## Theoretical and Practical Research in Economic Fields



### Volume XV Issue 2(30) Summer 2024

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# Call for Papers Fall Issue 2024 Theoretical and Practical Research in Economic Fields

Many economists today are concerned by the proliferation of journals and the concomitant labyrinth of research to be conquered in order to reach the specific information they require. To combat this tendency, Theoretical and Practical Research in Economic Fields has been conceived and designed outside the realm of the traditional economics journal. It consists of concise communications that provide a means of rapid and efficient dissemination of new results, models, and methods in all fields of economic research.

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All the papers will be first considered by the Editors for general relevance, originality, and significance. If accepted for review, papers will then be subject to double blind peer review.

**This Special Issue** was created at the request of a group of researchers from Ukraine. It is a response to the challenging situation of Ukrainian scholars due to the Russian invasion as well as the growing demand for knowledge on Ukrainian issues.

We would like to express our endless thank to our colleagues, scholars from Ukraine who are working amid the war on topics that are important for all. Also, we thank all our international authors for their valuable contributions to this Issue.

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## Innovation and Investment Model for the Development of Small and Medium-Sized Businesses in Ukraine

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Abstract: The research topic, related to the use of an innovation and investment model in entrepreneurship, is relevant because it will contribute to the modernisation and digitalisation of the economy, which would facilitate more efficient use of information technologies and allow automating business processes. In addition, the introduction of an innovative investment model will help to create new markets and promising areas of development, which will support Ukraine's competitiveness in the international market. The purpose of this study is to analyse innovative approaches and investments that can contribute to the growth and competitiveness of small and medium-sized businesses in Ukraine. The analytical method, statistical method, functional method, system analysis, deduction, synthesis, and comparison were used. The current state of entrepreneurship in Ukraine was analysed, including its size, structure and volume of production. Various innovative approaches and technologies that can be used by small and medium-sized enterprises for their development are revealed. The investment environment for small and medium-sized businesses is considered, including an overview of available sources of financing, the quality of the financial market, the availability of state support and other investment instruments. The main challenges faced by small and medium-sized enterprises in Ukraine in the context of the innovation and investment model are highlighted, and development prospects are considered. The practical significance lies in the use of the identified results, solving issues related to the use of an innovation and investment model in order to bring entrepreneurship to a new level.

**Keywords:** development strategy; digitalisation; production volumes; state support; competitiveness. **JEL Classification:** O30; D24; D00.

#### Introduction

Small and medium-sized businesses in Ukraine play an extremely important role in the development of the country's economy, job creation, and social prosperity. This sector is a source of innovative solutions, economic growth and support for entrepreneurial activity. However, to achieve sustainable economic growth and maintain the competitiveness of small and medium-sized businesses, innovative approaches and investment support are required. Successful creation and development of small and medium-sized businesses in Ukraine depends on a proper innovation and investment model that encourages the introduction of new technologies, advanced processes, and increased competitiveness. Innovation is becoming a key factor determining the success and survival of enterprises in today's conditions of rapid technological change and growing competition (Shtal *et al.* 2021; Chernetska and Chernetskyi 2023). In addition, access to finance plays a critical role in promoting the development of small and medium-sized businesses. Insufficient financial support can be an obstacle to expanding operations, innovating, and developing new products or services (Lemishovska 2023). Innovative approaches allow enterprises to introduce new ideas, technologies and developments that contribute to improving their efficiency and competitiveness in the market. Moreover, investment support provides financial resources necessary for the development and expansion of enterprises' activities.

Grechan and Babich (2019) point to the need to create a favourable investment environment for the development of small and medium-sized businesses in Ukraine. They emphasise that innovative approaches and investments in new technologies and developments are key factors for the successful development of this sector. Andrusiak (2019) offers a model based on attracting investment from a variety of sources, including government support programmes, international investment, and private investors. The researcher emphasises the importance of creating a network of incubators and accelerators that would help small and medium-sized enterprises receive funding and expert support. Toporkov (2020) analyses the role of innovations in the development of small and medium-sized businesses in Ukraine. The researcher points out the need to encourage innovation, introduce new technologies, and develop new products and services. The author suggests strengthening interaction between business, scientific and research institutions to create innovation clusters.

