

# THE ROLE OF MARKETS IN THE ENTREPRENEURIAL ECOSYSTEM AND THEIR ASSESSMENT IN THE REPUBLIC OF MOLDOVA

Natalia Vinogradova<sup>1</sup>

**Summary:** The availability of accessible markets contributes to increased sales and profit growth, stimulates competition, promotes innovation, and encourages economic integration. Some researchers even argue that the purpose of entrepreneurial ecosystems is to create and operate markets for entrepreneurship development. The article has two main objectives: (i) to define the role of markets as a component of the entrepreneurial ecosystem based on an analysis of various models of the entrepreneurial ecosystem's structure; (ii) to assess some indicators, characterizing market as an ecosystem's component in the Republic of Moldova. A survey of entrepreneurs carried out in 2022 in 25 regions of the Republic of Moldova, showed a relatively high level of competition and demand in the domestic market. However, the practice of cooperation with other enterprises is still not sufficiently developed. The majority of entrepreneurs assessed the market access factor negatively, especially since access to both the CIS and the EU markets is particularly difficult at present.

**Keywords:** Markets, entrepreneurial ecosystem, survey assessment, Republic of Moldova

**JEL Classification:** L10, L26, M21, C83

*Acknowledgments:* This article was prepared within the research project 20.80009.0807.38 “Multidimensional assessment and development of the entrepreneurial ecosystem at national and regional level in order to boost the SME sector in the Republic of Moldova”, financed from the state budget of the Republic of Moldova.

## Introduction

According to many studies, entrepreneurship is the driving force behind economic growth and development both in countries with developed market economies and those in transition (Smallbone & Welter, 2003; Audretsch et al., 2006; Aculai et al., 2020).

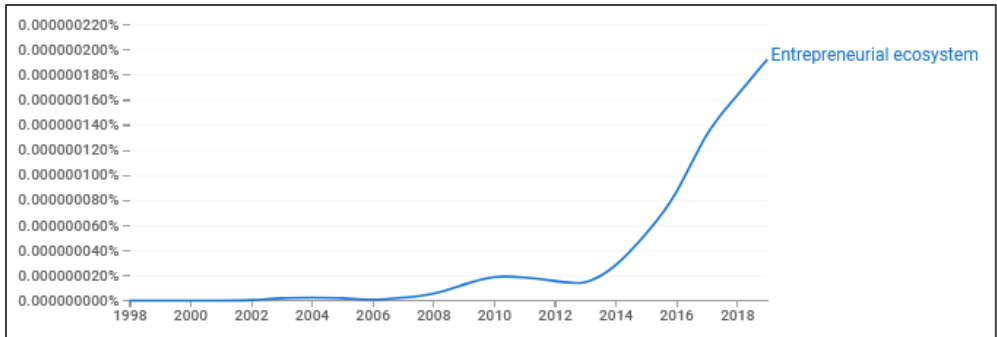
However, to develop effectively, entrepreneurship must operate in a favorable socio-economic environment. Recently, the totality of participants and factors in such an environment has been reflected in the concept of an “entrepreneurial ecosystem”. This concept largely continued and replaced such previously popular concepts as “clusters”, “innovation districts”, and “industrial regions”.

---

<sup>1</sup> Ph.D., Research Associate, National Institute for Economic Research, AESM, Chisinau, Republic of Moldova, E-mail: [natalia.vinogradova01@gmail.com](mailto:natalia.vinogradova01@gmail.com),  
orcid: 0000-0003-4485-668X

As the analysis of the frequency of use of the concept of “entrepreneurial ecosystem”, carried out using the online service Google Books Ngram Viewer, shows, over the past two decades in English-language books, the subject of the entrepreneurial ecosystem has become an object of the increased interest of researchers and practitioners (Figure 1).

**Figure 1.** Google Books Ngram for the phrase “Entrepreneurial ecosystem” from 1998 to 2019



Source: elaborated by the author at <https://books.google.com/ngrams/>

But at the same time, despite the growing number of publications on this topic, researchers have not yet come to a consensus on the term “entrepreneurial ecosystem”.

