

DOI: 10.31617/3.2023(130)06

UDC 339.9:338.24=111

MAZUR Anastasiia,postgraduate student at the Department
of Management

Ivan Franko National University of Lviv

1, Universitetska St., Lviv, 79000, Ukraine

ORCID: 0000-0003-3506-4779

anastasiia.mazur@lnu.edu.ua

МАЗУР Анастасія,

аспірант кафедри менеджменту

Львівського національного університету

імені Івана Франка

вул. Університетська, 1, м. Львів, 79000,

Україна

ORCID: 0000-0003-3506-4779

anastasiia.mazur@lnu.edu.ua

**INTERNATIONAL EXPERIENCE
OF STARTUP REGULATION**

The international experience of regulating the development of startup entrepreneurship indicates that when creating effective models of interaction between state authorities (development of the legal framework, development programs, strategies), education (creation of an environment, for example, accelerators, incubators, development of a beta version based on higher education institutions, which promotes startups to enter the market) and business (funding of startups, involvement in corporations), the startup ecosystem has high indicators in world ratings. The purpose of the article is to highlight the components of the international experience of regulating the development of startups that are relevant to Ukraine. The methods applied are induction, deduction, analysis, and systematization. Regulation of the development of startups at the mega level includes international clusters, international organizations, and developed countries of the world. It has been studied that the mega level includes three directions: legal, financial, and strategic. In the international environment, the "EU Startup Nations Standard" declarations signed in 2021 and laws on startups aimed at promoting the creation and development of startups are of great importance. International organizations influencing the development of startup entrepreneurship are divided by functional type and geographical scope of activity. The positive startup climate in the USA is formed through the following factors: Silicon Valley activity, flexible state regulation of this area, entrepreneurial culture, and way of thinking. Israel's experience reveals the need for financing research and development works. Germany and Austria have an efficiently built system of higher education. Among the directions for improving the regulation of the development of startups in Ukraine, the following are highlighted: education – the creation of a center that will help startups to develop from the beginning of the emergence of an idea to the development of the first prototypes; security – financing of military and defense develop-

**МІЖНАРОДНИЙ ДОСВІД
РЕГУЛЮВАННЯ СТАРТАПІВ**

Міжнародний досвід регулювання розвитку стартап-підприємництва вказує, що за створення ефективних моделей взаємодії між державними органами влади (розроблення нормативно-правової бази, програм розвитку, стратегій), освітою (створення середовища, наприклад акселераторів, інкубаторів, розроблення бета-версії на базі закладів вищої освіти, що сприяє виходу стартапів на ринок) та бізнесом (фінансування стартапів, залучення до корпорацій) стартап-екосистема має високі показники у світових рейтингах. Метою статті є виокремлення актуальних для України складових міжнародного досвіду регулювання розвитку стартапів. Застосовано методи: індукції, дедукції, аналізу та систематизації. Регулювання розвитку стартапів на мегарівні має міжнародні кластери, міжнародні організації та розвинені країни світу. Досліджено, що мегарівень має три напрями: правовий, фінансовий і стратегічний. У міжнародному середовищі важливими є підписані у 2021 р. декларації "EU Startup Nations Standard" та закони про стартапи, спрямовані на сприяння створенню та розвитку стартапів. Міжнародні організації, що впливають на розвиток стартап-підприємництва, розподілено за функціональним типом і географічним масштабом діяльності. Позитивний стартап-клімат у США формується шляхом таких чинників: діяльність Кремнієвої долини, гнучке державне регулювання цієї сфери, підприємницька культура та спосіб мислення. Досвід Ізраїлю розкриває необхідність фінансування науково-дослідних і дослідно-конструкторських робіт. Німеччина та Австрія мають ефективно побудовану систему вищої освіти. Серед напрямів покращення регулювання розвитку стартапів в Україні виокремлено: освіту – створення центру, що допоможе стартапам розвиватися від початку появи ідеї до розроблення перших прототипів; безпеку – фінансування військових та оборонних розробок; екологію – підтримка екологічних



Copyright © 2023, The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (CC-BY) International license, (<https://creativecommons.org/licenses/by/4.0/>)

ments, ecology – support for environmental startups that have the potential to expand globally, and the local ecosystem – state-region-city-community-startup.

Keywords: startup, startup entrepreneurship, mega-level of regulation, development of startup entrepreneurship, international experience.

стартапів, що мають потенціал до розширення у світовому вимірі; та місцеву екосистему – держава-область-місто-громада-стартапер.

Ключові слова: стартап, стартап-підприємництво, мегарівень регулювання, розвиток стартап-підприємництва, міжнародний досвід.

JEL Classification: M13, R11.

