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# ENTREPRENEURIAL ECOSYSTEM OF INTERNATIONAL BUSINESS IN THE TRANSITION ECONOMY: THE CASE OF SOUTHERN REGION OF UKRAINE

This paper aims to analyse and evaluate the state of the entrepreneurial ecosystem of international business in the transition economy based on the evidence of the southern region of Ukraine. The tasks of the study are (i) to identify the presence of components of the international business ecosystem and their quality depending on the level of development of the transition economy (policy, markets, finance, human capital, culture, support); (ii) to assess the current state of the components of the international business ecosystem; (iii) to identify constraining factors for the functioning of the regional entrepreneurial ecosystem for their further consideration when adjusting the trajectory of the development of the transition economy.

The model of Isenberg was used to observe the structure of the ecosystem. The international ratings (KOF Index of Globalization, Global Competitiveness Index, Doing Business, etc.), the data of the State Statistics Service of Ukraine, national laws, etc. were used for the qualitative measurement of the ecosystem performance. An online survey was conducted to assess the current state of the ecosystem and to identify the restraining factors of its functioning.

The research results demonstrate that all domains of an international business ecosystem are in the process of formation. 80% of respondents rated domains' performance at three points on a 5-point scale, indicating poor functioning the ecosystem. The respondents of the survey represent several industries but mostly agro-industrial complex. The restraining factors are ineffective government policy; business-unfriendly legislation; limited access to the infrastructure; insecurity of property rights;

inefficient business support systems, etc. The research results show that almost all components of the ecosystem are less efficient in Ukraine than in Europe, except for the entrepreneurs' intentions of networking and collaboration development.

The paper proposed original research on the institutional context of the ecosystem in the transition economy. The study is built on the idea of the specific regional peculiarities of entrepreneurial ecosystems and the impact of transformational processes of the economy of the country.

The results of the study can be used as a basis for a scientific focus on the policy of improving the entrepreneurial ecosystem. The article empirically expands the knowledge of entrepreneurial ecosystems and shows the potential and benefits of a complete integrated ecosystem for overall regional development.

Keywords: ecosystem, entrepreneurship, international business, region, transition economy, Ukraine

JEL classification: F23, L26, O52, P52, R12

Ця стаття має на меті проаналізувати та оцінити стан підприємницької екосистеми міжнародного бізнесу в перехідній економіці на основі даних південного регіону України. Завданнями дослідження є: 1) визначення наявності компонентів екосистеми міжнародного бізнесу та їх якості в залежності від рівня розвитку перехідної економіки (політика, ринки, фінанси, людський капітал, культура, підтримка); 2) оцінка поточного стану компонентів екосистеми міжнародного бізнесу; 3) визначення стримуючих факторів функціонування регіональної підприємницької екосистеми для подальшого їх урахування при коригуванні траєкторії розвитку перехідної економіки.

Для спостереження за структурою екосистеми використовувалася модель Ізенберга. Для якісного вимірювання ефективності екосистеми використовувалися міжнародні рейтинги (KOF Index of Globalization, Global Competitiveness Index, Doing Business та ін.), дані Державної служби статистики України, національні законодавчі акти та ін. Для оцінки поточного стану екосистеми та виявлення стримуючих факторів її функціонування було проведено онлайн-опитування.

Результати дослідження демонструють, що всі складові екосистеми міжнародного бізнесу перебувають у стадії формування. 80% респондентів оцінили їх ефективність у три бали за 5-бальною шкалою, що свідчить про погане функціонування екосистеми. Респонденти є представниками декількох галузей, але переважно агропромислового комплексу. Стримуючими факторами є: неефективна державна політика; «недружнє» для бізнесу законодавство; обмежений доступ до інфраструктури; незахищеність прав власності; неефективні системи підтримки бізнесу тощо. Результати дослідження показують, що майже всі компоненти екосистеми менш ефективні в Україні, ніж у Європі, за винятком намірів підприємців розвивати мережу та співпрацю.

У статті запропоновано оригінальне дослідження інституційного контексту підприємницької екосистеми в перехідній економіці. Дослідження побудовано на ідеї про специфічні регіональні особливості підприємницьких екосистем та вплив трансформаційних процесів економіки країни.

Результати дослідження можуть бути використані як основа для наукового фокусу на політиці вдосконалення підприємницької екосистеми. Стаття робить емпіричний внесок у знання про підприємницькі екосистеми та показує потенціал і переваги повної інтегрованої екосистеми для загального регіонального розвитку.

Ключові слова: екосистема, підприємництво, міжнародний бізнес, регіон, перехідна економіка, Україна

JEL classification: *F23*, *L26*, *O52*, *P52*, *R12* 

Introduction and review of literature. Entrepreneurs are key drivers of economic and social progress; they are mentors, inspirators, investors, new founders, and new employees (World Economic Forum, 2013); entrepreneurship changes the world (Woolley, 2017); successful entrepreneurial companies (high-growth businesses) are the grassroots of regional development (Stam & Van de Ven, 2019). Scholars argue that the

process of entrepreneurship is a collective achievement requiring strong contributions from numerous entrepreneurs (Van de Ven, 1993). To understand the context for entrepreneurship in particular territories (countries, regions, cities) the ecosystem approach is used. The ecosystem of international business is usually much broader and richer than the ecosystem of only local companies; the difference for international business lies in the latter's greater ability to integrate into the global economy. Therefore, international businesses make a valuable contribution to the growth of the regional ecosystem: they are the source of innovation, knowledge, and capital (Mack & Mayer, 2016; Ratten, 2020).