Dmytro K. Semenda and Olha V. Semenda (2022) examines the role of state support in the development of small and medium-sized businesses in Ukraine. The researcher stressed the importance of establishing effective government support mechanisms, such as tax incentives, subsidies, access to finance and advisory support. Attention is also drawn to the need to improve the business climate and simplify administrative procedures. Bortnik (2022) considers the importance of human capital development in small and medium-sized businesses in Ukraine. He emphasises the need to train and develop skills in entrepreneurs and create a support and consulting system to improve managerial competence. The author also emphasises the importance of cooperation between educational institutions and the business community.

In general, innovation and investment are essential components for stimulating competitiveness, attracting foreign investment, creating new market opportunities, and improving enterprise productivity. The innovation and investment model for the development of small and medium-sized businesses in Ukraine will allow enterprises to effectively implement new ideas, technologies and processes that contribute to improving the quality of products and services. The purpose of the study is to create an objective and detailed picture of the innovation and investment model for the development of small and medium-sized businesses in Ukraine, which can serve as a basis for the development of strategies, policies and programmes for the development of this sector.

#### 1. Materials and Methods

Official documents and reports, namely reports of the State Statistics Service of Ukraine, were used to study the topic. The topical issues of using the innovation and investment model for the development of small and medium-sized businesses in Ukraine were investigated using methods that reveal the content of the object. The analytical method was used to analyse and systematise available information about the innovation and investment model of entrepreneurship development in Ukraine. This method allowed analysing various aspects of this model, such as financing, research activities, and government support, and determined their impact on the development of entrepreneurship. Using the statistical method, it was possible to investigate data on the development of small and medium-sized businesses, the investment climate, the volume of financing and other indicators that reflect the state of the innovation and investment model in Ukraine.

The functional method was used to investigate the functions and roles of various subjects (state, business, academic institutions) in the development of the innovation and investment model. This method allowed considering what functions they perform, how they interact with each other, and what results can be achieved through their joint activities. The system analysis method helped to study the relationships and interactions of various elements of the innovation and investment model. This method approached the model as a complete system and revealed possible interdependencies, synergistic effects, and optimisation opportunities for the system. Due to the synthesis method, it was possible to combine individual aspects, ideas, and concepts into one common model, which helped to gain a deeper understanding and forecasting of the development of innovative entrepreneurship in Ukraine. The method of deduction helped to find out the patterns that underlie the understanding of the innovation and investment model of entrepreneurship development in the country. The comparison method was used to compare various elements of the innovation and investment model of entrepreneurship development in Ukraine. This allowed understanding the features and shortcomings of the Ukrainian model, highlighting ideas and practices that can be applied to improve the situation in the country.

The study was conducted with the disclosure of some aspects, including theoretical and practical components. During the analysis of the theoretical aspect, attention was focused on the investigation of the concepts of innovation and investment, as key elements that contribute to economic growth and competitiveness. This included the study of various theoretical approaches, models and concepts that determine the role of innovative entrepreneurship in the country's sustainable development. Another aspect of the study was the analysis of specific recommendations and tools that can help support and stimulate innovative entrepreneurship in Ukraine.

This included considering strategies, programmes, and tools that could be used by the government, business associations, and other stakeholders to support the development of small and medium-sized businesses.

Based on the results obtained, the necessary recommendations for identifying specific problems of implementing an innovation and investment model that will contribute to solving issues and developing entrepreneurship in Ukraine were considered. As a result, these actions were applied to consider the feasibility of implementing such a model for the successful development of the country.

#### 2. Research Results

The role of innovations in the development of entrepreneurship is an important aspect of the innovation and investment model for the development of small and medium-sized businesses. Innovation involves introducing new ideas, technologies, products, or processes that enable businesses to create a competitive advantage, deliver sustainable growth, and adapt to changing market conditions. One of the key concepts is 'innovation activity'. This manifests itself in the ability of businesses to generate and implement new ideas and solutions to improve their products, processes, or services. Innovation activity contributes to the creation of new markets, increasing competitiveness and expanding the sphere of influence of the enterprise (Acs *et al.* 2013). In addition, the concept of 'innovative entrepreneurship' indicates the important role of entrepreneurs in promoting innovative development. Innovative entrepreneurs show entrepreneurial qualities such as creativity, risk-taking, the ability to sense market opportunities and develop new ideas. They encourage the development of innovative products and services, attract investment and contribute to the creation of new jobs (Autio *et al.* 2014). Another important concept is 'innovation system'. It involves interaction between various stakeholders, such as the government, business associations, scientific institutions and other organisations, in order to encourage innovative development. The innovation system provides knowledge exchange, technology development, access to funding and other resources necessary for the successful implementation of innovative projects (Huggins and Thompson 2015).