Introduction

The experience of developed countries shows that in the conditions of global competition on the world market, the one who has a developed infrastructure for the implementation of innovations, who possesses the most effective mechanism of innovation activity and uses the entire range of technologies for the creation and implementation of innovations, wins. In this aspect, state regulation should create formal restrictions that would effectively operate in the rules of market behavior while not interfering with the operation of market mechanisms.

The problems of regulating the development of start-ups are presented in the studies of Ukrainian and foreign scientists, including Babiachok R. I., Kulchytskyi I. I. (2018), studied the development trends of start-ups in Ukraine, Bebko S. (2020), considered the cooperation of higher educational institutions in the conditions of global competition, Novak O., Musiichuk S., Zuyenko S. (2020), studied the role of university startups, Martin N., Matt K., Nibel K. (2019), examined how data protection regulation affects startup innovation, Ziakis C., Vlachopoulou M., Petridis K. (2022) with a paper on startup ecosystems. However, all the mentioned authors primarily devoted their works to researching the importance of state regulation; however, in the conditions of constant expansion of digital services in Ukrainian society, the issue of creating a practical digital space for startups is one of the main tasks of the crisis and post-crisis policy. Creating a single center will allow for a more detailed understanding of the features of startup creation, subsequent registration during scaling, and requests for new business models, services, or products from authorities or private investors, including international corporations. The issues of developing legislative frameworks for effective regulation of startup activities (official registration, rules of creation, support) and statistical evaluation (number of created startups, features at each stage of the life cycle) are some of the promising directions in regulating the development of startup entrepreneurship. Since Ukraine does not have data from the State Statistics Service on the number of startups created in Ukraine, it reflects the relevance of the set research problem.

The purpose of the article is to highlight the components of the international experience of regulating the development of startups that are relevant for Ukraine. The hypothesis of the article is the assumption that the international experience of regulating startups has a practical significance in its implementation in Ukraine to improve interaction between

participants of the startup ecosystem. The following methods of induction, deduction, analysis, systematization, and generalization were used to achieve the article's goal. In particular, the induction method made it possible to study foreign experience at the mega-level of regulation of startups, and the deduction method was used to develop measures for the adaptation of foreign regulatory experience in Ukraine. Thanks to the analysis, the peculiarities of the regulation of startups in such countries as the USA, Israel, Germany, and Austria were investigated. The method of generalization helped to formulate conclusions and summarize the research.

The article is divided into four parts: mega-level regulation of the development of startup entrepreneurship; regulation of startup entrepreneurship in the USA; regulation of startup activities in Israel; regulation of the development of startups in Germany and Austria.

Based on the study results, conclusions and recommendations were formulated for improving the regulation of the development of startups in Ukraine.

1. Mega-level regulation of the development of startup entrepreneurship

The study of the international influence on the regulation of the development of startups is essential in the modern conditions of European integration processes since compliance with the general international provisions of national legislation significantly affects the expansion of opportunities for cooperation, the introduction of new, radical, innovative solutions, the development of joint programs and further international financing of startups.

Regulation refers to any general form of "forced rule-making" by governments to influence market activity and the behavior of economic actors. Scientists and practitioners distinguish three types of regulation: economic regulation (antimonopoly legislation), social regulation (protection of consumer rights and the environment) and institutional regulation (rules on liability, bankruptcy) (Martin et al., 2019).

The mega level is a complex of international economic relations of all countries, which forms the international division of labor and is realized in the form of globalization of world economic relations (Rybakova, 2017). International clusters, organizations, and developed countries belong to the mega level.

The mega-level of regulation of startup entrepreneurship operates in three directions:

- legal – creation of an international legal field regarding the protection of intellectual property, patenting, and conducting business through the adoption of conventions, memoranda, and agreements both with individual countries of the world and with international organizations;

- financial – attracting financial resources at certain stages of the life cycle of startups, infrastructure facilities, or improving the ecosystem as a whole;
- strategic – planning or implementation of new technological solutions based on the example of ecosystem development and support of startups at various levels through reference to the experience of developed countries or individual regions or cities.

An international cluster is an international integrated structure that is based on the interaction of legally independent enterprises of the central and auxiliary industries, financial and credit, scientific, educational institutions, insurance, and other companies, which form production, intellectual, scientific, communication, information and technological relationships among themselves. These focused on the expected global market of resources and consumers, united by the introduction of modern, cutting-edge technologies into all spheres of operation, provided there is no control over the property of one participant over another but highly organized managerial control (Babiachok & Kulchytskyi, 2018).

An essential stage in supporting the development of startups at all stages of the life cycle was the signing of the "EU Startup Nations Standard" declaration by 26 EU member states and Iceland in March 2021 and the creation of the European Startup Nations Alliance, which will support the efforts of countries to become a "nation of startups" (New European Alliance to accelerate startups growth).

