection of the null hypothesis at 10%, 5% and 1% significance level.

# 3.2. Bounds Test for Cointegration

This section deals with the estimation of the combined effect of foreign direct investment and institutions on economic growth as well as the individual effect of foreign direct investment and institutions on economic growth in Ghana. In this light, the long-run relationship (cointegration) between these variables using bounds testing approach to cointegration was tested. The test involves the comparison of the F-statistics against the critical bounds as specified by Pesaran, Shin, and Smith (2001). The regressors on one hand are purely I(1) and on the other purely I(0) variables by the the two sets of asymptotic critical values assumption. The bounds test from Table 3 which was estimated in an Unrestricted Error Correction model was 7.38. This exceeds both the upper and lower bounds of the critical values showing that there is the presence of a long-run relationship among the variables under study.

Table 3. Bound Test

Source: Authors' construct using Eviews 10 package.

90%	90% level		95% level		99% level	
I(0)	I(0)	I(0)	I(0)	I(0)	I(0)	
1.99	2.94	2.27	3.28	2.88	3.99	
Dependent Variable				F-Stat	istic	
FLNGDPPC (LNGDPPC   LNFDI, LNINST, FDI *INST, LNK, LNL, LNREER)			7.381	0		

The model reavealed an existence of error correction mechanism as indicated by the presence of a long-run relationship between the variables. Subject to this idea, this work further estimated the long-run coefficients and short-run coefficients for the model using the ARDL model

Table 4. Estimated Long Run and Short Run Results in the ARDL Model

Source: Authors' construct using Eviews 10 package.

Variable	Short Run	Long Run
I NODDDC/ 4)	-0.4288**	
LNGDPPC(-1)	(0.0919)	<u> </u>
INEDI	-0.1572***	-0.3218***
LNFDI	(0.0108)	(0.0440)
NEDI/ 4)	0.0351***	-
LNFDI(-1)	(0.0046)	-
LNINST	0.2086***	0.4628***
LININS	(0.0181)	(0.0695)
NINST( 1)	-0.0860***	-
LNINST(-1)	(0.0130)	_
FDI*INST	0.00001***	0.00003**
I DI INGI	(0.00001)	(0.00006)
LNK	-0.0313**	-0.1599**
LINK	(0.0071)	(0.0554)
LNK(-1)	0.0291**	-
LIVIX(-1)	(0.0092)	-
LNL	-0.1250	6.4231*
LINE	(1.0058)	(2.3588)
LNL(-1)	6.3618***	-
LINL(-1)	(0.8946)	-
LNREER	0.0352*	0.8099***
	(0.0124)	(0.1664)
LNREER(-1)	-0.2284***	-
	(0.0280)	-
CONST		-25.8738*
		(10.6295)
ECT(-1)	-0.7440	-
	(0.0530)	<u> </u>

Note: \*\*\*, \*\* and \* denotes 1%, 5%, and 10% level of significance respectively.

# 3.3. Presentation of Results

#### 3.3.1.Long-run Results

Table 4 presents the estimated long-run and short-run results using the ARDL estimation approach. Long run estimates show that foreign direct investment negatively affects economic growth over the study space and this is statistically significant at a 1%. Specifically, the results show that an increase in foreign capital inflows will result in a 0.32 units decline in the economic growth of the country.

Results on the institutional index showed that institutions present a positive effect on economic growth over the study period recording a statistical significance of 1%. This means that a rise in institutions within the economy will result in an approximately 0.46 units increase in the economic growth of the country.

An observation of the joint effect of foreign direct investment and quality institutional index on economic growth revealed that they jointly pose a significantly positive effect on the economic growth of the country and this joint effect is significant at 5% level of significance. Specifically, the results from the net effect computation of the

interaction (see, Appendix A) reveal that both foreign direct investment and quality institutions jointly affect economic growth by 0.4628 units. That is, an increase in quality institutions within the economy given that there is foreign direct investment will improve economic growth by approximately 0.46 units in the country.

Results on capital also reveal that capital stock exerts a significantly but a negative effect on economic growth over the sample period. Specifically, it was revealed that capital stock increases will exert a diminishing growth effect of 0.1599 units. This is statistically significant at 5%.

A careful look at labor also shows that labor exerts a positive effect on economic growth over the period with an effect rate of about 6.4231. This is statistically significant at 10%. This means that an increase in the labor force of the country will result in about 6.42 rise in the economic growth in the economy in the long run.

Finally, a cursory look at the real effective exchange rate reveals that it has a positive and statistically significant influence on economic growth. Specifically, a real effective exchange rate was found to significantly influence economic growth by 0.8099 in the long run at 1% level of significance. This implies that an increase in the real effective exchange rate will result in about 0.81 rise in the economic growth of the economy.

# 3.3.2. Short-run Results

The short-run estimates of the ARDL model are shown in Table 4 with the error correction term. Results showed that foreign direct investment has a statistically negative effect on economic growth in the short run. Specifically, FDI records about 0.1572 effects on economic growth over the sample period. This means that a unit increase in FDI inflows will result in 0.16 units decline in the economic growth of the country. This result is consistent with the long run estimates and significant at 1% level of significance. But a one-period lag of FDI shows that FDI has a statistically positive link with growth.

The institutional variables also show that the quality of institutions poses a positive and statistically significant effect on economic growth over the period under review. Precisely, institutions recorded a positive effect of 0.2086 units on growth. This means that an increase in the quality of institutions will result in a 0.21 units increase in the economic growth of the country. This positive result is consistent with the result of the long run and it is significant at 1% level of significance. This notwithstanding, a period lag of institutional index revealed a statistically negative effect on economic growth.

An observation of the combined effect of foreign direct investment and institutions reveals a statistically positive relationship exists on economic growth significant at 1% significance level. Specifically, the results show that foreign direct investment and institutions jointly influence growth by 0.2086 units. This means that an increase in quality institutions given there are foreign direct investment flows will cause economic growth to increase by 0.21 units in the short run as attested to by the net effect computations in Appendix A.

Consistent with the long run results, capital recorded a negative but statistically significant effect of 0.0313 on economic growth at 5% level of significance. The coefficient of the current value of capital shows that an increase in capital stock in the economy will result in a decline in economic growth by 0.03 units. Contrary to this, the one-period lag of capital shows a positive effect of 0.0291 units on economic growth in the country.

Contrary to the long run results on the labor force, labor recorded a negative influence on economic growth in the short run but this result is statistically insignificant. But a look at the previous value of the labor force shows a positive and statistically significant effect of 6.3618 units on economic growth for the country.

The real effective exchange rate recorded a positive effect of 0.0352 units on economic growth over the study period and this result is significant at a 10% level of significance. This means that an increase in the effective exchange rate will result in a 0.04 rise in economic growth in the short run. This result is consistent with the positive result seen for real effective exchange rate in the long run. But a look at the lag or the previous value of real effective exchange rate shows that it has a statistically sagnificant and negative influence on economic growth.

Finally, the error correction model from the ARDL estimation reveals that the speed of adjustment to equilibrium in the dynamic model after a disturbance is -0.7440. This implies that when there is a shock to the model, about 74 percent of deviations from the long run economic growth caused by previous periods disturbance converges back to long run equilibrium in the current period. The equation of the ECM is present as follows:

$$ECM = LNGDPPC - (-0.3218LNFDI + 0.4628LNINST + 0.00003FDI * INST -0.1599LNK + 6.4231LNL + 0.8099LNREER - 25.8738).$$
(5)

# 3.4. Discussion of Results

The following section provides a discussion of the findings based on the results presented in Table 4. From the results of the ARDL model presented in Table 4, foreign direct investment inflows were found to be negative contributors to economic growth in Ghana over the study period. This unfavorable effect of foreign direct investment on economic growth can be attributed to the fact that income inflows from the foreign direct investment are not channeled into productive uses in the country hence leading to crowding out of local industries and poor absorptive capacities as well as unproductive industrial competitions (Carkovic & Levine, 2002). This result agrees with the works of Saqib et al. (2013) and Nath (2004) who found FDI inflows to negatively influence growth but contrary to the work of Melnyk et al. (2014) and Asafu-Adjaye (2005). Theoretically, this relationship confirms the Pollution Haven Hypothesis (PHH). Thus, FDI adversely affects economic growth through the less stringent measures (instituted by weakened institutions) governing it.