The entrepreneurial ecosystem concept appeared in the works of scholars from developed countries. It has been empirically studied further in rich entrepreneurial ecosystems in the US (Phoenix, Arizona; Washington DC) (Mack & Mayer, 2016; Feldman, 2001), Canada (Waterloo and Calgary) (Spiegel, 2017), Japan (Hamamtsu and Kyoto) (Aoyama, 2009), Netherlands (twelve regions) (Stam & van de Ven, 2019) etc. Hence, existing research mainly focuses on the characteristics of rich, highly developed ecosystems that enable entrepreneurship and value creation at the regional level. Meanwhile, developing and transition economies have their own characteristics which create cultural, political and institutional background for the entrepreneurial ecosystem emergence. Thus, research is needed to understand whether new ecosystem models are essential for different types of the economies. This will raise awareness of how specific ecosystems operate in developing and transition countries, which are usually under-represented in international business research in terms of whether they may be significantly different or considered similar.

Although the term "entrepreneurial ecosystem" is not usually used to define the external environment of the enterprise and its interaction within it, the phenomenon of the entrepreneurial ecosystem has been the objective of scientific research since the 1970s (Malecki, 2018). Understanding the entrepreneurial ecosystem stems from theories of

coexistence and interaction of organisms in nature for survival. (Moore, 1993) defines an ecosystem as a dynamic economic community, sustained by the interaction between organizations and people who are the organisms of the business world, creating new content through both interaction and competition. (Gugler, 2019) evaluates the competitiveness of locations to explain the reason for entrepreneurial success in some regions. However, during the last twenty years, the ecosystem approach has been studied by many authors. Some of them argue that there is no common definition of the term; (Stam, 2019) defines an ecosystem as a set of interdependent actors and factors coordinated to enable productive entrepreneurship. Most of the scholars emphasize the role of the entrepreneurial ecosystems in creating innovations (Van de Ven, 1993; Audretsch & Belitski, 2017) and new ventures (Neck et al., 2004; Acs et al., 2014) within the specific environment of the region (Fritsch, 2013; Mason & Brown, 2014; Mack & Mayer, 2016; Spigel, 2017; Cavallo et al., 2018; Dvouletý et al., 2019; Villegas-Mateos & Vázquez-Maguirre, 2020; Isenberg, 2011; Stam & Van de Ven, 2019). Thus, the entrepreneurial ecosystem can be understood as a dynamic community of interdependent actors that interact to facilitate innovation development, new sustainable ventures creation in a specific regional context.

The basic characteristics of the entrepreneurial ecosystem are the idea of the multidimensionality of entrepreneurship, its sensitivity to ascending conditions and the uniqueness due to them, the variability of factors affecting the state of the ecosystem (Komlósi et al., 2019); geographic location (Rücker Schaeffer et al., 2018), global integration (Trabskaja and Mets, 2019); and collaboration and collaboration (Moore, 1993).

A significant increase in academic interest in the topic of entrepreneurial ecosystems leads to the emergence of various models of them, consisting of a different number of components. (Van de Ven, 1993) uses the term "industrial infrastructure", which includes: (i) institutional arrangements for the legitimation, regulation and standardiza-

tion of new technology, (ii) public resource endowments of basic scientific knowledge, financing mechanisms, and a pool of competent labor, (iii) proprietary functions (applied R&D, commercialization, manufacturing, marketing, innovation network channel activities, access to market) and distribution functions by private entrepreneurial firms to commercialize the innovation for profit. (Kyfyak et al., 2021) examine the business environment in terms of 15 indicators of the socio-economic development of a country/ region: business performance indicators (GDP in actual per capita prices; Global Competitiveness Index, etc.); factor indicators of entrepreneurial activity (volume of innovation costs; capital investments; number of employed population; number of economically active population, etc.).

(Isenberg, 2011) built the model based on six domains: policy, markets, finance, culture, human capital, and supports. Entrepreneurs are the driving force behind the ecosystem, and the other interacting components are qualitative determinants of their productivity (Komlósi et al., 2019). (Stam & van de Ven, 2019) propose an integrative model of entrepreneurial ecosystems consisting of ten elements and outcomes of entrepreneurial activity: institutional arrangements (formal institutions, culture, and networks), resource endowments (physical infrastructure, demand, intermediaries, talent, knowledge, leadership, and finance), and outputs (productive entrepreneurship).

Most scholars describing the entrepreneurial ecosystem emphasize the importance of the local and regional environments: the entrepreneurial ecosystems generally emerge in locations that have place-specific assets (Mason & Brown, 2014). Regional aspects of the entrepreneurial development are domains of (Fritsch, 2013; Mason & Brown, 2014; Mack & Mayer, 2016; Spigel, 2017; Cavallo et al., 2018; Dvouletý et al., 2019; Villegas-Mateos & Vázquez-Maguirre, 2020), models of (Isenberg, 2011) and (Stam & Van de Ven, 2019).

Since the political background of a country also influences the process of ecosystem formation, several scientists are

working to identify the specific features of the entrepreneurial ecosystems of postsocialist, transitional and post-communist states. (Szerb & Trumbull, 2015) use the Global Entrepreneurship Index (GEI) to examine the level of entrepreneurship in the Visegrad countries to explain the role of entrepreneurship in economic development of these countries. (Grigore & Dragan, 2020) present the model of entrepreneurial ecosystem model in a transition economy based on the analysis of two Romanian city-regions through the lens of entrepreneurs. (Chepurenko, 2017) summarizes various aspects of the entrepreneurial development in European post-socialist countries. (Komlósi et al., 2019) link the quality of entrepreneurial ecosystems to the level of development of transition economies. According to the study, the best indicators of the elements of entrepreneurial ecosystems were recorded in the group of economically developed Baltic countries and several Central European countries - Slovenia, the Czech Republic, and Slovakia. Different trajectories of the development of other post-socialist economies correlate with the heterogeneity and backwardness of elements of entrepreneurial ecosystems. (Trabskaja and Mets, 2019) study the case of the development of the Estonian entrepreneurial ecosystem. It is argued that in most cases, the ecosystem is sensitive to starting conditions. However, Estonia, despite its historical transitional background, has developed a new path for the evolution of the "traditional" ecosystem in Western countries due to the long-term economic and political orientation and the unique resources of a small country.