One of the reasons for developing the standard is that startups and scale-ups play a vital role in Europe's future economy and society both before the *COVID-19* crisis and during the pandemic. However, in the context of the pandemic, startups have experienced significant problems with reduced revenues and funding availability. To address these issues, the European Commission, together with Member States and stakeholders, has identified some practices that are signs of an environment conducive to the development of startups, reflected in standards (Startup Nations Standard). The main directions are defined as quick creation of a startup, smooth entry to the market, attraction, and retention of talent, stock options, innovations in regulation, procurement of innovations (including technology transfer policy), access to finance, social integration, diversity and protection of democratic values, digitalization (24 EU Member States commit at Digital Day to take action to support growth of EU Startups, 2021).

At the mega level, it highlights the world's developed countries because they create a favorable environment for the development and implementation of innovative, technical, and technological solutions of startups thanks to the legal and business environment and the creation of an effective ecosystem. According to the international ranking of startup ecosystems, the USA, Great Britain, and Israel are the most developed in the support field for startups (*Table 1*).

Table 1

Regional leaders in the startup ecosystem

Region	Countries	Rating	Features
Middle East	Israel	3	The complex geopolitical situation has made innovation a strategic survival advantage. Army as one of the leading accelerators. Development of startups at an early stage without any restrictions
	United Arab Emirates	27	State licenses for startups, new flexible visa rules, cooperation with the Israeli ecosystem, many investments, and funding for entrepreneurs
Africa	South Africa	49	It brings together a network of startup ecosystem stakeholders to create the South African Startup Act
North America	USA	1	Financing startups from the private sector without excessive government intervention, a large number of investors. Legislation to support strategic industries and flexibility of bankruptcy laws
	Canada	4	Startup visas, tax benefits, and significant venture investments
South America	Brazil	26	Large corporations contribute to creating a favorable climate for startups by providing accelerator programs, incubators, and funding opportunities
	Chile	34	Startup Chile government program (supporting startups worldwide through an accelerator and a 1-year visa)
Central America	Mexico	35	Investment financing, environment with low operating costs
Europe	Great Britain	2	Talent attraction through separate state programs scientific infrastructure
	Sweden	5	The support of the public sector makes it easier for entrepreneurs to focus on a global level in the presence of many events, co-working spaces, and accelerators
	Germany	6	The country's federal structure provides more power and independence to the German states, contributing to the development of a decentralized startup ecosystem and a diversified startup support system
Asia-Pacific	Singapore	7	Favorable tax legislation, ease of doing business
	Australia	8	The proactive approach of the federal and state governments (temporary visas for business innovation and investment), involvement of universities as active stakeholders in the development of urban ecosystems
	China	10	It directs the country to develop technologies as a strategic goal, directing many investments

Source: compiled by the author based on (Best Countries for Startups, 2023).

In foreign experience, there are laws on startups "Startup ACTS" – comprehensive legal instruments aimed at promoting the creation and development of startups, taking into account their unique needs, and are developed through the participation of various participants of the entrepreneurial ecosystem. It is noted that governments are paying more and more attention to entrepreneurship as creating quality jobs, increasing the economy's productivity in general, and introducing market innovations to solve development challenges. In this context, Startup Acts can become a new tool for solving specific problems faced by companies with high potential for growth and innovation. This tool can also be used to develop dialogue between the public and the private sector through participatory processes and to analyze joint business policy reforms (Startup ACTS, 2023).

International organizations are collective participants in international relations because the institutions and bodies created within them ensure the realization of the interests of those states, individuals, or social

groups that created them. International organizations are divided into inter-state (the founders are the governments of states) and non-state (the founders are individuals, legal entities, or their groups). According to the criteria of the functional type, the organizations mentioned above are divided into universal, military-political, economic, financial, cultural, and specialized. According to the geographical scale of activity, global, interregional, regional, and subregional (Malskyi & Matsyakh, 2002) (*Table 2*).

Table 2

International organizations influencing the development
of startup entrepreneurship

Functional type	Geographical scope of activity			
	Global	Interregional	Regional	Subregional
Universal	UN	Organization of economic cooperation and development	EU	The Visegrad Group
Military and political	International Atomic Energy Agency	North Atlantic Union	Organization for Security and Cooperation in Europe	Organization for Democracy and Economic Development
Economical	World Trade Organization	UNIDO	European Free Trade Association	Black Sea Economic Cooperation Organization
Financial	The World Bank	International organization of higher bodies of financial control	European Bank for Reconstruction and Development	Regional development banks
Cultural	UNESCO	International center for research, preservation and restoration of cultural values	European Creative Business Network	Trans Europe Halles
Specialized	World Wide Fund for Nature WWF Global Innovation Fund	Transparency International	Council of Europe	Nordic Environment Finance Corporation

Source: developed by the author based on (Malskyi & Matsyakh, 2002).