Consistent with the literature, the study found institutions to be economic growth-enhancing for Ghana over the study period. One possible reason is that the more the quality of institutions in the country the ease with which they can channel investment into growth improving avenues. This result is consistent with the works of Yakubu (2020) and Nawaz et al. (2014) who found quality institutions to be growth-boosting.

The result of the combined effect of foreign direct investment and quality institutions revealed that they positively contribute to economic growth. This is attested to by the net effect computation of the joint effect of foreign direct investment and institution (see, Appendix). The result implies that the existence of the flow of foreign direct investment without the necessary institutions within the economy to translate the inflows into investment leading to growth will be detrimental to the economic health of the country. It also tells us that the right institutions coupled with the inflow of foreign capital will lead to favorable growth outcomes like an increase in the productive capacity of local industries, leading to increases in investment which also results in a rise in economic growth of the economy.

The result on capital shows that capital stock is not economic growth-enhancing over the study period in Ghana. This can be explained by the fact that although capital investment like machinery and equipment in the construction of roads, schools, offices, commercial and industrial buildings all contributes positively to the growth of output but are undermined by labor being displaced hence increasing the level of unemployment due to machinery replacing humans. This result is contrary to the findings of Asiedu (2013) and Ibraham (2011) who found a positive and significant effect of capital on economic growth for Ghana.

The estimated ARDL model also shows that the labor force is growth-inducing both in the long run and short run. This agrees with the neoclassical growth theory that the growth of the labor force boosts production as wages for informal workers increases. This result is consistent with the works of Jayaraman and Singh (2007) and Ayibor (2012) but contrary to the arguments of Sakyi (2011) and Frimpong and Oteng-Abayie (2006).

Real effective exchange rate proved to be growth improving over the study period for the country. This can be attributed to the fact that real effective exchange rate changes lead to increases in the export of the country and this will result in increased economic growth. This outcome is consistent with the work of Prasad (2000) who found a positive effect of real effective exchange rate on economic growth.

# 3.5. Robustness Check for ARDL Model

# Table 5. Model Diagnostics and Stability Tests

Source: Authors' construct using Eviews 10 package.

Test Statistic	F-statistics	Probability value	
Normality X <sup>2</sup> <sub>Norm</sub>	Not Applicable	0.5785	
Serial Correlation X <sup>2</sup> <sub>Auto</sub>	F(2, 1) 8.9837	0.2296	
Heteroskedasticity $X^2_{_{BP}}$	F(19, 3) 0.5931	0.7963	
Functional form $X^2_{Reset}$	F(1, 2) 0.3366	0.6205	

Table 5 presents the model diagnostics which test the robustness of the entire model. Tests such as normality test, Breusch-Godfrey test for serial correlation, Breusch-Pagan test for heteroskedasticity as well as Ramsey's Regression Specification Error Test (RESET) for functional form were conducted. Results, as shown in Table 5, attests to the fact that the model is devoid of issues of the non-normal distribution of parameter estimates, serial correlation, heteroskedasticity, and model misspecification. Additively, the cumulative sum of recursive residuals (CUSUM) and the cumulative sum of squares of recursive residuals (CUSUMSQ) were employed (see, Appendix) to test the stability of the model estimates over the sample period. The results show that the model estimates are stable and this was attested to by test results lying between the critical intervals at a 5% significance level. This means that there are no erratic parameters within the model.

# CONCLUSIONS AND POLICY IMPLICATIONS

The study examined the effect of foreign direct investment on economic growth by examining the role of institutions. The main argument advanced by the paper is that the combined effect of foreign direct investment and quality institutions induces economic growth significantly compared to their individual effects on economic growth. An implication deduced out of the study is that government policies should be directed towards attracting foreign direct investment while at the same time strengthening the institutions and regulations to enhance output growth. Again, attracting FDI alone can also come with the problem of the country becoming a dumping site of externalities that multinational corporations avoid by setting up their subsidiaries in pollution haven countries. The study, therefore, recommends that policymakers should strengthen institutions and regulations as efforts to attract clean foreign direct investment.

# **AUTHORS CONTRIBUTIONS**

Conceptualization: Evans Kulu.

Data curation: Evans Kulu, Samuel Mensah, Prince Mike Sena. Formal Analysis: Evans Kulu, Samuel Mensah, Prince Mike Sena.

Methodology: Samuel Mensah. Software: Prince Mike Sena.

Supervision: Evans Kulu, Prince Mike Sena.

Writing – original draft: Evans Kulu, Samuel Mensah, Prince Mike Sena. Writing – review & editing: Evans Kulu, Samuel Mensah, Prince Mike Sena.

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#### **APPENDIX**

#### **Net Effect Calculations (ARDL Model)**

#### Long Run Net Effect

$$LN(GDPPC) = -0.3218LN(FDI) + 0.4628LN(NDEX) + 0.00003LN(FDINDEX) \cdot \frac{dGDPPC}{dNDEX} = 0.4628 + 0.00003LN(FDI) \cdots \cdots = 0.4628 + 0.00003(1.2566) \cdots = 0.4628 + 0.000038 \rightarrow = 0.4628\%$$

#### **Short-Run Net Effect**

$$LN(GDPPC) = -0.1572LN(FDI) + 0.2086LN(NDEX) + 0.00001LN(FDINDEX) \cdot \frac{dGDPPC}{dNDEX} = 0.2086 + 0.00001LN(FDI) \cdot \cdot \cdot \cdot = 0.2086 + 0.00001(1.2566) \cdot \cdot \cdot \cdot = 0.2086 + 0.000013$$
 $\rightarrow \cdot = 0.2086\%$ 

## "Evaluation of systematic risk, corporate governance, and cash holdings: evidence from Indonesia"

Musdalifah Azis (1) Michael Hadjaat Rositawati Dio Caisar Darma (1)
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## EVALUATION OF SYSTEMATIC RISK, CORPORATE GOVERNANCE, AND CASH HOLDINGS: EVIDENCE FROM INDONESIA

#### **Abstract**

Profits that are calculated to finance unexpected cash need expedite management. This paper investigates the effect of corporate governance on cash holdings with systematic risk as a moderating variable. The population consists of companies from the property and real estate sectors listed on the Indonesia Stock Exchange (IDX) during 2012–2020. Through the purposive sampling technique, the sample obtained 41 companies as the study object. Data analysis is focused on panel data and its interpretation through the Moderated Regression Analysis (MRA). Hypothesis testing uses statistical terms at the 5% probability level. Important findings underline that corporate governance has a positive significant effect on cash holdings, while systematic risk has a negative insignificant effect. On the other hand, the moderation between corporate governance and cash holdings through systematic risk is positive significant. Systematic risk reflects the reliability of a stock; when the risk is higher, it tends to increase in cash flow situations, and investors prefer high-risk investments with the expectation of profit from returns. It is hoped that future contributions will serve as reference material for academics, government, and companies engaged in the financial service sector.