The uniqueness of the key factors that form the foundation of entrepreneurial ecosystem of a particular region formed the basis for the present research. This provides insight into the institutional context of an ecosystem in a transitional economy. The study is based on the idea of the specific regional features of entrepreneurial ecosystems and the impact of transformational processes on the country's economy. The orientation of the authors to what remains beyond the scope of other concepts and models makes its re-

sults the basis for conclusions about improving the efficiency of regional business.

The study is based on the theoretical model of Isenberg's entrepreneurial ecosystem strategy for economic development. This framework was designed to address a number of policy pitfalls that are common in transition economies (too low public priority for entrepreneurship, lack of clarity on entrepreneurship policy objectives, etc.). International entrepreneurship researchers highlight the components of economic ecosystems that characterize both the national and regional business systems, creating its uniqueness and prerequisites for successful international integration. The model assumes that a successful business ecosystem consists of six components: policy, markets, finance, human capital, culture, and supports (Isenberg, 2011).

The purpose of the article. The article offers an original study on the international business ecosystem in the transitional economy. This paper focuses on documenting the presence of ecosystem components, their analysis and evaluation in the southern region of Ukraine. The objectives of the study are (i) to identify the presence of components of the international business ecosystem and their quality depending on the level of development of the transition economy (policy, markets, finance, human capital, culture, support); (ii) to assess the current state of the components of the international business ecosystem; (iii) to identify constraining factors for the functioning of the regional entrepreneurial ecosystem for their further consideration when adjusting the trajectory of the development of the transition economy.

Data and Methods. To meet the objectives of the research a three-stage study was conducted. At the first stage the macroenvironment of Ukrainian entrepreneurship was studied. The state of the national economy shows crucial pillars of the formation of regional ecosystem. International entrepreneurial activity is based on an assessment of expected benefits and risks. For example, when making a decision on the Greenfield Project international entrepreneurs analyze the stability of the political and legal environment,

the protection of property rights, macroeconomic stability, market capacity, availability of resources, etc. Data on the international business environment and qualitative assessments of the external environment reflecting the state of the national entrepreneurial ecosystem, is provided by international ratings. Data from the Global Entrepreneurship Index, Index of economic freedom, KOF Index of Globalization, Global Enabling Trade Index, Global Competitiveness Index, Global Innovation Index, and Doing Business for 2015 compared to 2019/20/21 (depending on the last issue of the ranking) is analysed. At the second stage the components of the entrepreneurial ecosystem of the southern region of Ukraine were specified. For the statistical description of the ecosystem components, the data of the State Statistics Service of Ukraine were used.

The third stage was aimed at accumulating entrepreneurial experience of interaction within the ecosystem. At this stage, an online survey was conducted through Google Forms. The survey questions were developed in accordance with the World Bank Ecosystem Survey Instrument. The survey respondents were heads and deputy heads of large enterprises in the southern region. Currently, in the southern region of Ukraine there are 186 large enterprises (employed by 250 or more people) that carry out export-import operations. Thus, the general population of the study was 186 enterprises. The survey was distributed via e-mail in October-December, 2021 to the official e-mail addresses of these 186 enterprises. So, the population of the study became its sample. The sampling methodology applied in the research is based on the recommendations of the World Bank's Enterprise Surveys Tool. To ensure the highest response rate possible, three mailings were made over a period of ten weeks. The overall response rate was 35% (65 enterprises). Under the sampling methodology for a population of 186 firms, a sample size of 65 firms yields an accuracy of 7.5% and a confidence of 90%, meaning that the "true" population parameter is in the range of 7.5% of the observed sample estimate, 90% of the time. The coefficients of variation of responses to the survey questions range from 17.94 to 32.8% (which is <33% and indicates a high level of consistency of respondents' answers). A milestone for understanding the results of the research and adequacy of the conclusions drawn is the assessment of the European entrepreneurial ecosystem conducted by Stanford University and Ernst & Young for the 2013 World Economic Forum.

Results and discussion. Identification of the presence of the international business ecosystem components and their quality depending on the level of development of the transition economy. Entrepreneurship tends to be geographically concentrated in specific regions, but also requires a complete and integrated ecosystem, so that components can grow together and reinforce each other (Isenberg, 2011).

The position of Ukraine in the world rankings (in 4 out of 7 presented in tab. 1) has been worsening in recent years. In the Global Entrepreneurship Index, Ukraine lost nine positions (the largest decline in the opportunity perception, technology absorption, and process innovation pillars). In the KOF Index of Globalization Ukraine occupies a stable position - ranking 40th out of 207 countries. In the Global Enabling Trade Index, Ukraine lost twelve positions - rank-

ing 95th out of 136 countries. In the Global Competitiveness Index, Ukraine lost nine positions. However, there have been positive changes in indicators of international trade, protection of investor rights, payment of taxes, business complexity, knowledge creation, programs and new computer technologies, innovations, etc.

The positive trend for Ukraine could be seen in the Doing Business ranking – plus thirty-two positions (the largest increase in tax payments, cross-border trade and protection of minority investors); in the Global Innovation Index (the largest increase in business sophistication (knowledge workers, innovation linkages, and knowledge absorption), knowledge and technology outputs (knowledge creation, impact, and diffusion), creative outputs (intangible assets, creative goods & services, online creativity) - plus twenty-one positions; in Index of economic freedom – plus thirty-eight positions (Ukraine moved from the group of repressed countries to the most unfree countries).