The term “ecosystem” in economics became widespread after the publication of the scientific article “Predators and Prey: A New Ecology of Competition” by James F. Moore in 1993 (Moore, 1993). Moore introduced the new for his time concept of “business ecosystem”, by which he understood a system that includes companies that “work cooperatively and competitively to support new products, satisfy customer needs, and eventually incorporate the next round of innovations”. A similar concept was proposed by Deborah J. Jackson (2011), who described her definition of an entrepreneurial innovation ecosystem as “complex relationships that are formed between actors or entities whose functional goal is to enable technology development and innovation”. According to the definition given by Daniel Isenberg, founder of the Babson Entrepreneurship Ecosystem Project, an entrepreneurial ecosystem is a dynamic, self-evolving network of interconnected agents that promote entrepreneurship in their region (Isenberg, 2011). Peter Vogel, in a workshop organized by the OECD and LEED in 2013, defined the entrepreneurial ecosystem as “a dynamic, interactive community within a geographic region, composed of varied and inter-dependent actors (e.g. entrepreneurs, institutions and organizations) and factors (e.g. markets, regulatory framework, support setting, entrepreneurial culture), which evolved over time and whose actors and factors coexist and interact to promote new venture creation” (Vogel, 2013). According to the 2014 OECD definition, an entrepreneurial ecosystem is “a set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organizations (e.g.

firms, venture capitalists, business angels, banks), institutions (universities, public sector agencies, financial bodies) and entrepreneurial processes (e.g. the business birth rate, numbers of high growth firms, levels of 'blockbuster entrepreneurship', number of serial entrepreneurs, degree of sell-out mentality within firms and levels of entrepreneurial ambition) which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment” (Mason & Brown, 2014). According to Stam E. & Spigel B. (2016), the entrepreneurial ecosystem is defined as “a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular territory”.

Thus, the term “entrepreneurial ecosystem” brings together entrepreneurs and all elements of the environment that interact to develop entrepreneurship and ensure economic growth.

Entrepreneurial ecosystems with accessible markets are important for facilitating business growth in the region. The presence of accessible markets, both local (OECD et al., 2020) and foreign (Nagy et al., 2012), contributes to increased sales and profit growth, stimulates competition, promotes innovation and economic integration. Some researchers even define the concept of an entrepreneurial ecosystem as a metaphor for the more traditional term “markets”, noting as the purpose of entrepreneurial ecosystems is “to create and operate markets...” (Audretsch et al., 2019)

## **Research Methods**

In this article, one of the research methods is desk research, which includes a comprehensive review of modern academic literature in order to characterize the role of markets as a component of entrepreneurial ecosystems within the framework of various models proposed and substantiated by researchers. Additionally, the component “Markets” of the entrepreneurial ecosystem of the Republic of Moldova was evaluated based on a survey of entrepreneurs carried out as part of the applied scientific project “Multidimensional assessment and development of the entrepreneurial ecosystem at the national and regional level in order to boost the SME sector in the Republic of Moldova”, implemented at the National Institute for Economic Research of Moldova between June and October of 2022. A total of 204 enterprises from 25 districts of the Republic of Moldova participated in the survey.