The mega-level is represented by international (supra-state) organizations, international financial institutions, and legal regulations recommended by international bodies. Such regulation significantly impacts regulatory processes within the country as it determines priority directions and criteria (Vladychyn, 2015). During the war in Ukraine, there were changes in the regulatory system for the development of startups, and the active cooperation of the state sector and international organizations became an essential direction in creating favorable conditions for Ukrainian startups, as some startups relocated to other countries to continue their activities.

2. Regulation of startup entrepreneurship in the USA

Practical factors of a positive startup climate in the USA are the Silicon Valley technology center, entrepreneurial culture, way of thinking,

and flexible state regulation of this field of activity. According to foreign researchers, the supporting role of the state in the broader ecosystem of entrepreneurship is currently of particular research interest, and it is argued that the state can be involved in some high-risk areas of activity where the private sector has consistently avoided participation. A typical example of such state intervention is the USA, where many business ecosystems, such as Silicon Valley, have benefited from an active role of the state. In the example of Silicon Valley, governments also play a role in the financial sector, contributing to the ecosystem's success. Of course, governments need to understand the underlying mechanisms for creating and diffusing innovation, thereby fostering business activity rather than hindering it. This intervention is encouraged by governments in various ways, in particular by providing tax incentives for R&D spending (Ziakakis et al., 2022).

In the United States, as part of the Startup America initiative, the federal government has introduced a series of policy initiatives aimed at entrepreneurs in five areas: reducing barriers, unlocking access to capital, connecting mentors, accelerating the commercialization of research and development, and opening new market opportunities for entrepreneurs (New European Alliance to accelerate startups growth, 2021).

In the conditions of the war period and post-war period, the American government actively attracted human capital for intellectual work, created personnel resources for developing technologies demanded by the market, and created the first private venture investment company.

In addition to direct government orders, methods of supporting startups in Silicon Valley include access to markets and big players (A Strategic Overview of the Silicon Valley Ecosystem, 2015). The impact on the development of startups is manifested in the following three principal dimensions. First, large firms (listed on the New York Stock Exchange (NYSE)) are willing to buy the products and services of startup firms. Multinational companies ranging from Citibank to Chevron, which go far beyond the IT industry, are willing to buy software and services from startups. The second aspect of influence is that large corporations become the first and often the leading adopters of innovation due to the high level of competition, which forces large companies to innovate constantly. Moreover, a third important role that large companies in Silicon Valley play is buyouts by large companies of ready-made startup companies or the rights to their product. This expansion strategy is used by IT companies of Silicon Valley, which often started as startups themselves, becoming the main customers of startups (Apple, Hewlett Packard).

3. Regulation of startup activities in Israel

Israel is distinguished by a broad policy strategy focused on startups with a combination of policies, programs, and legislative amendments to the normative framework of classical entrepreneurship. In martial law conditions, when cyber security is one of the most essential values, the study of Israel's

experience in the development of startups in this direction becomes relevant. Until the 1990s, the primary funding source for technology in Israel was funding for military, defense, and significant aerospace developments. In the conditions of technological changes over the past decades, the emphasis of attention has shifted to increasing investments in the largest dominant companies in the field of information technologies (Big Tech) (The Israeli Technological Eco-system, n.d.).

The main factors in the development of Israel as a center of entrepreneurial activity and a center of innovative technologies are (The Israeli Technological Eco-system, n.d.):

- a high level of innovation – the world leader in the number of startups per capita, Israeli innovations focused on making a profit include an extensive list of novelties on the market;
- large volumes of R&D funding – Israel ranks second in the world regarding R&D expenditure per capita. Israel invests about 4.1 % of its GDP in R&D; the OECD average is 2 %;
- education – Israel has the highest percentage of engineers and scientists per capita in the world and one of the highest rates of university degrees and academic publications per capita. Israel has a high-quality education system and is one of the most educated societies in the world;
- venture capital – availability and a large number of active venture capital funds.

State support is a separate factor in the effective formation of startups in Israel – in the early 1990s, the Israeli government established the "Technology Incubator" program. Today, more than 25 incubators are in the country, all privatized. Incubators offer government financing of up to 85 % of the cost of an early-stage project for two years. They work with startups from seed to early stage, thus minimizing the risk for the investor.

To date, incubators have released more than 1 100 projects, of which more than 45 % have successfully attracted additional investments from various investors. In addition, the Israel Innovation Authority provides various support programs with an annual budget of about USD 400 million.