An analysis of world rankings allows us to identify five main problems in the macro environment of Ukrainian business: unpredictable government policy, poor infrastructure and monetary regulation, ineffective structure of commodities export,

Table 1 Ukraine's positions in international rankings

Ranking	]	Rank			
	2015	2019/20/21			
Global Entrepreneurship Index (Global Entrepreneurship and Development Institute, 2015; 2019)	64 <sup>th</sup>	73 <sup>th</sup>	-9		
Doing Business (The World Bank, 2015; 2020)	96 <sup>th</sup>	64 <sup>th</sup>	+32		
Index of Economic Freedom (The Heritage Foundation, 2015; 2021)	162 <sup>th</sup>	124 <sup>th</sup>	+38		
KOF Index of Globalization (KOF Swiss Economic Institute, 2015; 2021)	40 <sup>th</sup>	40 <sup>th</sup>	0		
Global Enabling Trade Index (World Economic Forum, 2014*; 2016**)	83 <sup>th</sup>	95 <sup>th</sup>	-12		
Global Competitiveness Index (World Economic Forum, 2016; 2020)	76 <sup>th</sup>	85 <sup>th</sup>	-9		
Global Innovation Index (WIPO, 2015; 2021)	64 <sup>th</sup>	49 <sup>th</sup>	+15		

<sup>\*2014 –</sup> the rank is presented once in two years

Source: Authors compilation

<sup>\*\* 2016 –</sup> the last update of the ranking

and difficulties with customs regulation and procedures. On the other hand, Ukraine has a number of advantages in international business development. Taking full advantage of them requires an objective assessment of the structure and performance of the existing international business ecosystem. Most of the ecosystem components can be identified at the regional level (Stam, 2015).

The southern region of Ukraine is potentially attractive for international business. The geographical location is the advantage of the region. The intersection of international waterways in the south of Ukraine provides access to the Azov and Black Seas. A large coastline contributes to efficient transport logistics and the development of tourism, as well as transboundary cooperation. Business in the region is concentrated mainly in the areas of agriculture, industry, trade, and education. Climatic conditions are particularly conducive to green energy business; a dry climate prevails throughout the region, with lots of sunny days and strong winds. The region's rich soils are conducive to international agricultural specialization. These traditional industries (food and beverages, green energy, logistics, water industry, manufacturing) provide a platform to dynamic, high-value added entrepreneurial ecosystem (Mason & Brown, 2014). The domains of the entrepreneurial ecosystem of the southern region of Ukraine are:

1. Policy. Government can do its part to create the preconditions for the emergence of entrepreneurial ecosystems (Mason & Brown, 2014). The legal basis for international economic policy in Ukraine was established in the 1990s. Almost every government has changed the vectors of foreign economic development of the country – a long-term strategy has not been developed. The legislative regulation of international business is currently being updated according to changing circumstances. In 2017-2019, the Ukrainian government adopted new laws regarding international business. Despite the presence of the component, it doesn't have a positive effect. The Corruption Perception Index (Transparency International, 2021) of Ukraine is 27 points in 2015,

33 – in 2020. The reasons for the low position of the county in the ranking are a curtailment of anti-corruption reforms; growing risks of doing business due to corrupt practices; worsening of the position in the PRS International Country Risk Guide; low rates of law enforcement reforms; failure of judicial reform.

2. Markets. According to the State Statistics Service of Ukraine the southern region occupies 86.2 thousand km<sup>2</sup> (14.3% of the territory of Ukraine). The GRP of the region makes up 9% of the GDP of Ukraine (State Statistics Service, 2020a). The population of the region is 4.6 million - 10.9% of the total population of the country. Residents have low purchasing power: in 2020 their average annual income was \$4091.5, while the average income across Ukraine was \$5102.4 (State Statistics Service, 2020a). The socioeconomic development of the region is slow. There are 155,000 registered enterprises in the region, including 1,400 subsidiaries and 22 foreign companies (State Statistics Service, 2020a). Export quota of the region was 37.4% in 2020, while import quota was at 24.3%. These figures testify to the high level of openness in the regional economy. The main export partners of the region are China, Indonesia, India, Saudi Arabia, Turkey, the EU, and the CIS. The export is based on primary commodities: cereals, sunflower seeds; ferrous metals. Exports high valueadded goods is negligible. The main import partners of the region are Turkey, China, Poland, and Germany. A significant share in the commodity structure is occupied by the machines, equipment, transport, and chemicals (State Statistics Service, 2020a).

3. Finance. Financial opportunities for international business are largely determined by access to capital. The main participants in this component are banks and non-banking financial institutions, foreign investors, public funds. 71 banking institutions were licensed by the National Bank of Ukraine in 2021 (incl. 38 banks with foreign capital). Net assets of the banking system of Ukraine grew by 8.9% in 2021. Interest rates for residents were 12.1% (national currency), 4.4% (foreign currency) in 2021. Interest rates

for non-residents were 29.8% (national currency), 4.9% (foreign currency) (National Bank of Ukraine, 2021). High interest rates make lending unaffordable to business. Other sources of financing have a small share in the structure of the sources of business investments in the region. According to the (Ukrainian Venture Capital and Private Equity Association 2015; 2018), the total value of venture capital in Ukraine was 132 million US dollars (0.16% of GDP) in 2015; in 2018 – 336.9 million US dollars (0.26% GDP). By geography, 52% of attracted investments were local, Ukrainian, in 2015, in 2019 – 85% were inflow from the EU. Odesa is the most attractive destination of venture capital in the region. Despite the positive trend in venture capital inflows to Ukraine, foreign investors account for 9.4% of the investments in the region. National and local authorities constitute 12.6% of investment. Entrepreneurial capital constitutes 70.1% of investment, while other funds make up 7.9% (State Statistics Service, 2019). This indicates that the financial component has not yet fully formed. The financial institutions and private entities of the ecosystem are not interested in interaction as a system - they continue to pursue their interests separately.