Innovation is a key factor in the development of entrepreneurship. The introduction of innovative ideas, the use of new technologies and the creation of innovative products allow enterprises to increase their competitiveness, enter new markets and achieve sustainable growth. The experience of many developed countries shows that the small and medium-sized business sector is both efficient and the most dynamic in economic activity. At the same time, large corporations, due to their significant financial, material and labour resources for implementing large innovative projects, have undoubted advantages in numerous industries and fields of activity (Eniola and Entebang 2015). However, in many industries, the most optimal and effective are small forms of organisation of economic activity, which are largely based on the development and implementation of innovations. Small and medium-sized businesses are characterised by flexibility, quick decision-making, and the ability to respond quickly to changes in the economic environment. These advantages allow them to effectively use limited resources and focus on innovative approaches to achieve success (Naradda Gamage *et al.* 2020). Through innovation, small and medium-sized enterprises can open up new markets, create unique products and services, improve their business processes, and increase efficiency.

Investment is crucial for the development of small and medium-sized businesses, as it promotes economic growth, creates new jobs and ensures the sustainability of entrepreneurship (Ziberi and Alili 2021). Through investment, small and medium-sized enterprises have the opportunity to introduce new ideas, technologies and innovative solutions, which allows them to improve the quality of their products and services, attract more customers and increase competitiveness in the market. In addition, investments help to expand the activities of enterprises, increase their production capacity and attract more employees, which has a positive impact on employment and social development. Investment resources available through investment, such as bank loans, venture capital, or investment funds, enable small and medium-sized enterprises to carry out significant projects, expand into new markets, modernise production, and improve infrastructure. In addition, small and medium-sized enterprises play an important role in regional development, and investment in this sector contributes to the creation of new jobs in remote areas, reduces economic inequality between regions, and contributes to overall economic development (Drobyazko et al. 2019; Gherghina et al. 2020).

Small and medium-sized enterprises have a unique opportunity to apply various innovative approaches and technologies to develop and strengthen their competitiveness in the market. The introduction of modern information systems, cloud technologies, and software allows optimising business processes, reducing costs, and improving productivity (Gregori and Holzmann 2020). The use of artificial intelligence allows analysing large amounts of data, predicting demand for goods and services, and personalising customer service. The use of advanced manufacturing technologies, such as 3D printing and the Internet of Things (IoT), helps speed up production, reduce costs, and improve product quality (Bican and Brem 2020). Focusing on innovation and developing new products

that meet market needs and have competitive advantages helps small and medium-sized enterprises occupy new niches and attract new customers. The state of the innovation and investment environment in Ukraine is complex and requires attention for further development. During the analysis of the state of the innovation and investment environment in Ukraine, the following main aspects can be identified: legal environment, financing of innovations, scientific and technical potential, and infrastructure development.

In 2023, the innovation and investment landscape for small and medium-sized enterprises (SMEs) in Ukraine has been significantly shaped by international support and strategic initiatives to overcome the challenges posed by the ongoing conflict and its aftermath. The European Commission, recognizing the critical role of intellectual property in innovation, has extended the SME Fund to Ukrainian businesses. This initiative aims to bolster innovation and entrepreneurship by covering a substantial portion of the costs associated with trademark and design protection within the European Union, up to a certain limit, thereby providing valuable support for Ukrainian innovative SMEs and playing a part in rebuilding the economy.

Additionally, the European Investment Bank has launched the EU for Ukraine Fund, a part of the broader EU for Ukraine initiative, with an initial commitment of over €400 million by EU Member States. The fund's first project includes a €25 million investment in Ukraine's equity growth fund, which is specifically aimed at strengthening tech and export-oriented SMEs in Ukraine and Moldova. This marks a strategic focus on sectors such as IT services and products, e-commerce, innovative retail and consumer goods, and fintech.