**Keywords** stock portfolio, financial risk, investment management, MRA,

Indonesia

JEL Classification G11, G32, C24, G1

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## ОЦІНКА СИСТЕМАТИЧНИХ РИЗИКІВ, КОРПОРАТИВНОГО УПРАВЛІННЯ І ГОТІВКОВІ ЗАОЩАДЖЕННЯ: ДАНІ З ІНДОНЕЗІЇ

#### Анотація

Прибутки, які розраховані для фінансування непередбачених готівкових коштів, особливо потребують прискорення управління. Ця робота спрямована на вивчення впливу корпоративного управління на грошові кошти з систематичним ризиком як регулюючої змінної. Населення орієнтоване на сектори власності і нерухомості, включені в список Фондової біржі Індонезії на період 2012-2020 рр. Методом цілеспрямованої вибірки в якості об'єкта дослідження було обрано 41 компанію. Аналіз даних в цьому дослідженні зосереджений на групових даних і їх інтерпретації за допомогою помірного регресійного аналізу (ПРА). При перевірці гіпотез використовуються статистичні терміни з 5-відсотковим рівнем імовірності. Важливі висновки підкреслюють, що корпоративне управління надає позитивно-значущий вплив на готівкові кошти, в той час як систематичний ризик чинить негативний-незначний вплив. Відповідно до іншого результату, поміркованість між корпоративним управлінням та грошовими коштами через систематичний ризик є позитивно-значною. Систематичний ризик відображає надійність акції, де ризик вище, він має тенденцію до збільшення в ситуаціях з грошовими потоками, а інвестори вважають за краще інвестиції з високим ризиком, з очікуванням прибутку від повернення. Сподіваємось, що майбутні внески стануть довідковим матеріалом для науковців, уряду та компаній, що займаються сектором фінансових послуг.

Ключові слова портфель акцій, фінансовий ризик, управління інвестиціями,

модераційний регресійний аналіз, Індонезія

**Класифікація JEL** G11, G32, C24, G1



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#### INTRODUCTION

It is highly important for every company to have cash, otherwise its operations cannot be performed properly. Cash holding is the cash in the hands or available to invest in the form of assets or assets smoothly physically (Gill & Shah, 2012). But, holding cash in the company can both result in a profit and losses for the company. The need for cash is unexpected. On the other hand, in the number of which loads can create conflicts agency because the manager has the desire to gain domination over an investment decision the company as a basic interest self (Jensen, 1986; Azis et al., 2020).

Many researchers study of cash holding, but the results of their research work are inconsistent. Theoretically, corporate governance aims to overcome the problem of an agency that is a conflict of interest between managers and shareholders, because when a company's corporate governance is weak, there may increase conflict agency. Relevant studies related to corporate governance and cash holding have been highlighted by various researchers and produce a variety of evaluations (Cheung, 2016; Harford et al., 2008; Dittmar & Mahrt-Smith, 2007; Khan et al., 2016).

Another research is to identify the effect of the systematic risk used with cash holdings. The presentation of systematic risk, also known as market risk, is the risk associated with changes as a whole that can be eliminated through diversification by investors. Related research shows a positive welfare relationship between the systematic risk used for cash holdings (Cheung, 2016). However, this point differs from Palazzo (2012) and Acharya et al. (2013), who suggest that the systematic risk used has a significant negative effect on cash holdings.

Weak corporate governance has had a systematic impact by putting in little cash and the IDX forced to undertake high agency fees, earning the nickname twelve small mortgage loan wallets. The agency fee results from a conflict of interest between calculating ratings and the agency. If in a company with weak corporate governance, it can reduce the cash value of the parent company. Cheung (2016) emphasizes that corporate governance has a positive effect on cash holding. The same thing happens if low systematic risk is used when a company plans to reduce the investors' interest in investing in the company so that it can reduce the value of the company holding cash (Muliadi et al., 2020). Then, there will be a positive relationship between the systematic risk used and cash holdings.

The relationship between corporate governance and cash holding has several positive effects, namely when corporate governance decreases, cash holding decreases as well. The same can be seen in the systematic risk used where the systematic risk used by banks has a positive impact on cash holdings. The systematic risk used can be a moderating effect on the corporate governance of cash holdings. The reduction in the systematic risk used will strengthen the effect of corporate governance on cash holdings (Acharya et al., 2013; Ikbal et al., 2020).

Based on the phenomenon and several previous studies, this study aims to investigate the effect of corporate governance on cash holding with systematic risk as a moderating variable with empirical studies for Indonesia. The contribution of this study is expected to be a reference material for further researchers, the government, and companies engaged in financial services. Several sections for this study are presented in a structured manner. In the first section, the introduction clearly outlined the background, problem statements, and objectivity of the paper. The second section provides a literature review, describing the basic theory related to variables and an empirical review based on several studies. In the third, the research method section, the sample size, data, and data processing techniques are illustrated. In the fourth section, the findings present descriptive statistics, the results of hypothesis testing based on the study objectives, and data interpretation. The fifth section provides a discussion to clearly demonstrate the results based on the statistical findings compared with several relevant studies, whether they are in line or contradictory, then a number of hypotheses can be found that have been accepted and rejected. The last section suggests conclusions consisting of a brief overview of empirical findings, the study weaknesses, and policy implications.

#### 1. LITERATURE REVIEW

The characteristics of companies' cash holding are broadly explained on the grounds of three basic theories, namely free cash flow, pecking order, and trade-off theory. Each of these theories is intended to clarify the review of the predictions of each theory (e.g. Ferreira & Vilela, 2004; Ngoc et al., 2020). As additional information, Gill and Shah (2012) define cash holding as cash available to be invested or cash on hand in the form of physical assets and to be distributed to investors. Meanwhile, Gore (2009) illustrates that cash holding is the ratio between cash and cash equivalents to monthly interest expenses and operating expenses.

Cash holding is the ratio that compares the amount of cash and cash equivalents the company has with the number of assets the company obtains as a whole (Cai et al., 2016). The list of companies referred to here includes companies in the property and real estate enrolled in the Indonesia Stock Exchange in the period 2012–2020.

Corporate governance is a system where business directed and controlled describing the framework of regulations with the separation between a principal and an agent (Manzaneque et al., 2016). The agent mentioned is a board of directors, an appointed principal responsible for all cash management, corporate governance, and another policy in a sector property company and real estate listed in the Indonesian Stock Exchange for the period 2012–2020.

The systematic risk used is the risk that, considering the transformation that occurs in the market as a whole, may not be omitted through diversification in economic activities shown by investors. The research uses a 'beta' to describe the systematic risk of a securities or portfolio assessment became relatively against a risk its shares in companies in the research products which are and real of an estate enrolled in the Indonesia Stock Exchange between 2012 and 2016.

Corporate governance is a concept relating to maximizing shareholders' profit and protection from economic agents providing capital to a company. One of the main roles of corporate governance is dealing with an agency that represents a conflict of interests between managers and shareholders reasonable by weak governance management of excessive cash possession for their personal gain by investing in the net present value (NPV) negative. Because of this reason, this agency will weaken the conflict between the two sides (Jensen, 1986). Corporate governance is associated to cash holding as positively-significant if seen from the agency's perspective because of the company by the conflict agency high with weak governance which keeps less cash (Manzaneque et al., 2016).

Corporate governance associated with negative cash holding by significant to see motive agency cost because firms to governance bad cause agency cost was high and cause the ownership small, agency cost itself because of the conflict of interest between a principal and an agent (Cheung, 2016). It is not surprising that the companies that are complex with the agency conflict crucial height have a problem because the board of directors expresses a desire to build cash to self-interest and not employed in support shareholders.

The used systematic risk changes that occurr in the risks market can affect all companies. There are two views about the relationship between systematic risk and cash holding. The first point is that low systematic risk may reduce cash holdings to reduce motive transaction to keep cash which means systematic risk is associated to cash holding as positively-significant because the company with a low correlation with the shock of the aggregate tends to a shortage of cash flow in a situation where companies need (Palazzo, 2012). The other view is that systematic risk can affect the way of how a company chooses between cash and bank credits. Banks cannot guarantee liquidity for all the companies at any time and are inclined to grant a credit line to all companies at low systematic risk so small cash holding and thus systematic risk is associated with positive significance to cash holding (Acharya et al., 2013).

#### 2. METHODS AND DATA

The population in this research is all companies and real estate property sectors listed on the Indonesia Stock Exchange (IDX) for the period 2012–2020 that comprise about 41 property sector and real estate companies in total. The sampling technique applied in the research was based on the criteria upon (sampling purposive), with certain consideration fulfilled to sampling in Table 1.