4. Human capital. Since an entrepreneurial ecosystem tends to emerge in places where there is already an established and highly valued knowledge base (Mason & Brown, 2014), this component is characterized by the level of education, professional qualification, innovations, etc., among the participants in the economic ecosystem. The population of the southern region of Ukraine is highly educated. The training of qualified personnel is carried out in thirty-seven professional institutions, with 139,000 students receiving higher education in the region (3% of the total population of the region in 2020) (State Statistics Service, 2020b). The Southern Science Center coordinates the scientific activities of the region. Innovations were recorded at seventy-six enterprises, including sixty-six industrial ones. These and other indicators are summarized in the rating of the innovation activity of twenty-seven Ukrainian regions: the Odesa region is ranked

19th; the Kherson region ranks 13th; and the Mykolayiv region ranks 10<sup>th</sup> (State Statistics Service, 2020a). Fundamental research was conducted in the following areas: biotechnology and medicine; the agro-industrial complex; ecology; mechanical engineering and instrument making; electronics, computer science and communications. Despite the high qualitative characteristics of this component, one third of residents with higher education perform jobs that do not require higher qualifications; unemployment among youth with higher education is higher than in other age groups; international labor migration outside the region is increasing; only 15% of postgraduates defended their theses and completed their degrees (State Statistics Service, 2020d). This indicates that the human capital component is available but not used efficiently.

5. Culture. The combination of national and regional mentality, as well as global trends, influences the formation of regional business culture. Entrepreneurship growth needs strong cultural support and positive attitudes of the nation towards the career of an entrepreneur. To define the cultural component of the entrepreneurial ecosystem of the international business in the southern region of Ukraine the pillars of the Global Entrepreneurial Index (Global Entrepreneurship and Development Institute, 2015; 2019) were analysed. The "Entrepreneurial Attitudes" block of pillars (opportunity perception, start-up skills, risk acceptance, networking, and cultural support) and partly "Entrepreneurial Abilities" block (opportunity startup and human capital) and their variables served as the basis for the study. According to the data obtained, entrepreneurial culture in Ukraine could be characterized as follows: (i) low potential for the population to perceive entrepreneurial opportunities (0.13 points out of 1 in 2019 year); (ii) the population's perception of starting skills is above average (0.60 points), more than half of the population believes that they have adequate starting skills; (iii) the population does not accept the risks associated with business startups (0.01 points); half of the population personally knows an entrepreneur who started a business within two years (0.55 points) and has an opportunity to connect to others in a country and the whole world; (iv) the cultural support is growing, 64% of the population aged 18-64 consider entrepreneurship a good career choice and enjoys high status (0.66 points); (v) people are poorly motivated by entrepreneurial opportunities as they face bureaucracy and paying taxes (0.23 points); (vi) Ukraine has high-quality human capital (50% of entrepreneurs have a high level of education). The overall assessment of the investigated block of pillars is low, the entrepreneurial culture is not yet developed in Ukraine. But it has the potential for development due to the growth in the cultural support for the entrepreneurs, the high status of entrepreneurial careers, and an increase in the share of enterprises with technological, product and process innovations.

6. Supports. International business support programs are a critical part of an international business ecosystem. For example, in 2013-2020, the European Bank for Reconstruction and Development offered Ukraine multiple grants for business growth. PUM Netherlands Senior Experts is another program, focused on transferring technology and business experience. The Global Innovation Fund invests in projects with a social impact. WannaBiz is a business incubator for building a startup ecosystem. Horizon 2021-2027 is a program of the European Union focused on science and innovation development, etc. The most positive aspect of this type of support is the attraction of a sufficient number of international donors for business development and sustainability. On the other hand, it also affected the consumer attitude of local businesses towards grants. Researchers note that some countries that receive more business support can end up wasting the money, instead of using it to motivate people to work or promote economic growth (Isenberg, 2011).

7. Ecosystem approach: The analysis shows that all components of a potentially successful ecosystem are present in the southern region of Ukraine, but they are not yet integrated, not hierarchically constructed (i.e. not interdependent), bound by ill-conceived

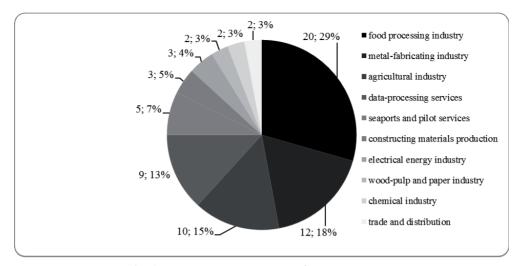
international government policies and bureaucracy (i.e. not interconnected), nor strive to satisfy personal interests (i.e., there are no mutual interests). Since the preconditions for a positive contribution of international business to regional development do not result from the mere presence of ecosystem components but rather from their co-evolution into a full-fledged system based on cooperation, trust, and partnership, we conclude that the regional ecosystem of the south of Ukraine is still in its infancy. Large companies, strong groups of active and visible entrepreneurs who are accessible and interested in making the region the best place to start and develop a company, are the driving forces behind the successful development of a city or region (Stam, 2015). They also bring together small business service companies (such as lawyers, accountants, consultants, investment bankers, etc.). An online survey was conducted to accumulate the entrepreneurial experience of large companies within the ecosystem.