## **The Role of Markets Based on Entrepreneurial Ecosystem Models**

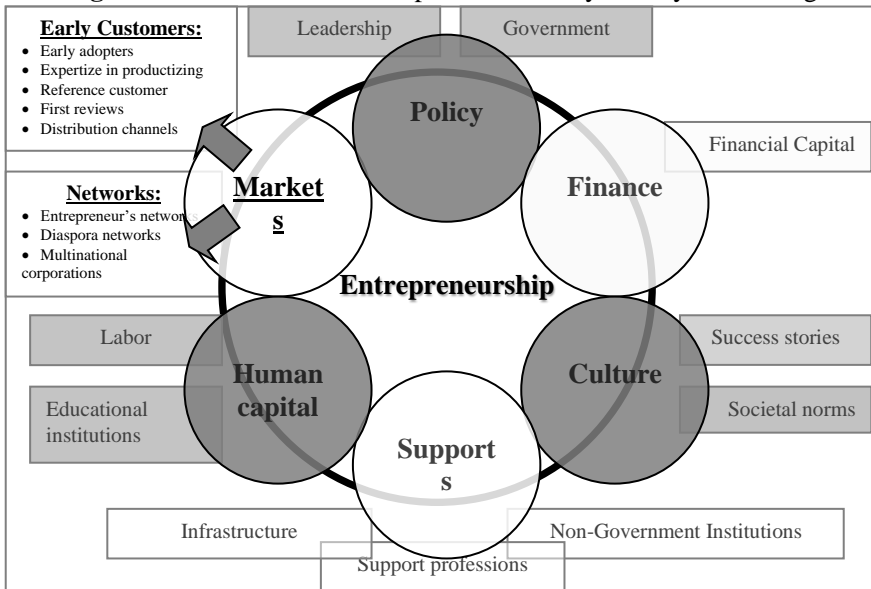
Foreign studies highlight several key approaches to describing the structure of the entrepreneurial ecosystem. Our article will focus on those of them in which markets are identified as a separate constituent element of entrepreneurial ecosystems.

### *Model of the Entrepreneurial System by Isenberg*

The popular entrepreneurial ecosystem model of Daniel Isenberg consists of six key domains: (1) conducive policy, (2) markets, (3) capital, (4) human skills, (5) culture,

and (6) supports. All listed domains are equivalent and “interacting in highly complex and specific ways” (Isenberg, 2011) – see Figure 2.

**Figure 2.** Domains of the entrepreneurial ecosystem by D.Isenberg



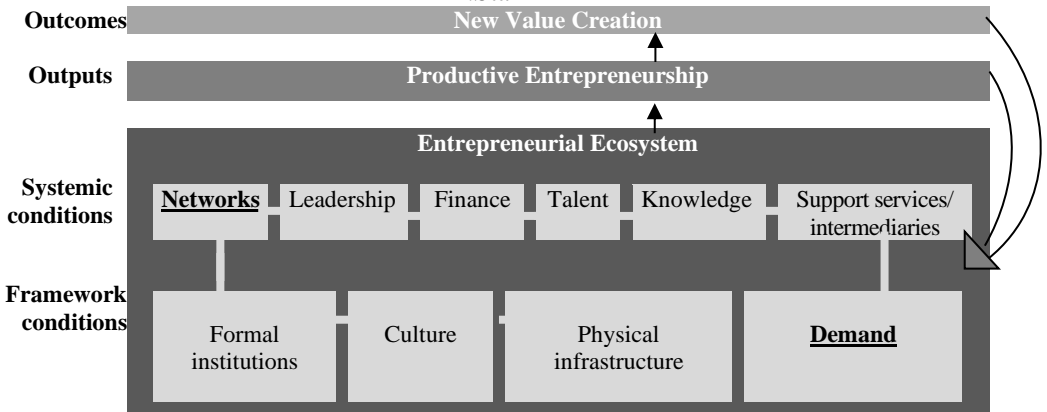
Source: adopted by the author based on Isenberg, D. (2011)

In turn, the “markets” domain, according to Isenberg, includes such elements as the presence of early customers to help evaluate the product and service level, give first feedback and establish distribution channels, as well as entrepreneurial networks, diaspora, and multinational corporations as necessary networks for development.

*Model of the Entrepreneurial System by Stam*

Erik Stam (2015) proposed a synthetic model of an entrepreneurial ecosystem, which includes four ontological layers (Framework conditions, Systemic conditions, Outputs, and Outcomes) and cause-and-effect relationships of various directions, including intra-level ones. According to this model, demand in the domestic market is one of the elements of the entrepreneurial ecosystem that forms the framework conditions for its functioning. At the same time, networks of enterprises are part of the systemic conditions of the entrepreneurial ecosystem and provide an information flow that allows for the efficient distribution of labor and capital (Figure 3).