However, despite these promising developments, the Organization for Economic Co-operation and Development (OECD) has highlighted that the war has exacerbated pre-existing challenges in Ukraine's innovation ecosystem, including under-investment in research and development, brain drain, and the destruction of scientific infrastructure. Moving forward, there's an emphasis on rebuilding a better innovation ecosystem by leveraging Ukraine's strengths in fields such as computer science, engineering, and information and communication technology services.

The legal environment in Ukraine plays an important role in the development of innovation and investment activities. Ensuring stable, transparent and progressive legal norms and legislation is a key factor in stimulating innovative entrepreneurship and attracting investment to the country. One of the most important aspects of the legal environment is the protection of intellectual property. Ukraine pays considerable attention to creating an effective system for protecting intellectual property rights, including patent legislation, copyrights and trademarks. This contributes to the protection of innovative developments and design, which increases investors' interest in financing innovative projects in Ukraine. Another important aspect is the regulation of innovation financing (Tkachenko et al. 2023). Ukraine is developing and improving legislation aimed at creating favourable conditions for attracting investment and financing for innovative projects. Legislative acts, such as the Law of Ukraine 'On Innovation Activity', establish benefits and support for investors who finance innovative projects. In addition, there are special state programmes and support funds that contribute to the financing of innovative enterprises. The 'Programme for the Development of the National Industry of Priority Areas of Science and Technology', the 'Innovation Development Fund', and the 'Small and Medium Enterprise Support Fund' can be distinguished. An important element of the legal environment is to simplify the procedures and registration of enterprises, reduce bureaucratic obstacles and facilitate doing business. Ukraine is working to improve the business climate and introduce electronic services that simplify the processes of doing business and attracting investment (Slobodian et al. 2022).

Table 1 shows the main indicators of innovation activity of industrial enterprises in Ukraine for the period from 2010 to 2022.

Approximately 15% of the total number of industrial enterprises in Ukraine introduce innovations related to both products and technological processes. In recent years, this indicator has fluctuated. The lowest level was recorded in 2010 – 11.5%, and the highest – in 2016, reaching 16.6%. At the same time, only 1.9% of the total sales of industrial enterprises in 2020 accounted for the volume of innovative products (goods, services) sold. Although from 2017 to 2020, there was a tendency to increase this indicator. Notably, the number of types of innovative products introduced in 2020 amounted to 4066 units, which shows a significant increase compared to 2010.

In 2021, due to the consequences of COVID-19, namely changes in the operating mode, lockdowns, changes in demand and consumption, restrictions on the movement of people and goods, difficult conditions for innovation occurred. Some businesses may have been forced to temporarily close or operate in a limited mode, which affected the development and implementation of new innovations. In 2022, due to a full-scale war, the country's innovation and investment situation also worsened. The situation causes distrust of investors and a decrease in their willingness to invest in unstable regions. This leads to a reduction in innovative projects and limited opportunities for the development of small and medium-sized enterprises. War contributes to changes in

14.9

12.2

11.9

12.1

2020

2021

2022

2023

government policy priorities. The state is forced to redirect resources to military needs and respond to economic challenges associated with the situation. The war has significantly increased the degradation of innovative ecosystems in industrial sectors, in particular among small and medium-sized enterprises. The reasons for this are as follows: more than 40% of small and medium-sized enterprises have simply ceased operations, and those who continue to work are mainly focused on simple survival. Under such conditions, enterprise managers do not have the time and resources to develop innovations, and they consider this area of work as not a priority, but functional for obtaining at least a minimum volume of orders (Yurchak 2022; Gavrysh *et al.* 2024).

Year	Share of the number of enterprises that implemented innovations in the total number of enterprises, %	Number of types of innovative products introduced in the reporting year, units	Share of the volume of innovative products sold in the total volume of products sold by enterprises,
2010	11.5	2408	3.8
2011	12.8	3238	3.8
2012	13.6	3403	3.3
2013	13.6	3138	3.3
2014	12.1	3661	2.5
2015	15.2	3136	1.4
2016	16.6	4139	1.1
2017	14.3	2387	0.7
2018	15.6	3843	0.8
2019	13.8	2148	1.3