The main program is the R&D Fund, which offers grants for R&D in the amount of up to 40 % of the approved cost of the R&D program. Other programs administered by the IIA include bilateral funds (joint R&D programs with foreign partners such as China, Canada, USA) that are eligible for financial assistance of 50 % of an Israeli company's R&D expenditures. Investment support – the investment law allows foreign companies to benefit from a reduced income tax rate and investment grants. Another incentive program the government proposes provides employment grants to research centers and large enterprises. The program offers a 4-year grant scheme that covers an average of 25 % of the employer's wage costs for each new employee (The Israeli Technological Eco-system, n.d.).

4. Regulation of the development of startup entrepreneurship in Germany and Austria

One of the essential factors in the successful development of startup entrepreneurship in Germany is the startup financing system, in which the Federal Ministry of Economics and Development plays an important role. Financial support programs are defined by low-interest rates, long terms, and the fact that startups at the initial stages of development rarely use traditional bank loans because banks, in most cases, cannot correctly assess the quality of innovative business models and their market potential. Startup support programs include (Financing. Federal Ministry for Economic Affairs and Energy, n.d.):

- "My microcredit" ("Mein Mikrokredit") – financing is provided by microcredit institutions of entrepreneurial activity only, with an emphasis on supporting young women and people with a migrant background, the interest rate is 7.9 % and a transaction fee (100 euros per loan), the total amount of the loan is 25 000 euros, the repayment term is up to 4 years, depending on the individual capabilities of the company;
- lending within the framework of the Micromezzanine Fund of Germany (Mikromezzaninfonds Deutschland) – financing is provided by the European Recovery Program and the European Social Fund, at the moment, more than two thousand financing programs are available in various directions.

Startup ecosystems undergo periodic changes and reflect the process of responding to changes. The Berlin ecosystem, in particular, reflects an optimized, dynamic environment. In 2015, the state of Berlin and its startup industry partners created the Berlin Startup Unit (Berliner Agenda für ein optimiertes Gründungsumfeld, 2016), which focuses on developing young and fast-growing companies. One of the main factors in the development of startups is talent orientation, namely the attraction of creative and qualified people who see their professional prospects in the startup market, paying particular attention to specialists from other countries.

The communication factor is reflected in the provision of advisory services and support from associations and chambers regarding practical issues of the day-to-day activities of startups. The internationalization of Berlin startups manifests in the orientation to the international market, the attraction of capital from foreign investors, and the involvement of employees of different nationalities. In this case, Berlin is making international connections and working to improve further the entrepreneurial culture for people with an international background who plan to work in Germany's startup environment.

High levels of talent competitiveness in Germany are determined by an effectively built higher education system that actively develops internal startup ecosystems.

Germany in higher education institutions not only introduces students to the peculiarities of startups but also allows students to use their

practical developments. The Julius Maximilian University of Würzburg presents scientific proposals that are relevant to all sectors of the economy. Core competencies will be presented in life and health science, new materials, digital society, and global change (*Table 3*).

Table 3

Applied research and core competencies
of Julius-Maximilians-Universität Würzburg

Research directions	Key competencies
Science of life	Biomedicine, infection and immunity, cancer, neurology, psychology, cardiovascular systems, ecosystems
Health science	Cancer, immunotherapy, infections, psychological diseases, regenerative medicine
Molecular chemistry and materials	Functional materials, solar technologies, chemistry of nanosystems, interaction of light materials, molecular synthesis and catalysis
Quantum phenomena in new materials	Organic photovoltaics, nanotechnology, topological insulators
Digital society	Human-computer interaction, e-commerce, digital business models, virtual/augmented reality
Cultural heritage	Classical studies, philology, regional perspective, digital humanities
Global changes	Biodiversity and ecosystem changes, social, political, economic, legal aspect, problems of globalization
Norms and behavior	Competition and regulation, mass media psychology

Source: (Innovations kompass Mainfranken, n.d.).

It highlights the cooperation experience between German higher education institutions and foreign partners and the development of long-term partnership programs for technology transfer. In particular, an example is the "Ukrainian German Technology Transfer University partnership" (Ukrainian German Technology Transfer university partnership); within the framework of this project, participants from both sides had the opportunity to get to know university ecosystems in more detail regarding the creation of new innovative solutions through conferences and presentations of startups' ideas. Implementing such programs will allow cooperation in scientific developments, student startup ideas, and the expansion of cooperation models between higher education institutions through joint educational programs.