Assessment of the current state of the components of the international business ecosystem and identification of constraints to its functioning. The assessment of the elements of an entrepreneurial ecosystem by its actors is the basis for identifying specific regional features of entrepreneurial ecosystems in a transitional economy. Survey respondents represent various industries, but mainly the agro-industrial complex (about 50%) (Fig. 1).

The questions of the survey were grouped into four blocks (tab. 2).

Each block consists of ten questions. When answering the question from blocks 1-3, the respondent's opinion was assessed from zero to five, where zero meant the influence of the factor as negative, and five - as positive (i.e., on a Likert scale). Four respondents had to answer "yes" or "no" to the questions from the block. Consistency of respondents' opinions is confirmed by descriptive statistics of survey responses (block 1-3) (Tables 3-5).

The analysis of the answers to the questions from the block one "A general assessment of the regulatory framework of the entrepreneurial ecosystem" allows us to con-



**Fig. 1:** The sectoral structure of the respondents Source: authors' elaboration based on the results of the survey

Blocks of questions in the survey

Table 2

No	Block	Expected information
1	A general assessment of the regulatory framework of the entrepreneurial ecosystem	The effectiveness of the legislative framework in the transition economy, regulatory policy of state and local authorities, non-governmental and public organizations, tax, customs, legal, international organizations
2	An assessment of the investment climate	Macroeconomic environment of the transition economy, access to factors of production, expected medium and long-term profit
3	An assessment of the interactions within the ecosystem	Entrepreneurs' awareness of other participants of the ecosystem, the state and needs for interaction between them in the transition economy
4	An assessment of the barriers, motives, and opportunities	Society's attitude towards entrepreneurs, internal motives, risks and barriers in the transition economy

Source: authors' elaboration based on the results of the survey

Table 3
The descriptive statistics of the respondents' answers (block one)

	Question number									
	1	2	3	4	5	6	7	8	9	10
Median	2	3	2	2	3	3	2	3	2	3
Mode	2	2	2	2	3	2	2	3	2	2
Std. Deviation	0.649	1.074	0.594	0.572	0.954	0.800	0.515	0.857	0.609	0.893
Sample variance	0.422	1.153	0.353	0.328	0.910	0.641	0.265	0.734	0.371	0.797
Variation coefficient	32.22	32.47	28.62	25.85	32.98	29.40	23.25	28.41	32.73	32.79
Minimum	1	2	1	0	1	2	1	1	0	1
Maximum	3	5	3	3	5	5	3	5	3	5
Reliability level (95,0%)	0.161	0.266	0.147	0.142	0.236	0.198	0.128	0.212	0.151	0.221

Source: authors' elaboration based on the results of the survey

clude (according to the question number): 1) The general legal and regulatory framework for entrepreneurship (government effectiveness) has a negative impact on business in the southern region of Ukraine (max. score 3). 2) 60% of the respondents evaluate the impact of the government's general foreign economic policy (foreign relations vectors, export support, customs legislation, sectoral priorities) as negative. 3) The effectiveness of local government support for international business is assessed with three points out of five possible. 4) The effectiveness of local tax administration and land management is assessed with three points out of five possible. 5) 80% of respondents assess the efficiency of the customs authorities as negative. 6) 80% of respondents assess the impact of the legislative environment on current decisions in international business as negative. 7) The influence of the external economic and legal environment on long-term decisions (business strategy) is assessed with three points out of five possible. 8) 80% of respondents rated the availability of information on markets, prices, legislation, licensing, taxation in Ukraine and abroad at three points out of five possible. 9) 80% of respondents rated the availability and efficiency of economic courts at three points out of five possible. 10) 80% of respondents rated the impact of international organizations, funds and programs on the general conditions for doing business in Ukraine at three points out of five possible. This is the corresponding coherence of respondents' answers to questions from the first block. The coefficient of variation varies from 23.25% to 32.8%.

It can be concluded that respondents assess the regulatory framework for international business as not helpful. The most influential limiting factors to the growth of international business are the low effectiveness of government policies and business-unfriendly legislation for businesses. An empirical study by (Shevchenko & Petrenko, 2020) also highlights these factors as negative for the development of business in Ukraine. According to the WEF Report (World Economic Forum, 2013) on the European entrepreneurial ecosystem, the regulatory framework component was rated as moderately helpful for business development. Thus, the Ukrainian companies operate in a more complicated regulatory framework than the European one. This component needs improvement.

The analysis of the respondents' answers to questions from block 2 "An assessment of the investment climate" allows us to draw the following conclusions (according to the question number): 1) The macroeconomic environment in the country (economic growth, GDP and welfare dynamics, inflationary processes, unemployment rate) is estimated by expected profit with three points out of five possible. 2) 60% of respondents

Table 4
The descriptive statistics of the respondents' answers (block two)

	Question number									
	1	2	3	4	5	6	7	8	9	10
Mean	2.015	-	3.138	3.200	2.154	1.750	2.323	2.046	2.138	2.923
Std. Error	0.060	-	0.128	0.124	0.077	0.412	0.058	0.077	0.085	0.110
Median	2	-	3	3	2	1.5	2	2	2	3
Mode	2	-	2	2	2	1	2	2	2	3
Std. Deviation	0.484	-	1.029	1.003	0.618	1.165	0.471	0.623	0.682	0.889
Sample variance	0.234	-	1.059	1.006	0.382	1.357	0.222	0.388	0.465	0.791
Variation coefficient	24.01	-	32.78	31.35	28.70	20.29	30.46	31.88	30.42	24.01
Minimum	1	-	1	2	0	0	2	0	1	2
Maximum	3	-	5	5	3	3	3	3	3	5
Reliability level (95,0%)	0.120	-	0.255	0.249	0.153	0.974	0.117	0.154	0.169	0.220