4066

2451

1.9

1.8

Table 1. Indicators of innovation activity of industrial enterprises in Ukraine

Nowadays, small and medium-sized businesses are considered as the basis of the national economy, as the subjects of this sector create approximately 60% of gross domestic product (GDP) and provide 7 million jobs, which is almost 40% of tax revenues. During the war in Ukraine, the total losses of small and medium-sized businesses exceeded USD 85 billion (excluding lost profits), and more than 1 million employees were also reduced. More than 19% of enterprises were forced to relocate, most of which moved from the east of Ukraine. A significant part of them (72%) moved their business within the country, 11% moved abroad, and 17% chose to relocate both abroad and within Ukraine. The reasons for moving the business were different: 38% said that the main goal was to save their business, 30% had customer orders in new markets, and 28% moved because of solving logistics problems. Now there is a change in business strategies among small and medium-sized businesses, approximately 43% of them plan to actively develop exports. The rate of registration of new businesses at the end of 2022 was 63% of the same period in 2021 (Center for Innovation Development 2022).

The war significantly affected the country's economy and entrepreneurship, but nevertheless, some enterprises found ways to survive and develop, relocating and adapting to new conditions (Kucherenko *et al.* 2023). This indicates the resilience of Ukrainian entrepreneurship and readiness to search for new markets and opportunities outside the country. For further development of innovative entrepreneurship in Ukraine, it is important to ensure a favourable investment and innovation environment. Financing of innovative activities of enterprises in Ukraine depends on various sources, including the following: the state budget of Ukraine, local budgets, own and borrowed funds, investments of individuals and legal entities, and other sources not prohibited by law (Abbasova *et al.* 2023; Barabash *et al.* 2023). These sources of financing play an important role in the development of innovation activities in Ukraine, stimulating the attraction of capital and the development of innovative projects.

In 2023, Ukraine's economic landscape has been defined by the resilience and strategic redirection of its industries amidst the ongoing conflict. Despite significant challenges, the country has displayed unexpected economic growth. The National Bank of Ukraine estimated a real GDP growth rate of 5.7% for the year, which was substantially higher than initial forecasts. This growth was in contrast to the broader European economy, which experienced more subdued growth projections due to the war's impact.

The innovation and investment landscape in Ukraine has been shaped by the war and the adaptability of businesses. For instance, Ukraine leveraged open-source technology and public-private innovation to bolster its strategic resilience. The use of social media and communication technologies for reconnaissance and intelligence has been noteworthy, with platforms such as the Diia app playing a crucial role in collecting data on military activity.

In addition to adapting existing technologies for military and strategic purposes, Ukraine has shown commitment to public-private partnerships and innovative solutions to address the war's challenges. The 'Brave1' portal, launched in April 2023, is an example of Ukraine's dedication to facilitating innovation and supporting the development of such collaborative projects.

The rebuilding of Ukraine's economy and infrastructure is a significant challenge that will require substantial investment. Estimates from the World Bank in 2022 suggested that the cost of reconstruction could exceed Ukraine's pre-invasion GDP, highlighting the enormity of the task ahead. Financial aid and support from international allies, particularly in the form of military and humanitarian assistance, have been pivotal during this period.

Table 2 shows the sources of financing innovation activities of industrial enterprises in the country for 2010-2022.

Year	Innovation costs, mln	Own funds of the enterprise		Funds from the state budget		Funds of non- resident investors		Funds from other sources	
	UAH	mln UAH	%	mln UAH	%	mln UAH	%	mln UAH	%
2010	8045.5	4775.2	59.4	87	1.1	2411.4	30	771.9	9.6
2011	14333.9	7585.6	52.9	149.2		56.9	0.4	6542.2	45.6
2012	11480.6	7335.9	63.9	224.3	2	994.8	8.7	2925.6	25.5
2013	9562.6	6973.4	72.9	24.7	0.3	1253.2	13.1	1311.3	13.7
2014	7695.9	6540.3	85	344.1	4.5	138.7	1.8	672.8	8.7
2015	13813.7	13427	97.2	55.1	0.4	58.6	0.4	273	2
2016	23229.5	22036	94.9	179	0.8	23.4	0.1	991	4.3
2017	9117.5	7704.1	84.5	227.3	2.5	107.8	1.2	1078.3	11.8
2018	12180	10742	88.2	639.1	5.2	107	0.9	692	5.7
2019	14220.9	12474.9	87.7	556.5	3.9	42.5	0.3	1147	8.1
2020	14406.7	12297.7	85.4	279.5	1.9	125.3	0.9	1704.2	11.8
2021	9882.7								-
2022	6524.2								_

Table 2. Sources of financing innovative activities of industrial enterprises

According to the data shown in Table 2, it can be concluded that the main source of financing for innovation activities of Ukrainian enterprises is mainly the own funds of business entities. In 2020, 85.4% of innovations were financed from enterprises' own funds, 1.9% – from the state budget, 0.9% – from non-resident investors, and 11.8% – from other sources. A similar trend has been observed in Ukraine since 2013. However, today the issue of increasing the share of state participation in financing innovation activities of Ukrainian enterprises remains relevant.