**Table 1.** Sample criteria based on a purposive sampling technic

Source: Formed by the authors.

Criteria	Total
Sector property and real estate companies listed in the Indonesia Stock Exchange for December 2016	47
Sector property and real estate companies that failed to provide annual reports since the period 2012-2020	(6)
Sample count	41

Then, with the support of secondary data from the IDX website, the variables are presented according to 3 functions based on the study objectives. Two hypotheses are related to the analysis of systematic risk and corporate governance applied to cash holding. This involves systematic risk and corporate governance as independent variables, and cash holding is the dependent variable. For the third hypothesis, systematic risk becomes a moderating variable that affects the relationship between corporate governance and cash holding.

From this difference, Indriastuti et al. (2020) emphasize the position of the independent variable functions to predict the independent variable, while the dependent variable is the variable influenced or predicted by the independent variable. The two variables are still in the form of a one-way relationship. On the one hand, specifically for moderating variables like the previous case, it serves to weaken or strengthen the direct relationship between the independent variable and the dependent variable, which is played by systematic risk. As many as 41 samples based on the population have done filtering technique sampling purposive. The moderation research used a Moderated Regression Analysis (MRA), and the model received is as follows:

$$CH_{it} = \alpha + \beta 1CG_{it} + \beta 2SR_{it} + \beta 3SR^*CG_{it} + e_{it}, \tag{1}$$

where, CH – cash holding,  $\alpha$  – constant,  $\beta$  – regression coefficient, GG – corporate governance, SR – systematic risk, \* – multiplication of systematic risk and cash holdings, it – time series, and e – error term.

The provisions of each variable clarify the size and scale used. To simplify the measurement of variables, we arrange the following scale and estimate from Table 2.

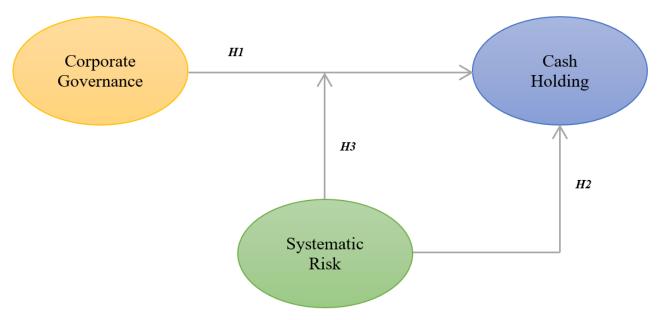
**Table 2.** Estimated of variables

Source: The IDX (2020).

Variables Code		Measurements	Scale	References	
Cash holding	Υ	Cash holding = the ratio of cash and cash equivalents / total assets		Cai et al. (2016)	
Corporate governance	<i>X</i> 1	Board size = number of boards of directors Ratio		Manzaneque et al. (2014)	
Systematic risk	X2	$CE = RF + \beta \times (MR - RF)^*$	Ratio	Jogiyanto (2008)	

Note: \* - where, CE – cost of equity, RF – risk-free rate,  $\theta$  – beta on non-diversifiable risk which cannot be eliminated through diversification by investors such as political factors and certain economic conditions), MR – market return for Indonesia using the Index Composite Share Price (IHSG).

This study's analysis model is the development of several previous studies that discuss the linkages of systematic risk, corporate governance, and cash holding that are listed by manufacturing companies (Ozordi et al., 2019; Tong, 2008; Ajanthan & Kumara, 2017; Azis et al., 2020).



Source: Created by the authors.

Figure 1. Framework

Figure 1 illustrates the direct influence (corporate governance and systematic risk) on cash holding and the moderating effect of systematic risk on cash holding through the role of corporate governance. The hypothesis design and expected signs for this study are detailed as follows:

H1: It is assumed that there is a positively-significant relationship between corporate governance and cash holding.

H2: It is assumed that there is a positively-significant relationship between systematic risk and cash holding.

*H*3: It is assumed that there is a positively-significant relationship between systematic risk and moderate corporate governance and cash holdings.

#### 3. RESULTS

In this section, we need to describe an overview of the study and statistical tests based on the proposed hypotheses. Referring to cash holding calculations to the property and real estate company as a sample of Indonesia stock exchange 2012–2020 period can be averaged from Figure 2.

Over the nine periods, the growth in cash holdings in property and real estate companies appeared inconsistent. The highest average cash holding value in the 2014 period was 0.128. On the one hand, a decrease in the average cash holding value by 0.064 also occurred in 2020, where a decrease in the cash holding value showed that the company was using excessive funding, so if the cash holding was low, it could result in the lack of ability to achieve the company's goals and missed investment opportunity.

As can be seen from Figure 3, the average value of corporate governance also fluctuates over nine periods. The peak increase in corporate governance value by companies for 2017 was 5.22. This shows that the higher the level of the company's compliance to maximize shareholder profits and protection from economic actors provides capital for the company. Meanwhile, the lowest corporate governance score was at the level of 4.93 in 2020.

With the current instability of corporate governance, the value shows that when a board size mean value experience a fall in means conflict agency higher and having an impact for a cash holding decreased level. While at the time of the board size average value increases, it indicates the increase in cash holding because corporate governance plays an important role in cash maintaining the level to do so from the company in shareholder support.

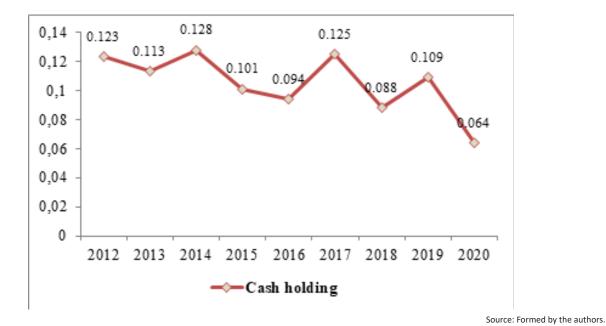
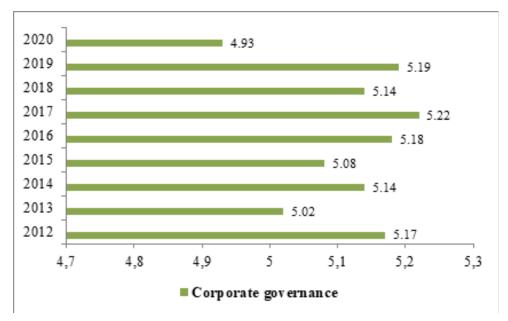
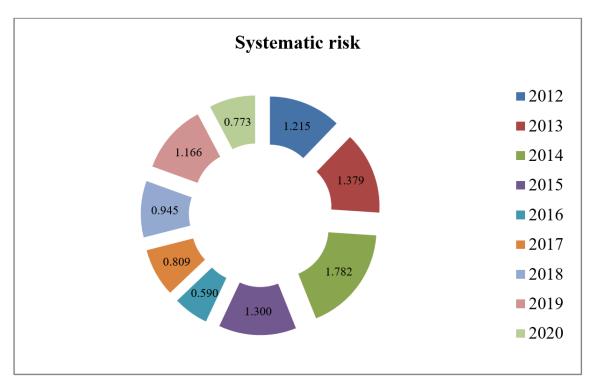


Figure 2. Cash holding average value of property and real estate sample companies in IDX



**Figure 3.** Corporate governance average value of property and real estate sample companies in IDX

A high-risk level of an investment company reflects the high rate of the expected return. Then we can conclude that investors always expect to benefit from investments but cannot be separated from them. The existing risk in this research to measure systematic risk value used a 'beta' measuring instrument because beta is a stage stock sensitivity towards affecting factor changes that occurred in the market. The findings are based on the beta value calculations of property and real estate companies (see Figure 4). In 2012, an achievement of 1.215 was a systematic risk position. Next, 2013 showed a dramatic increase, where the value reached 1.379 and the peak of the increase occurred in 2014 with 1.782 points. The increase in the mean value indicates a higher beta and a higher risk for taking any stock market risk. When a stock has a high beta, it reflects a high-risk stock. A fantastic decline was in 2016, where the average value of systematic risk was up to 0.590.