Source: authors' elaboration based on the results of the survey

do not intend to make investments in the near future (there is no statistics on this issue in Table 3, since it suggested a "yes" or "no" answer). 3) 60% of respondents rated the availability of bank loans as a source of funding at three points out of five points possible. 4) 60% of respondents rated the availability of alternative sources of funding in Ukraine (grants, business development programs, crowdfunding, charitable foundations, etc.) at three points out of five points possible. 5) 100% of respondents rated the possibility of attracting foreign investors to business projects at three points out of five points possible. 6) 100% of respondents rated the availability of legal, tax and accounting services at three points out of five points possible. 7) 100% of respondents rated the availability of physical infrastructure (transport, real estate, energy, etc.) at three points out of five points possible. 8) 100% of respondents rated the availability of land resources at three points out of five points possible. 9) 100% of respondents rated the availability of labour (with selection criteria) at three points out of five points possible. 10) 80% of respondents rated their desire to get the prepaid access to online register of investors at three points out of five points possible. This is the corresponding coherence of respondents' answers to questions from the second block. The coefficient of variation varies from 20.29% to 32.8%.

We can summarize the most fragile points of international business growth in the southern region of Ukraine. These are the quality of transport infrastructure, access to land resources, the availability of qualified workforce, the share of the foreign investments in the region and difficulties in attracting them. According to the WEF Report (World Economic Forum, 2013), the infrastructure and finance components were noted as moderately useful for business development; the human capital component was very useful and accessible. Therefore, to reach the European level of the development of these components, the Ukrainian government should improve the situation.

The analysis of the respondents' answers to questions from block 3"An assessment of the interactions within the ecosystem" allows to conclude that (according to the question number): 1) 80% of respondents rated their contacts and interaction with other companies - competitors, suppliers, partners, and contractors at four or five points. 2) 80% of respondents rated the non-financial support from investors, suppliers, and intermediaries at three points out of five points possible. 3) 80% of respondents rated bank as a partner in solving administrative, organizational and operational tasks at three points out of five points possible. 4) 80% of respondents rated the connection with the business support

Table 5
The descriptive statistics of the respondents' answers (block three)

	Question number									
	1	2	3	4	5	6	7	8	9	10
Mean	3.754	2.862	2.846	2.800	2.092	3.108	3.969	4.123	1.754	3.138
Std. Error	0.144	0.112	0.112	0.112	0.081	0.093	0.118	0.092	0.066	0.105
Median	4	3	3	3	2	3	4	4	2	3
Mode	4	3	3	3	2	3	4	4	2	3
Std. Deviation	1.160	0.899	0.905	0.905	0.655	0.753	0.851	0.740	0.531	0.846
Sample variance	1.345	0.809	0.820	0.819	0.429	0.566	0.905	0.547	0.282	0.715
Variation coefficient	30.89	31.43	31.81	32.32	31.30	24.22	23.97	17.94	30.29	26.94
Minimum	1	1	1	0	1	1	0	1	0	0
Maximum	5	5	5	5	4	5	5	5	3	4
Reliability level (95,0%)	0.287	0.223	0.224	0.224	0.162	0.186	0.236	0.183	0.132	0.210

Source: authors' elaboration based on the results of the survey

centres (chambers of commerce and industry of the region, employment centres, clubs of business people, etc.) at three points out of five points possible. 5) 80% of respondents rated their participation in Ukrainian business support programs at two points out of five points possible. 6) 60% of respondents rated media as a promotion tool at three points out of five points possible. 7) 60% of respondents rated their need to communicate with other entrepreneurs, desire to be a part of a entrepreneurs' network at four or five points. 8) 80% of respondents rely on personal connections, family, relatives, and friends in their business. 9) 100% of respondents do not trust and rely on authorities, laws, and courts. 10) 60% of respondents do not want to cooperate with universities as sources of knowledge and labour, especially in return for a fee This is the corresponding coherence of respondents' answers to questions from the second block. The variation coefficient varies from 17.94 to 32.32%.

It can be concluded that international business has a weak connection with support systems (professional business services – banks; mentors/advisors, business support services). It does not trust authorities and courts. Besides, companies create a network of entrepreneurial peers. Despite the fact that the researchers emphasize the positive effect of the university-industry partnership on the economic growth of the ecosystem (Panarina, 2015), the respondents do not intend to cooperate with universities as a source of knowledge and workforce. According to the WEF Report (World Economic Forum, 2013), support systems and education components were rated as moderately helpful for business development. Thus, the international business ecosystem of the southern region of Ukraine partly corresponds to European trends. But the education component, especially the role of the universities remains low and needs improvement.

There is no descriptive statistics for block 4 since it suggested a "yes" or "no" answer. The analysis of the respondents' answers to the questions of block 4 "An assessment of the barriers, motives, and op-

portunities" allows to conclude (according to the question number): 1) 100% of respondents are proud of their enterprise. 2) 60% of respondents believe that society values the success of entrepreneurship. 3) 60% of respondents would like to change the sphere of their activity. 4) 60% of respondents agree that informal support will help their business and they are willing to pay for it. 5) 60% of respondents provide financial/non-financial assistance to other organizations. 6) 80% of respondents do not feel support from local authorities. 7) 100% of respondents believe that people are afraid to do business due to lack of information. 8) 100% of respondents believe that people are afraid to do business due to lack of funding. 9) 100% of respondents believe that people are afraid to do business due to corruption. 10) 100% of respondents believe that people are afraid to do business due to insecurity of property and raiding.

The answers to the questions of block 4 show that international business feels insecure about property and raiding, corruption, lack of financing and information. That is why, while the entrepreneurs are proud of their activity, most of them would like to change the field of activity. This result correlates with the WEF Report (World Economic Forum, 2013), where the cultural support component is ranked as the worst among all the components.