The practice of supporting startups, depending on the regional ecosystem and the institution of higher education in Austria, is reflected in three directions (Preparing and supporting start-ups in higher education in Austria, 2019):

first level – Vienna University of Economics – students and teachers have the opportunity to use the local entrepreneurial infrastructure and funding from business angels, venture capital, legal support for the creation of companies, and the availability of human capital; the local ecosystem enables cooperation between HEIs (both public and private) in Vienna to support startups and relatively quickly introduce practical modules into curricula;

second level – Leopold and Franz University of Innsbruck – local government, chamber of commerce, Regional Development Agency of Tyrol cooperate with institutions of higher education to create local (small)

business ecosystems in various industries; establishment of a university-based holding company that participates in university startups and organizes various business events;

the third level – Technical University of Graz – the university's activities are focused on a separate branch, higher education has strong ties with industry (in the form of research contracts, joint research, training seminars, and grant support), in particular, the university closely cooperates with several participants in the automotive industry.

Based on the above practice of regional-level support for startups, it is also relevant for Ukrainian higher education institutions and local authorities to expand cooperation positions.

In global practice, there is a trend toward cooperation between corporations and startups by creating venture capital funds, hackathons, accelerators, startup studios, and incubators. Corporations attract external startups at the early stage and seed stage; among the advantages of cooperation are the following: ensuring competitiveness for the long term; access to innovations, new technologies, the attraction of new products; a ready-made solution for an existing problem and adaptation of a startup to the company's activities.

Globalization, combined with digitization, is a determining factor in developing civilization, economy, and education. Therefore, education can now be expanded beyond training specialists for the local or national labor market. Online technologies and communications are closely intertwined in all areas of life, and the ability to apply them in work and business is essential. In 10-20 years, the robotization trend will result in more labor-intensive occupations being displaced. However, robots will not be able to be effective in areas related to creativity, human relationships, emotions, and intrinsic motivation. Entrepreneurial abilities and creative potential for non-standard solutions to business tasks become especially necessary.

Analysis of the experience of world universities points to the importance of forming a new management culture based on teaching students, researchers, and teachers the most effective strategies and tactics for launching startups from academic platforms. As a result, startups still enter the market with the support of special courses, government grants, incubators, and private partnerships at the university, regional, state, and global levels (Novak et al., 2020). The creation of academic platforms for startups is a promising development direction for Ukrainian higher education institutions, which have already established business schools, and startup incubators, are developing science parks and laboratories, and are attracting projects for the development of the startup environment. However, a significant disadvantage is that higher education institutions need to have the opportunity to provide grants to continue to work on a new startup created at the university. Establishing cooperation between education and business is a promising solution since the business sector is interested in discovering new ideas regarding technological or innovative solutions.

Moreover, especially, such cooperation will be practical with large corporations. Also, cooperation between universities around established startups needing further scaling and cooperation at the regional level can be a solution that will expand the opportunities to increase the effects. In the educational environment, international cooperation between institutions of higher education is an active direction, allowing Ukrainian universities to participate in the exchange of world educational and scientific developments, teaching methods, distance teaching technology, and research (Bebko, 2020). Therefore, it is necessary to intensify cooperation and communication between Ukrainian educational institutions in war conditions. To support the development of startup entrepreneurship in the conditions of the Russian-Ukrainian war, an important direction is creating an academic platform for the development of startups in cooperation with higher education institutions and cooperation with business and state support.

Conclusions

The experience of developed countries shows that in the conditions of global competition on the world market, the one who has a developed infrastructure for the implementation of innovations, who possesses the most effective mechanism of innovation activity and uses the entire range of technologies for the creation and implementation of innovations, wins. Therefore, state regulation should create formal restrictions that would effectively operate in the market behavior rules while not hindering market mechanisms' operation.

Based on the analysis of foreign experience in regulating the development of startups, we will highlight factors and practical tools that can be useful for Ukraine – first, education. The most extensive ecosystem in the USA was formed based at Stanford University. Technical universities exist and are being created in Ukraine, which has an initial level of formation of the startup ecosystem (laboratories, accelerator programs in cooperation). The exchange of experience in the field of technology, the practice of Germany shows a positive result of supporting startup entrepreneurship by creating a separate center that deals comprehensively with startups – from initial consulting to developing prototypes. The second important factor is safety. In the conditions of war, Israel's experience shows that it is necessary to increase the funding of R&D and focus on financing the military and defense spheres for the creation of startups. Ecology is also a trend of global social development. The issue of improving the environmental condition and reducing its impact is raised yearly. This opens up opportunities for environmental startups and practical implementation of the idea in Ukraine, with subsequent scaling in countries that need to solve similar environmental problems. Furthermore, the local ecosystem is the fourth important factor in the success of startup business development. It is essential to focus on priority areas that can increase the city's competitiveness in the international ranking, define critical tasks in the state-region-city-community-startup system that will contribute to a better understanding of similar requests in all cities, and distinguish differences.