Crisis situations such as COVID-19 and the war have led to a decline in private investment in the economy. Investors are becoming more cautious and circumspect about investing in innovative projects due to the instability and risks associated with crisis conditions. The state redistributes its resources and changes priorities in supporting the innovation activities of enterprises. Funding for research, innovation programmes, grants, and other activities aimed at supporting businesses is being reduced. The state of financing small and medium-sized businesses in Ukraine during wartime has become extremely vulnerable due to the large number of uncertainties and risks associated with the impact of war on the economy. Reduced availability of loans, increased security costs, instability of the foreign exchange market, reduced consumer demand, lack of resources and changes in the legal environment – all this strongly affected the development of small and medium-sized businesses (Khodakivska *et al.* 2022; Samedova *et al.* 2022). However, it is worth noting that the war attracted a lot of attention and support from the European Union (EU) and the international community. This opened up new and concrete opportunities for Ukraine, such as receiving a grant of EUR 20 million specifically for 200 Ukrainian start-ups and innovative small and medium-sized enterprises (Delegation of the European Union to Ukraine 2022). To make the most of these opportunities, it is necessary to solve problems and create a favourable innovation environment for businesses and

start-ups, provide access to funding and support, and develop infrastructure that will contribute to the country's innovative growth.

Ukraine has a significant scientific and technical potential, which can be used to change the state of innovation potential of small and medium-sized businesses. Scientific and research institutions, universities and other scientific organisations in the country are a source of innovative ideas, advanced technologies, and scientific developments that can be used to stimulate the innovative development of small and medium-sized businesses. Currently, there are 16 technology parks operating in Ukraine in various sectors of economy, which indicates some progress in the development of innovative infrastructure in the country. Technoparks are specialised centres where research and innovation projects meet the field of entrepreneurship, promoting the exchange of knowledge, technology, and the creation of new enterprises (Podra 2020). Continuing the development of innovative infrastructure and creating new technology parks in various sectors of the economy is an important task for Ukraine. This will help strengthen the country's innovation potential, accelerate technological progress, and support the development of small and medium-sized businesses.

Currently, in addition to all the negative consequences of a full-scale war that is taking place in Ukraine and has a negative impact on the country's economy, innovation also faces a range of problems. These problems include the following: inefficient and weak mechanism for introducing innovations into the economic sphere and their further commercialisation; insufficient level of state support for innovative projects and their financing, both from the state budget and at the expense of private investors; limited use of opportunities provided for by the association agreement between Ukraine and the EU, in particular, with regard to scientific and technological cooperation, entrepreneurship development and industrial policy; reduced funding for science, innovation and education; spread of corruption and political instability; insufficient level of cooperation between innovative enterprises and research institutions, and other problems (Madiyarova et al. 2019; Berdar et al. 2021; Kutsmus et al. 2024).

Considering all these challenges, it is important to focus on creating a favourable innovation and investment environment that will contribute to the development of the innovation sector in Ukraine and become a recovery factor in the post-war period. To achieve this goal, it is necessary to solve a number of problems that may limit the potential and competitiveness of small and medium-sized businesses in the country. One way to solve these problems is to provide access to financial resources for innovative enterprises. To do this, you can use government programmes and support funds that provide financial support through grants, loans, venture capital, and the creation of special investment funds. It is also important to strengthen cooperation between innovative enterprises and scientific institutions. For this purpose, it is possible to develop scientific and technical cooperation programmes, create technology parks and incubators that will facilitate the exchange of knowledge and technologies, as well as joint research and innovation projects. Protecting intellectual property is another important aspect of driving innovation. By improving the system of legal protection of intellectual property, it is possible to ensure the protection of intellectual property. In addition, businesses need support in commercialising their innovative products and technologies. Collaboration with start-ups, incubators, and accelerators can provide support in marketing, sales, introducing new technologies, and expanding sales markets. The development of education and training is also crucial for the development of innovative entrepreneurship. It is necessary to develop specialised educational programmes, trainings and master classes for entrepreneurs and specialists in the field of innovation.