Source: Formed by the authors.

Figure 4. Systematic risk average value of property and real estate sample companies in IDX

To measure systematic risk, this research uses the tools measuring beta which is greatly affected by investment opportunities. Corporate governance is measured through board size as indicated as a board director of responsibility for all cash management, corporate governance, and another policy. If beta affects corporate governance, so corporate governance is multiplied by beta. This was done to see if there is a powerful relationship between corporate governance and systematic risk to cash holding.

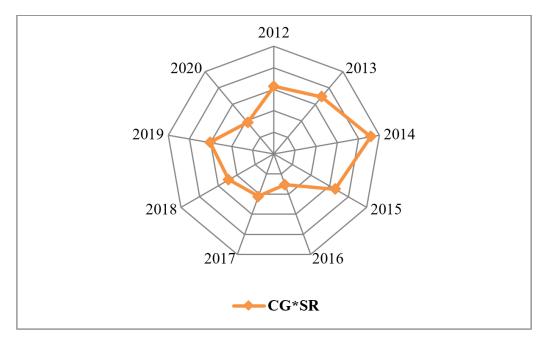
Figure 5 confirms that the results of the moderating variables on corporate governance and systematic risk experience instability. The biggest peak was in 2014, where the average moderation value reached 9.159. 2016 was associated with the lowest period as property and real estate values reached the level of 3.056.

Spriestersbach et al. (2009) inform that descriptive statistics function to explain data, understand, and interpret an event that is collected on a particular object, investigation, and do not arrive at generalizations or conclusions about the observations being investigated. The distribution of data relating to the variables in this section is calculated through Table 3 including the mean, maximum, minimum, median, SD, skewness, and kurtosis with varying values.

**Table 3.** Review of descriptive statistics (n = 369)

Source: Formed by the authors.

	CG	SR	СН	СGЧ
Mean	5.118	1.106	0.105	5.663
Maximum	5.22	1.78	0.13	9.16
Minimum	4.93	0.59	0.06	3.06
Median	5.14	1.116	0.109	6.052
Std. Deviation (SD)	0.093	0.366	0.020	1.876
Skewness	-1.189	0.429	-0.877	0.444
Kurtosis	0.833	-0.020	0.460	0.082



Source: Formed by the authors.

Figure 5. Moderation average value of property and real estate sample companies in IDX

The output on descriptive statistics evaluates that corporate governance has the highest mean, maximum, minimum, median, and kurtosis acquisition when compared to the other two variables. For primary achievement and skewness, it is precisely the systematic risk that is greatest. In contrast to cash holding, the overall score in the descriptive statistical component is the lowest. Moderation of corporate governance using systematic risk (beta) proved to be positive, where the standard deviation was quite high at 1.876 and the maximum value reached 9.16.

**Table 4.** Data panel regression analysis

Source: Formed by the authors.

	Coeff.	Std. Error	t-Statistic	Prob.	Direction	Conclusion
(Constant)	0.255	0.069	5.490	0.017 < 0.05		_
CG	1.528	0.038	4.184	0.033 < 0.05	(+)	Accepted
SR	-0.146	0.078	–1.328	0.304 > 0.05	(-)	Rejected
CG*SR	2.763	0.169	3.142	0.026 < 0.05	(+)	Accepted
R	0.964			•		
R2	0.929					
F-Statistic	2.876					
F-Sig.	0.025					

*Note*: p < 0.05.

Simultaneous testing ensures that the three recommended variables (corporate governance, systematic risk, and cash holding) have a significant impact, where the coefficient is a constant of 0.255 with a probability of 0.017 or the level of significance is greater than the F-statistic. Overall, the proposed model is feasible or has met the assumptions based on statistical criteria because the correlation (R) is classified as very close and the coefficient of determination (R<sup>2</sup>) reaches 92.9%. That is, 7.1% are other variables outside the study model or may be considered a residual factor.

Furthermore, for partial and moderation testing based on Table 4, it appears that the results are very different from the previous ones. Corporate governance has a positively-significant effect on cash holding, whereas systematic risk has a negatively-significant impact on cash holding. Interestingly, the relationship between corporate governance and cash holding is moderated by systematic risk; the result is positively-significant so that systematic risk is a variable that is considered appropriate in influencing the two relationships. Brief explanations of the

achievements in each hypothesis, interpreted by corporate governance on cash holding are p-value <0.05, systematic risk and cash holding are indicated by p-value >0.05, then systematic risk on corporate governance and cash holding is obtained amounting to 0.026 <0.05. The probability level used as a standard in this model is 5%.

#### DISCUSSIONS

With EViews 8, it can be seen that the systematic risk variable used as a moderating variable (a type of moderation potential) can affect the relationship between corporate governance and cash holding, or the third hypothesis is accepted.

The findings highlight the moderation between the systematic risk used and corporate governance that has had a significant impact on the sustainability of cash holding. In addition, these results are in line with the hypothesis that has been developed, in which systematic risk has played a significant role as a moderating variable that strengthens the relationship between corporate governance and cash holding. This also reflects the fact that through systematic risk, investors can get profit now to predict future profits and income. If the investor is at risk of the company's windfall income, the future profit is also lower. Thus, if the point is high, corporate governance beta will also increase and will cause the effect of systematic risk which is used as a moderating variable on corporate governance to increase rapidly and its effect on cash holdings is very close. Based on significant achievements, it may be assumed that, in general, companies contain the same pattern.

These results also present several previous studies discussing the close relationship between systematic risk, corporate governance, and holding. The government allows managers to control cash flow to avoid under-investment and plays a monitoring role in regulating industry behavior. According to Hsu et al. (2014), this corresponds to the size of the independent director's responsibility because it aims to monitor the manager's cash expenditure behavior and avoid investment restrictions.

Cash owned by investors plays an important role in companies' policy, and even acts as the most significant thing. The dramatic increase in cash reserves, despite alternative instruments such as debt, derivatives, and lines of credit. Financial behavior is the subject of a discussion as a determinant of cash holding and various reasons for companies to save cash. A systematic understanding of cash holding in the financial sector certainly becomes the main focus to determine the direction of a company's sustainability (Cruz et al., 2019).

Corporate cash holding has grown rapidly throughout the world so far. As a result, various studies have high-lighted and examined cash holding based on company's results and company's values. The effectiveness and efficiency of various corporate governance tools to limit cash holding are important because these factors prove to be fundamental for investor's confidence in the fact that cash will not be wasted. The measurement scale associated with the empirical cash holding study is closely related and has always been an interesting issue to be discussed (Amess et al., 2015).

#### CONCLUSIONS

This research made three significant points. First, corporate governance has a positive and powerful impact on cash held by property and real estate companies. It is in line with the proposed hypothesis, that corporate governance has a positively-significant effect on cash holdings. The relevance of agency theory seen from an agency perspective includes the problem of companies with high agency conflicts with weak corporate governance reducing cash holdings. Secondly, the systematic risk used has a negative and significant effect on cash holdings. As the systematic risk used can be understood as the risk of a stock, where a higher risk tends to increase in cash flow situations, investors prefer high-risk investments with large returns. Thirdly, the systematic risk that is used as a moderating variable (moderation type) can affect the potential for corporate governance in holding cash. There is an agreement with moderation through the systematic risk that is evaluated so that corporate governance has a significantly positive relationship with cash holdings.

Based on the limitations and weaknesses that refer to the presentation results, we suggest that future studies should consider other aspects related to the weak moderation of systematic risk in its effects on corporate governance and cash storage. In general, the focus on the value of corporate governance, systematic risk, and cash holding for 2020 is below average when compared to other periods. As is well known, the effects of Covid-19 have triggered global problems, including financial markets. Falling share prices in various countries triggered drastic declines in a number of sectors and had a strong impact on the macroeconomy. Thus, the relevant dimensions have attracted attention and can be a reference for future insight.