Modern trends in the economic development of leading countries show that the strategic management of startup entrepreneurship has undergone significant changes. In the conditions of the formation of the innovative sphere, as a factor of the economic development of an individual country, there is an increase in competition for talents and the development of high-tech products, which allows the implementation of innovative strategies for developing the country's economy. In the conditions of globalization processes, one of the main factors of the competitiveness of the innovative economy is startups that can generate new ideas and continue their activities in the conditions of change. Further research should investigate the international interaction system between government authorities, startup entrepreneurship, higher education institutions, and businesses. This creates opportunities to highlight the main principles of interaction that can be used in constructing effective regulation of startup entrepreneurship in Ukraine based on foreign experience.

СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ	REFERENCE
A Strategic Overview of the Silicon Valley Ecosystem: Towards Effectively "Harnessing" Silicon Valley. 2015. https://fsi-live.s3.us-west-1.amazonaws.com/s3fs-public/strategic_overview_of_sv_ecosystems.pdf	A Strategic Overview of the Silicon Valley Ecosystem: Towards Effectively "Harnessing" Silicon Valley. 2015. https://fsi-live.s3.us-west-1.amazonaws.com/s3fs-public/strategic_overview_of_sv_ecosystems.pdf
Berliner Agenda für ein optimiertes Gründungsumfeld. 2016. https://join.rz.tuhh.de/static/dokumente/aussen/be_2016_startup-metropole_agenda.pdf	Berliner Agenda für ein optimiertes Gründungsumfeld. (2016). https://join.rz.tuhh.de/static/dokumente/aussen/be_2016_startup-metropole_agenda.pdf
Best Countries for Startups. 2023. https://www.startupblink.com/?leaderboards	Best Countries for Startups. (2023). https://www.startupblink.com/?leaderboards
DAAD Dies Ukrainian German Technology Transfer university partnership. 2022. https://www.uni-wuerzburg.de/en/sft/daad-dies-ukrainian-german-technology-transfer-university-partnership	DAAD Dies Ukrainian German Technology Transfer university partnership. (2022). https://www.uni-wuerzburg.de/en/sft/daad-dies-ukrainian-german-technology-transfer-university-partnership
Financing. Federal Ministry for Economic Affairs and Energy. (n. d.). https://www.existenzgruender.de/EN/Die-ersten-Schritte/Finanzierung/inhalt.html	Financing. Federal Ministry for Economic Affairs and Energy. (n. d.). https://www.existenzgruender.de/EN/Die-ersten-Schritte/Finanzierung/inhalt.html
Innovations kompass Mainfranken. (n. d.). http://www.mainfranken.org/m_54143	Innovations kompass Mainfranken. (n. d.). http://www.mainfranken.org/m_54143
Martin N., Matt C., Niebel C. (2019) How Data Protection Regulation Affects Startup Innovation. <i>Inf Syst Front</i> , 21, 1307-1324. https://doi.org/10.1007/s10796-019-09974-2	Martin, N., Matt, C., & Niebel, C. (2019) How Data Protection Regulation Affects Startup Innovation. <i>Inf Syst Front</i> , 21, 1307-1324. https://doi.org/10.1007/s10796-019-09974-2
New European Alliance to accelerate startups growth. 2021. https://digital-strategy.ec.europa.eu/en/news/new-european-alliance-accelerate-startups-growth	New European Alliance to accelerate startups growth. (2021). https://digital-strategy.ec.europa.eu/en/news/new-european-alliance-accelerate-startups-growth
Novak O., Musiichuk S., Zuenko S. (2020) Management culture: the role of university startups. <i>Науковий Вісник Національного гірничого університету</i> , 5, 241–246. https://doi.org/10.33271/nvngu/2020%20%AD5/193	Novak, O., Musiichuk, S., & Zuenko, S. (2020). Management culture: the role of university startups. <i>Scientific Bulletin of the National Mining University</i> . 5, 241–246. https://doi.org/10.33271/nvngu/2020%20%AD5/193
Preparing and supporting start-ups in higher education in Austria. 2019. https://www.oecd-ilibrary.org/sites/9d7519b5-en/index.html?itemId=/content/component/9d7519b5-en	Preparing and supporting start-ups in higher education in Austria. (2019). https://www.oecd-ilibrary.org/sites/9d7519b5-en/index.html?itemId=/content/component/9d7519b5-en