The results of our research prove and enlarge the investigation previously published by the World Bank. According to their findings, the constraints on business activity in Ukraine in 2017 were: unstable political situation, insufficient demand, volatility of the national currency, the war, corruption, inflation, excessive tax pressure, frequent changes in the regulatory framework, and low availability of funding (Cheney et al., 2017). Our research shows that from 2017 to the present, there have been no positive changes in the components of the international business ecosystem. Political instability and global economic crisis caused by the COVID-19 pandemic worsen the international business ecosystem in the southern region of Ukraine.

Conclusions. This research was conducted to identify the state of the international business ecosystem of the southern region of Ukraine and its impact on the entrepreneurial activity. Research objectives were achieved. The idea, structure and state of the international business ecosystem of the southern region of Ukraine were analysed and evaluated. The components of the regional ecosystem were characterized using international and national statistical data sources and the survey results. Most of them testify to the average and low level of economic development of the country.

It is shown that although all components of a potentially successful economic ecosystem in the southern region of Ukraine are present, they are not yet integrated. They are bound by ill-conceived state policy and bureaucracy (i.e., not interconnected) and not built hierarchically (i.e., not interdependent). Ecosystem business agents do not seek to satisfy personal interests as a source of synergistic results (i.e. they do not pursue mutual interests). Since the prerequisites for a successful international business ecosystem come not only from the presence of ecosystem components, but also from mutually beneficial partnerships, we conclude that the formation of an international business ecosystem in the southern region of Ukraine is still at an early stage. The southern region of Ukraine has various advantages to achieve success in international business, including a high level of specialization in shipbuilding, agro-industry, tourism, recreation, green energy, etc.

The results of the online survey made it possible to assess the current state of the ecosystem. Survey respondents represent various industries, but mainly the agro-industrial complex (about 50%). The components of the international business ecosystem of the southern region of Ukraine were assessed by respondents on a Likert scale. Less than 20% of respondents gave positive assessment (4-5 points) to the components. 80% of respondents rated them at three points out of five points possible, that indicates inefficient performance of the ecosystem. The general entrepreneurship regulatory framework (gov-

ernment effectiveness) has negative impact to business in the southern region of Ukraine (max. score 3). 60% of respondents do not intend to invest in the near future.

Restraining factors for the functioning of the regional entrepreneurial ecosystem have been identified. These include: low effectiveness of public policy; businessunfriendly legislation; poor quality of the transport and market infrastructure; limited access to the land market: inefficient use of qualified workforce, inessential share and size of foreign investments; insecurity of property rights, raiding and corruption; weak relationship between business performance and support systems; unwillingness of companies to pay for resources (information, scientific support of universities) that could contribute to economic growth. Removing restrictions on the development of the entrepreneurial ecosystem is a necessary element for developing long-term economic and political priorities for countries in transition. The results of monitoring the assessment of the components of the regional entrepreneurial ecosystem can be used in the development of a regional development strategy.

The qualitative measurement of the ecosystem and survey results show that almost all components of the international business ecosystem of the southern region of Ukraine are less efficient than the European ones. The intentions and efforts to build an entrepreneurial network are among the characteristics that mirror European trends. 80% of respondents have successfully built entrepreneurial networks.

The efficient use of regional resources will eventually bring more benefits than risks. Therefore, we would like to continue studying the development of the international business ecosystem of the region, considering it as an evolutionary process and observing the changes that will occur in the state of the components through their integration into a full-fledged ecosystem that stimulates overall regional development. The set of tools for improving the business ecosystem is the subject of further research, as it needs more detail.

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# ENTREPRENEURIAL ECOSYSTEM OF INTERNATIONAL BUSINESS IN THE TRANSITION ECONOMY: THE CASE OF SOUTHERN REGION OF UKRAINE

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This paper aims to analyse and evaluate the state of the entrepreneurial ecosystem of international business in the transition economy based on the evidence of the southern region of Ukraine. The tasks of the study are (i) to identify the presence of components of the international business ecosystem and their quality depending on the level of development of the transition economy (policy, markets,

finance, human capital, culture, support); (ii) to assess the current state of the components of the international business ecosystem; (iii) to identify constraining factors for the functioning of the regional entrepreneurial ecosystem for their further consideration when adjusting the trajectory of the development of the transition economy.

The model of Isenberg was used to observe the structure of the ecosystem. The international ratings (KOF Index of Globalization, Global Competitiveness Index, Doing Business, etc.), the data of the State Statistics Service of Ukraine, national laws, etc. were used for the qualitative measurement of the ecosystem performance. An online survey was conducted to assess the current state of the ecosystem and to identify the restraining factors of its functioning.

The research results demonstrate that all domains of an international business ecosystem are in the process of formation. 80% of respondents rated domains' performance at three points on a 5-point scale, indicating poor functioning the ecosystem. The respondents of the survey represent several industries but mostly agro-industrial complex. The restraining factors are ineffective government policy; business-unfriendly legislation; limited access to the infrastructure; insecurity of property rights; inefficient business support systems, etc. The research results show that almost all components of the ecosystem are less efficient in Ukraine than in Europe, except for the entrepreneurs' intentions of networking and collaboration development.

The paper proposed original research on the institutional context of the ecosystem in the transition economy. The study is built on the idea of the specific regional peculiarities of entrepreneurial ecosystems and the impact of transformational processes of the economy of the country.

The results of the study can be used as a basis for a scientific focus on the policy of improving the entrepreneurial ecosystem. The article empirically expands the knowledge of entrepreneurial ecosystems and shows the potential and benefits of a complete integrated ecosystem for overall regional development.

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