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Writing – original draft: Musdalifah Azis, Dio Caisar Darma. Writing – review & editing: Rositawati, Dio Caisar Darma.

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### "Innovative development of the management potential at a modern enterprise"

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# INNOVATIVE DEVELOPMENT OF THE MANAGEMENT POTENTIAL AT A MODERN ENTERPRISE

#### **Abstract**

The development of the national economy and its components in modern conditions is increasingly dependent on technological shifts based on innovation. The ability to form and effectively use potential is becoming a decisive factor in enhancing the competitiveness and development of enterprises. The development of managerial capacity will allow enterprises to adapt quickly to new environmental conditions and make effective management decisions. With the transformation of the economic system towards social orientation, there is a transition from outdated forms of enterprise potential management to a new vision of the quality of management potential.

Basic approaches to assessing the quality of management potential in its innovative development were formed. The main features of the innovative development of managerial potential were identified. The main features of the development of innovative management potential were determined. A basic structure for management potential innovative development measures was proposed, which regulates that a company's policy in the field of improving the efficiency of management capacity is a subordinate element of the general strategy of an enterprise, but at the same time it is necessary to monitor the balance between economic performance and social justice.

**Keywords** innovation, management potential, innovative development,

modern enterprise, development efficiency

JEL Classification M21, L29, M50, O15

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## ІННОВАЦІЙНИЙ РОЗВИТОК УПРАВЛІНСЬКОГО ПОТЕНЦІАЛУ СУЧАСНОГО ПІДПРИЄМСТВА

#### Анотація

Класифікація JEL

Розвиток національної економіки та її складників у сучасних умовах все більше залежить від технологічних зрушень на базі інновацій. Уміння формувати й ефективно використовувати потенціал стає вирішальним фактором підвищення рівня конкурентоспроможності та розвитку підприємств. Розвиток управлінського потенціалу дозволить підприємствам швидко адаптуватися до нових умов зовнішнього середовища та приймати ефективні управлінські рішення. В умовах трансформації економічної системи у напряму соціальної орієнтації, відбувається перехід від застарілих форм управління потенціалом підприємства до нового бачення якості управлінського потенціалу.

В дослідженні були сформовані основні положення щодо інноваційного розвитку управлінського потенціалу підприємства, з урахуванням складової управлінського персоналу. Виокремлено основні особливості інноваційного розвитку управлінського потенціалу. Були запропоновані основні заходи інноваційного розвитку управлінського потенціалу сучасного підприємства, сутність яких полягає в тому, що політика підприємства в галузі підвищення ефективності управлінського потенціалу є підпорядкованим елементом загальної стратегії підприємства, але постійно необхідно вести контроль щодо дотримання балансу між економічними результатами діяльності та соціальною справедливістю.

Ключові слова інновація, управлінський потенціал, інноваційний розвиток,

сучасне підприємство, ефективність розвитку

M21, L29, M50, O15



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#### INTRODUCTION

The problem of efficient enterprise resource provision primarily depends on the enterprise management system and the expertise of its executives. Approaches to the formation of an effective management system have been studied in many works of modern researchers; a summary of the research results shows that traditional methods of human resource management in a modern dynamically developing enterprise are ineffective and create a certain mechanism that prevents the development processes of managerial personnel. Traditional human resource management methods are ineffective within the framework of a modern dynamic enterprise and create a certain mechanism that prevents the development processes of management personnel. Thus, the quality of management activity is one of the primary factors that determine the ability of the enterprise to accomplish the tasks it sets.

Approaches to the creation of an effective management system have been studied in many works of modern scientists, Generalization of research results indicates that traditional methods of human resource management in a modern dynamically developing enterprise are ineffective and create a certain mechanism that hinders the processes of managerial personnel development.

#### 1. LITERATURE REVIEW

The majority of research works published in the modern economic literature in Ukraine and abroad are devoted to the research and elaboration of the methodology and enterprise human resources, financial and innovation potential evaluation methods. The works by Ander (2003), Armstrong (2008), Bilorus (2018), Ghruzynova (2010), Kibaljuk (2006), Ladunka (2011) and Sabadyrjova (2010) are devoted to the issue of forming and distinguishing the enterprise management potential as well as management potential innovative development.

Pysarenko (2020) considers innovation potential as unused, latent possibilities of accumulated resources that can be put into action to achieve the goals of an economic subject. The innovation potential of an organization is also considered as a measure of readiness to perform the tasks that ensure the achievement of the set innovation goal Ghruzinova (2010).

Issues related to the measurement of management, human resources, and financial potential have been researched to a much lesser extent. However, researches (Bilorus, 2018; Vorsovskyi, 2007; Ladunka, 2011; Sabadyrova, 2010) highly evaluate the role of these factors, analyses the practices and management technologies of innovative enterprises, and prove their impact on the efficiency of innovative activity of the enterprise.

#### 2. AIMS

The aim of the article is further development and methodological support of the formation for management potential innovative development at a modern enterprise, which takes into account the component of management potential and reveals the essence of basic structure of management potential innovative development measures.

#### 3. RESULTS

Summary of practical experience in recent years has led to the following conclusion about managerial capacity: the foundation of the production process is human activity and the competitiveness of any enterprise is determined by the potential of its personnel.

The keen interest to the notion of "management potential" resulted in two substantially different approaches: resource-based and factor approaches. On the one hand, the resource-based approach defines management potential through management resources studied from the standpoint of quantitative and qualitative criteria. On the other hand, adherers of the factor approach define management potential as a peculiar form of the human factor, i.e., human management capability. In our opinion, management potential must reflect the complex of learning, labor and psychophysiological resources of a manager, which can provide the highest level of management activity.

The consistent trend among managers of the leading Ukrainian enterprises as to perceiving management potential as the basis for production is being studied. In this regard, the notion of "management potential" becomes the subject of the scholarly discussion.

The notion of "potential" was derived by the economic science from physics (lat. «potentia» - power) where it reifers to a certain quantity of energy accumulated by the system and which can be implemented in work (Vorsovskyi, 2007). The Explanatory Dictionary by Ozhegov defines potential as a physical quantity, which characterizes the force field at the given point, or the electric charge or quantity, which determines the energy store of the body at a certain point of the force field (electric, magnetic etc.) (Busel, 2016). In everyday life, the notion "potential" refers to the available means, supplies, certain sources, which can be applied in order to achieve a particular aim.

In the enterprise management theory, the economic activity is invariably connected directly with human resources, i.e. with people. However, from the standpoint of management, labor bears the name of management activity due to the presence of a set of characteristic features such as the subject of labor, outcome and its effectiveness.

Increased interest to the notion of "management potential" resulted in two completely different approaches to its interpretation. On the one hand, management potential refers to certain resources of an enterprise under study in respect of unity. On the other hand, management potential is a certain form of human factor perceived as a capacity for management activity. An of the abovementioned definitions management potential presupposes a set of certain learning, psychic and personal traits of the enterprise human resources, which provide for the highest qualitative level of management and optimal performance of professional functions under the current conditions.

Thus, the planned economy was based on the state ownership and human resources were not considered an "article of value". The personnel policy of that time was characterized by the three distinguished personnel reproduction phases: production, division and employment. Upon that, production presupposed human resources formation, training, retraining and further development, division presupposed their reallocation across fields of activity and employment was skilled labour force implementation. Hence, the planned economy focused on the distribution relationship, so quantitative and not qualitative personnel reproduction parameters are characteristic of this system. However, the command economy had a great advantage of constant personnel management planning process, which provided sustainable system development (Hruzinova, 2010).

Thus, in order to form the modern theoretical basis, it is worth providing the analysis of the former management potential formation system and assessing the situation with respect to the process of transition to the market economy (Figure 1).