Startup ACTS. (2023). https://www.icr-facility.eu/fileadmin/files/downloads/icreports/icreport_startupacts.pdf	Startup ACTS. (2023). https://www.icr-facility.eu/fileadmin/files/downloads/icreports/icreport_startupacts.pdf
Startup Nations Standard. (2021). https://startupnationsstandard.eu/about.html	Startup Nations Standard. (2021). https://startupnationsstandard.eu/about.html
The Israeli Technological Eco-system. (n. d.). https://www2.deloitte.com/il/en/pages/innovation/article/the_israeli_technological_eco-system.html	The Israeli Technological Eco-system. (n. d.). https://www2.deloitte.com/il/en/pages/innovation/article/the_israeli_technological_eco-system.html
Ziakis C., Vlachopoulou M., Petridis K. (2022). Start-Up Ecosystem (StUpEco): A Conceptual Framework and Empirical Research. <i>Journal of Open Innovation: Technology, Market, and Complexity</i> . 8, 35 p. https://doi.org/10.3390/joitmc8010035	Ziakis, C., Vlachopoulou, M., & Petridis, K. (2022). Start-Up Ecosystem (StUpEco): A Conceptual Framework and Empirical Research. <i>Journal of Open Innovation: Technology, Market, and Complexity</i> . 8, 35 p. https://doi.org/10.3390/joitmc8010035
24 EU Member States commit at Digital Day to take action to support growth of EU Startups 2021. https://digital-strategy.ec.europa.eu/en/news/24-eu-member-states-commit-digital-day-take-action-support-growth-eu-startups#:~:text=Declaration%20on%20EU%20Startup%20Nations%20Standard	24 EU Member States commit at Digital Day to take action to support growth of EU Startups 2021. https://digital-strategy.ec.europa.eu/en/news/24-eu-member-states-commit-digital-day-take-action-support-growth-eu-startups#:~:text=Declaration%20on%20EU%20Startup%20Nations%20Standard
Баб'ячок Р. І., Кульчицький І. І. (2018). Основні тенденції розвитку стартапів в Україні – проблеми, перешкоди і можливості. Аналітичний матеріал. Громадська синергія: сайт. https://www.civic-synergy.org.ua/wp-content/uploads/2018/04/Osnovni-tendentsiyi-rozvytku-startapiv-v-Ukrayini-1-1.pdf	Babiachok, R. I., & Kulchytskyi, I. I. (2018). The main trends in the development of startups in Ukraine – problems, obstacles and opportunities. Analytical material. Public synergy: website. https://www.civic-synergy.org.ua/wp-content/uploads/2018/04/Osnovni-tendentsiyi-rozvytku-startapiv-v-Ukrayini-1-1.pdf
Бєбко С. В. (2020). Кооперація закладів вищої освіти в умовах глобальної конкуренції. <i>Проблеми і перспективи економіки та управління</i> . 3(23), С. 17-25. https://doi.org/10.25140/2411-5215-2020-3(23)-17-25	Bebko, S. V. (2020). Cooperation of higher education institutions in conditions of global competition. <i>Problems and prospects of economics and management</i> . 3(23), 17-25. https://doi.org/10.25140/2411-5215-2020-3(23)-17-25
Владичин У. В. (2015). Державне регулювання іноземного банківництва в Україні: монографія. Львів. ЛНУ ім. І. Франка. 594 с.	Vladychyn, U. V. (2015). State regulation of foreign banking in Ukraine: monograph. Lviv. Ivan Franko National University of Lviv. 594 p.
Мальський М. З., Матях М. М. (2002). Теорія міжнародних відносин. Львів. ЛНУ ім. І. Франка. 392 с.	Malskyi, M. Z., & Matsyakh, M. M. (2002). Theory of international relations. Lviv: Ivan Franko National University of Lviv. 392 p.
Рибаківа Т. О. (2017). Зовнішньоекономічна діяльність як об'єкт фінансового регулювання. <i>Науковий вісник Ужгородського національного університету</i> . 14, 94- 98. http://www.visnyk-econom.uzhnu.uz.ua/archive/14_2_2017ua/21.pdf	Ryakova, T. O. (2017). Foreign economic activity as an object of financial regulation. <i>Scientific Bulletin of the Uzhhorod National University</i> . 14. 94-98 http://www.visnyk-econom.uzhnu.uz.ua/archive/14_2_2017ua/21.pdf

Conflict of interest. The author certify that she doesn't have financial or non-financial interest in the subject matter or materials discussed in this manuscript; the authors have no association with state bodies, any organizations or commercial entities having a financial interest in or financial conflict with the subject matter or research presented in the manuscript.

The author received no direct funding for this study.

Mazur A. International experience of startup regulation. *Foreign trade: economics, finance, law*. 2023. № 5. P. 83-96. Series. Economic Sciences. [https://doi.org/10.31617/3.2023\(130\)06](https://doi.org/10.31617/3.2023(130)06)

Received the editorial office 06.09.2023.

Arrived after revision 03.10.2023.

Accepted for printing 06.10.2023.

Publication online 26.10.2023.