In general, the development of the innovation sector and support for small and medium-sized businesses in Ukraine require joint efforts of the government, businesses, and the research community. Improving the innovation environment can be key to stimulating economic growth, creating new jobs, and improving a country's competitiveness.

#### 3. Discussions

A scientific study conducted among entrepreneurs in Ukraine highlights the importance of applying an innovative and investment development model. This model provides for promoting innovation processes and attracting investment for the development of small and medium-sized businesses, which can become the main source of innovative solutions and innovative products. One of the main characteristics of the innovation and investment model is the support of innovative entrepreneurship. To achieve this goal, the state, business and the scientific community must cooperate to create a favourable innovation environment. An important element of such a model is the development of scientific and technical potential and infrastructure that supports innovative ideas and research. To provide financial support to small and medium-sized businesses, investment programmes and funds should create mechanisms for providing grants, loans, venture capital, and other investment instruments. Such

events help enterprises implement innovative projects and expand their activities. Ensuring the protection of intellectual property is another important aspect of the innovation and investment model. The development of an effective system of legal protection of intellectual property provides enterprises with the protection of their innovative solutions, which contributes to their commercialisation and encourages further development.

The study shows that the development of an innovative and investment model for small and medium-sized businesses in Ukraine has the potential to significantly increase their competitiveness and create conditions for sustainable economic growth. Countries with a developed innovation and investment model can have strong small and medium-sized enterprises that successfully implement new ideas and technologies, which encourages the development of the economy as a whole. In addition, the development and implementation of such a model will help attract foreign investment, as investors are looking for a stable and favourable innovative environment for placing their funds. This can lead to an increase in financial support for innovative projects and an increase in investment in small and medium-sized enterprises. The successful implementation of such a model will also contribute to the development of an innovative culture and support the entrepreneurial spirit among young people. The creation of specialised training programmes and mechanisms for the dissemination of knowledge and skills in the field of innovation and entrepreneurship will help create a new generation of entrepreneurs who will be ready to implement their ideas and implement innovative projects.

Amorós et al. (2019) analyse the innovation and investment component of the motivational mechanism of entrepreneurship, focusing on the principles of activation of innovation and investment orientation of entrepreneurial activity, the functions of innovation and investment development of entrepreneurship and models of innovative entrepreneurship. The researchers point out that the world's leading countries use several basic forms of support and promotion of innovative development. These include direct financing of innovations, in particular, the provision of subsidies for the development and promotion of new technologies, goods and services. The paper also mentions the creation of venture capital companies with state participation, which is one of the most effective forms of promoting innovative entrepreneurship. This approach is appropriate and important for Ukraine, as it helps to stimulate the innovative activity of enterprises, accelerates the development of new technologies, and improves the country's competitiveness in the international market. It is important to use these approaches, providing a supportive innovation environment and support for small and medium-sized enterprises that will contribute to their success and development. The state should actively cooperate with businesses and the research community, ensuring coordination of innovation efforts and creating a favourable climate for the development of innovative entrepreneurship in Ukraine.

Qiu et al. (2021) investigate the analysis and role of factors of innovation and investment model of economic growth in the context of effective use of human resources during market transformation. They also explore the areas of innovative development in the scientific and technological sphere and suggest measures for the formation of production infrastructure of enterprises. Within the framework of the study, the researchers focus on the importance of developing theoretical problems related to the investigation of the impact of production intensification on the level of efficiency and competitiveness of products in a market economy. These studies are aimed at improving the economic efficiency of countries and developing their innovative potential. This research can be a valuable contribution to the development of scientific knowledge about the innovation and investment model of economic development. The solutions proposed by the author and the analysis of factors can serve as a basis for developing effective strategies and policies aimed at ensuring stable growth and increasing the competitiveness of the Ukrainian economy.