Economic System Type					
Planned Economy	Market Economy	Socially-Oriented Economy			
Go	vernment Control of Enterprise Rec	ruitment Policy			
Government regulation and control of government regulation and control of government regulation and control of recruitment policy  Absence of maximum limitation of government regulation and control of recruitment policy  Partial government regulation and control of recruitment policy					
Fi	inctional Tasks of Personnel Manag	ement System			
System of personnel training, retraining and development, audit and reporting, personnel appraisal, social functions	Continuous system of personnel training, retraining and development, system of motivation, bonuses, labour potential assessment, personnel marketing	Continuous system of personnel training, retraining and development, system of motivation, bonuses, labour potential assessment, personnel marketing, personnel development, quality of work life and social security			
	Requirements to Management I	Potential			
Political orientation	Economic feasibility orientation	Economic and social feasibility orientation			

Source: Complemented and adapted by the author at (Kibalyuk, 2006).

**Figure 1.** Interdependence of the economic system type and requirements to the management potential

This was followed by the transition from the planned economy to the market relations, which caused separation of one of the personnel policy functions – division. Due to the fact that within the transition to the market economy the guiding principle was making maximum profit, personnel development generally lacked attention.

Analysis of the situation in 2013–2019 in the innovation field of the state enables to conclude that in absolute terms the increase in total expenditure on the innovative activity does not have a considerable impact on the continual upward trend in the development of enterprises involved in the innovative activity.

Official statistics confirm that the issues in the development of innovative activities of enterprises lie in the amount of funds and directly in the sources of funding, which are declining, but there remain enterprises that continue to innovate and contribute to the development of the economy, but at the same time it should be remembered that the vast majority of innovation is carried out by enterprises at their own expense.

The main priority for the financial and economic activities of domestic enterprises, which develop under the requirements of the time, must be timely management potential innovative development process because it covers in its essence the substantial percentage of capacity reserve.

**Table 1.** Enterprise Innovative Activity and Their Expenditure on Innovations in 2013–2020

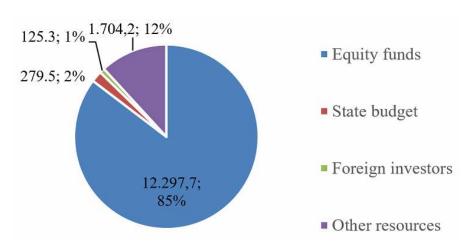
Source: The table was built by the author based on the data (State Statistics Service of Ukraine, n.d.; Pysarenko, Kvasha, Rozhkova, & Kovalenko, 2020).

Year	Share of the number of		Of which are funded from, mln UAH				
	industrial enterprises implementing innovations in the total number of industrial enterprises, %	Total Expenditure, min UAH	Equity funds	State budget	Foreign investors	Other resources	
2013	13.6	9.562,6	6.973,4	24.7	1.253,2	1.311,3	
2014	12.1	7.695,9	6.540,3	344.1	138.7	672.8	
2015	15.2	13.813,4	13.426,8	96.6	179.5	110.5	
2016	16.6	23.229,5	22.036,0	179.0	23.4	991.1	
2017	14.3	9.117,5	7.704,1	227.3	107.8	1.078,3	
2018	15.6	12.180,1	10.742,0	639.1	107.0	692.0	
2019	13.8	14.220,9	12.474,9	556.5	42.5	1.147,0	
2020	14.9	14.406,7	12.297,7	279.5	125.3	1.704,2	

The Table 1 shows that main constituents of total expenditures on innovative activity are equity funds, state budget, foreign investors and other resources. It is seen that each year equity funds are the biggest source of contribution in innovative activity of enterprises. The situation with financing from the state budget is changing to worse. There is a lack of state budget financial support. The share of foreign investors in total expenditure is increasing while it has extremely dropped in 2016. Since 2014 Ukraine doesn't meet a lot of investments from foreign countries. Such situation takes place due to unstable situation in Ukraine. The main reasons of such awareness' are military conflict on the East of Ukraine and ineffectual fight against corruption.

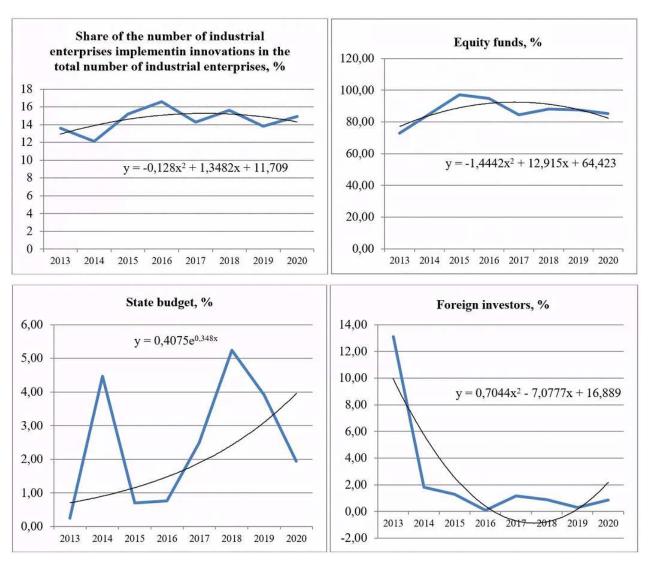
The results of the analysis of the dynamics of the indicators show that the average share of the number of industrial enterprises implement in innovations in the total number of industrial enterprises for period between 2013 and 2020 is at 14.52%. It means that only 14.52% of Ukrainian industrial enterprises are involved in innovation activity. It is important to understand that all innovative activities of enterprises are mainly based on equity funds. There is the lack of financing from other sources. For example, it is possible to build a diagram of total expenditure on innovative activity in 2020 based on Table 1. It will show the difference between sources of innovative activity financing.

It is clear that in the most cases expenditure on innovative activity are funded by equity funds. Foreign investments have been decreasing since 2014. Most of Ukrainian enterprises have not enough resources to invest them in innovative activity, so they have to attract them from the state budgets and foreign investors.



Source: Based on Table 1.

Figure 2. Foundation of expenditure on innovative activity in 2020, mln UAH



Source: Based on Table 1.

**Figure 3.** Graphic representation of the impact of financing parameters in terms of its individual sources on the dynamics of the total expenditure of domestic enterprises on innovation for the period 2013–2020

A more detailed analysis of the dynamics of the total expenditure of domestic enterprises on innovation (Table 1) allowed to determine the impact of funding parameters in terms of its individual sources on the achieved result. The parameters of the impact in graphical form are presented in Figure 3.

The main cause of such a low level of involving is that financing of scientific research in Ukraine belongs to Fourth wave of innovation. Electronics and microelectronics, automotive industry, non-ferrous metallurgy, oil refining, synthetic polymer materials are the common direction of innovative activity in Ukraine (57.9% of investments). For example, United States of America, one of the strongest economies of the world, invest capital in development of technologies of the Sixth wave of innovation (nano- and biotechnology, nano- energy and etc.). Foreign investors and huge investment companies do not want to invest their capital to the obsolete production areas. That is why we have such a low level of enterprises involved in innovative activity.

At that moment Ukraine has a lot of problems like corruption, dishonest courts, low level of social responsibility and etc. These facts repel foreign investors. There are several possible changes that can help make a difference:

- 1. The government should create an attractive economic environment for new companies (such as lower taxes for start-ups, tax holidays, free land for building new enterprises and etc.). If they will do it, country meets an increased interest from foreign investors.
- 2. The government should revise the investments structure. It means that capital should not be invested to the obsolete production areas like ferrous metallurgy and etc. These resources should be invested to the modern and future technologies (such as IT, bio- and nanotechnology and other).