Demirel and Danisman (2019) focus on an important problem related to innovation and investment activities and its impact on the development of the economy. One of the key aspects is the substantiation of the need to create a single category of innovation and investment activities, which will coordinate and link the processes of investment and innovative development of business entities. The researchers analyse various scientific, theoretical, and organisational approaches to the definition of innovation and investment activities. Attention is drawn to the differences and shortcomings of existing concepts, highlighting the need to create a holistic and well-coordinated theoretical base. The presented mechanism can contribute to the effective implementation of innovative solutions, the development of new technologies and improving the competitiveness of the economy as a whole. However, the results of the study may also reveal its practical application in real-world conditions. For example, it would be possible to present specific measures and recommendations for improving the state's innovation policy, developing innovation clusters, and supporting start-ups and small businesses.

Dzwigol *et al.* (2020) analyse the areas of innovative development in the scientific and technological sphere and consider measures for the development of the production infrastructure of enterprises. The study considers the main factors influencing innovation and technological progress and examines the reasons for success and

failure in implementing innovative projects. The introduction of new technologies and innovative solutions requires an efficient production infrastructure, including state-of-the-art equipment, research laboratories, and qualified personnel. Creating such an infrastructure is an important task for the successful innovative development of enterprises. The study provides an understanding of the problems and prospects of innovative development in the scientific and technological sphere. The results can be used to develop effective strategies and policies aimed at supporting innovation and creating a favourable environment for enterprise development and strengthening the country's competitiveness in the global economic space.

Rauter *et al.* (2019) investigate the role and impact of innovative entrepreneurship on sustainable economic growth and development of the country. Their research focuses on analysing the importance of innovative activity of enterprises in the context of achieving sustainable economic growth and ensuring the socio-economic well-being of the nation. Enterprises that actively implement innovative solutions have advantages over other players in the market, such as high competitiveness, increased production potential and the ability to adapt to changing market conditions. Creating new jobs, increasing the level of income of the population and improving the quality of life are key aspects that contribute to the sustainable development of the country. Innovative entrepreneurship determines the country's development trajectory and has great potential for achieving sustainable economic growth. For the success of this process, there is a need to develop education, science and culture, support and stimulate creative activity among entrepreneurs, scientists, and young people.

In general, the findings suggest that innovative entrepreneurship and the development of the innovation sphere in the country has a great potential for increasing competitiveness, attracting investment, expanding markets, and developing small and medium-sized businesses. An important factor in this process is the coordination of innovation and investment processes, development of effective strategies for financial regulation, and stimulation of scientific achievements in the field of innovation. This will help strengthen the economic potential of Ukraine and ensure stable development of the country in the international market.

#### **Conclusions and Further Research**

The study describes the role of innovations in the development of entrepreneurship and the importance of investment in small and medium-sized enterprises, analyses the state of the innovation and investment environment in Ukraine, and considers ways to improve it. The main aspects of the state of the environment in the country were described: legal environment, financing of innovations, scientific and technical potential, and infrastructure development. The most important aspects of the legal environment are the protection of intellectual property, regulation of innovation financing, simplification of procedures and registration of enterprises. Financing of innovative activities of enterprises is carried out by the following sources: the state budget of Ukraine, local budgets, own and borrowed funds, investments of individuals and legal entities, and other sources not prohibited by law. A number of problems that limit the development of the innovation sector were identified, such as insufficient funding, inefficient mechanisms for introducing innovations, insufficient cooperation between enterprises and scientific institutions, as well as problems in the field of legal protection of intellectual property. A number of measures that can be taken to improve the state of the innovation and investment environment in Ukraine are also highlighted. These include creating favourable conditions for attracting funding, supporting innovative enterprises through government programmes and funds, strengthening cooperation between enterprises and scientific institutions, protecting intellectual property, and developing innovation education.

Summing up, it can be noted that the development of small and medium-sized businesses requires a comprehensive innovative approach and cooperation between the state, business and the research community. To increase the country's competitiveness, it is important to develop new technologies, encourage investment in research projects, and create a favourable innovation environment. Further research in this line can be aimed at investigating effective mechanisms for financial support of innovations, analysing the role of state programmes and legislative acts in stimulating innovative entrepreneurship, and developing new methods and strategies for integrating innovative solutions in various sectors of the economy.

#### **Credit Authorship Contribution Statement**

**Marharyta M. Berdar:** Writing – original draft, Writing – review and editing, Methodology, Data curation, Validation; **Roman A. Yaremko-Hladun:** Writing – original draft, Formal analysis, Visualization.

#### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### **Declaration of Use of Generative AI and AI-assisted Technologies**

The authors declare that they have not used generative AI and AI-assisted technologies during the preparation of this work.

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