Nowadays, under the conditions of the economy transformation towards social orientation, there is a transition from obsolete enterprise potential management forms to the new management capacity quality management. This will make highlight the main approaches to the quality of management capacity at modern enterprises:

- 1. Personnel potential reserve formation, which enables personnel selection.
- 2. Competition on the labor market, which results in the necessity of constant market research as well as research into its infrastructure and forecast.
- 3. Decrease in investment activity to provide for the survival of present-day businesses, which explains the need in highly skilled management elite.
- 4. High dynamics of entrepreneurial activity dictates new requirements to the managerial staff, thus it is necessary to upgrade skills.

The primary aim of management potential innovative development is provision of enterprise functional and production systems with the necessary number of workers with the appropriate qualification. In its turn, along with the change in the approach towards innovations, there is the change in the basic principles, provisions and standards of staff performance. However, under any conditions, provision of the high quality of management potential innovative development is one of the basic factors of enterprise efficiency and competitiveness.

The primary need is to focus on the set of measures necessary to provide for the management potential innovative development at a modern enterprise. of management potential innovative development measures must be elaborated at three stages:

- 1. Elaboration of the basic principles of innovative development.
- 2. Formation of overall enterprise policy on the basis of organizational and staffing policy (planning the need in management resources, reserve formation, staff formation), information policy (formation and support of the management potential information support system), economic policy (funds allocation principles and management staff efficiency), management staff development policy (elaboration of the sustainable management staff development program).
- 3. Performance and management potential development efficiency assessment for further elaboration of measures aimed at changing innovative development principles.

In the process of elaborating the measures of management potential innovative development it is worth taking into account external and internal factors influencing directly this potential. The basic rule of forming this system of measures must lie the fact that the company policy in the sphere of management potential efficiency enhancement is the component of the overall company policy, but it is necessary to control the balance between the economic performance and social equity.

Modern enterprises achieve innovative development only under the condition of the availability of certain potena tial, management potential in particular. It is worth noting that the staff component is of great importance, i.e. personnel have become the main resource. However, complex systemic approach remains essential. In the process of studying the overall category of "innovative development potential", scholars distinguish the set of interrelated resources and capabilities of their implementation, which define its capacity (intellectual, technological, information, research, economic etc.) to balance internal development opportunities against external ones on the basis of constant search, exploitation and development of new spheres and means of effective current and potential market opportunities implementation (Kibalyuk, 2006).

The basic characteristic feature of management potential innovative development at a modern enterprise (Figure 4) is the necessity to conduct a set of additional measures aimed at adjusting to the current changing environment including wage and labor promotion policy formation, motivation, marketing in the sphere of management personnel, setting enterprise strategic aims and labor policy aims.

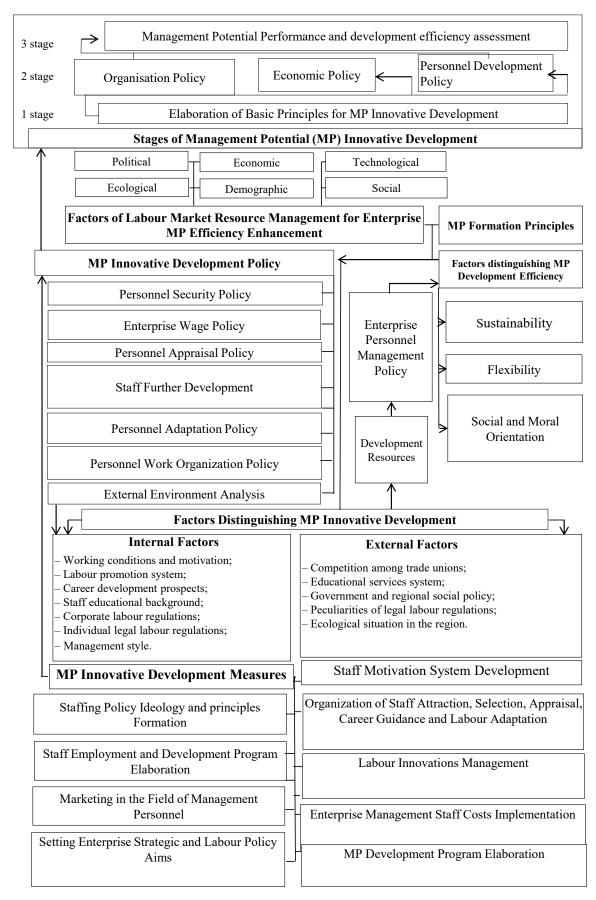
Currently, the management potential of a modern enterprise must meet the following requirements and, correspondingly, solve the given tasks:

- 1. Are all the available enterprise resources fully used? It is necessary to update the list of its resources, updating and broadening it at the expense of potential (possible) resources and its capabilities.
- 2. Are there any weaknesses in the resource utilization system? It is necessary to monitor effective resource utilization at an enterprise and regularly reappoint controllers responsible for the resources and results of their implementation.
- 3. Is innovative development characteristic of the enterprise? It is necessary to implement modern trends and peculiarities of the correspondent economic sphere development.
- 4. Is the system of staff activity adaptation to the changing economic (operating) conditions applied at an enterprise? Periodic application of mitigation means, techniques and methods of management and other staff adaptation to the changes in the economic conditions, which considerably facilitate implementation of changes and foster innovative development at modern enterprises.

Maximum absolute use of the available enterprise resources as well as the availability of the innovative development focus enable the organization to tap its resources efficiently and gain competitive advantage in the industry in accordance with the enterprise business activity as well as discover new (accompanying) business activities for the enterprise development and activity diversification, eliciting staff potential, which must be the primary task of management personnel at a modern enterprise and fully complies with the innovative development components.

The main problem of the management system of modern enterprises in the process of management potential innovative development is the under run of data updates in accordance with the needs of the economic activity and, primarily, the difficulty of implementing innovations at enterprises due to the lack of funds, time and willingness of both employees and managers.

According to Sabadyrjova (2010), enterprise management potential is the aggregate of interrelated resource system features, management process opportunities and their marshaling under the conditions of enterprise innovative development in order to gain competitive advantage with account taken of the external environment. When studying management potential features, it is worth paying attention to the variables that impact considerably on the enterprise activity (Mazhnik, & Novikova, 2015; Sabadyrova, 2010; Fernandez-Araoz, Roscoe, & Aramaki, 2017).



Source: Author's development.

Figure 4. Peculiarities of Management Potential Innovative Development

Stability of the external environment of enterprise functioning (see Figure 4 for external factors, namely macron economic, social, demographic, social norms and standards etc.) that accounts for incoming and outgoing information in the management system.

The results of the research allow to state that the issues of the managerial capacity development of a modern enterprise considered in the article are relevant. The essence distinguished in the article and the basic structure of management potential innovative development measures at a modern enterprise will enable to forecast the main trends of changes in impact factors and achieve the most efficient management potential development by focusing on expanding potential resources and the efficiency of their use. The identified patterns of influence of financing parameters in terms of its individual sources on the dynamics of the total expenditure of domestic enterprises on innovation allow to specify the problem areas in the context of the necessary efforts and allocate available resources of the national economy.

Effective use of managerial capacity, its constant development possible only in the presence of a modern managen ment system with such an important characteristic as the strategic aspect of resource planning. The additional measures of management capacity development proposed in the research, solves the issue of lagging behind the process of updating data in accordance to the needs of economic activity and complexity of implementing innovations in enterprises.

The issue of organizational characteristics forming of managerial capacity and the ability to mobilize explicit and latent competencies to ensure competitiveness, stable operation and continuous development under the current conditions is subject to further research.

#### AUTHORS CONTRIBUTIONS

Conceptualization: Pysmak Viktoriia. Data curation: Sigaieva Tetiana. Funding acquisition: Mazhnyk Lidiya.

Investigation: Pysmak Viktoriia, Mazhnyk Lidiya. Resources: Mazhnyk Lidiya, Sigaieva Tetiana.

Software: Sigaieva Tetiana. Validation: Mazhnyk Lidiya.

Writing – original draft: Pysmak Viktoriia, Sigaieva Tetiana.

Writing - review & editing: Pysmak Viktoriia.

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