**Figure 3.** Key elements, outputs, and outcomes of the entrepreneurial ecosystem by E.Stam



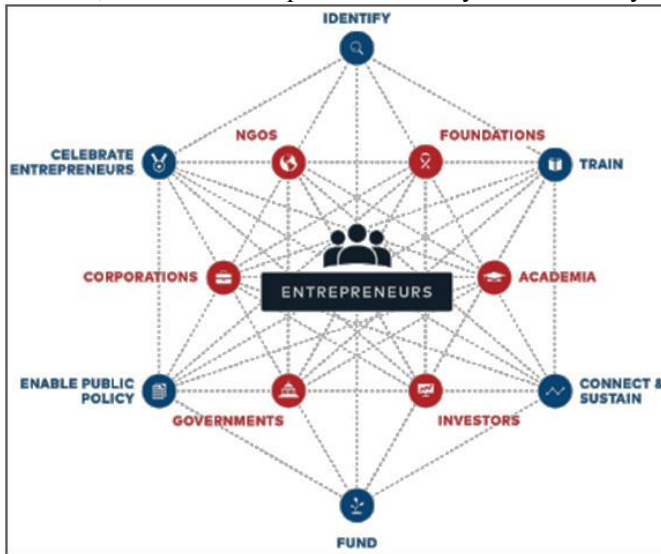
Source: adopted by the author based on Stam, E. (2015)

Later, in collaboration with A. Van de Ven, Stam modified his entrepreneurial ecosystem model. He retained the same ten basic elements of the entrepreneurial ecosystem but changed their grouping into two levels: “Institutional arrangements” (Networks, Culture, and Formal institutions) and “Resource endowments” (Demand and the remaining six elements) (Stam & Van de Ven, 2021).

*Model of the Entrepreneurial System ‘Six+Six’ by Koltai*

The ‘Six+Six’ model of Steven R. Koltai is based on the mindset that businesses grow when multiple sectors and actors consciously work together to create an enabling environment for entrepreneurship (Koltai & Muspatt, 2016). The six areas of entrepreneurship development work are key pillars of a strong ecosystem and include: ‘identify’ (to discover new entrepreneurs or new business ideas); ‘train’ (educational resources in different forms); ‘connect and sustain’ (connection to the business network); ‘fund’ (all types of financing for all stages of a venture); ‘enable’ (enabling legal, fiscal, and regulatory systems); ‘celebrate’ (entrepreneurship must be celebrated as a desirable and viable career path in society). And six types of actors should participate in their implementation: non-governmental organizations, corporations, foundations, government, academic institutions, and investors (Figure 4).

**Figure 4.** The ‘Six + Six’ Entrepreneurial Ecosystem Model by S.Koltai



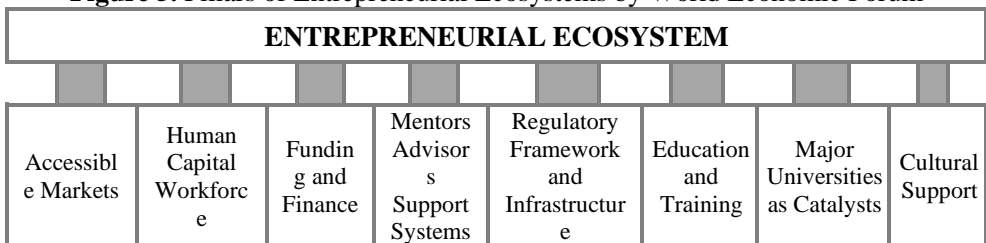
Source: Koltai S.R. & Muspatt M. (2016)

According to this model, the role of markets is to create conditions for the emergence of new business ideas, sustain enterprises, and network entrepreneurs with the support of large corporations, investors, and other actors.

*Entrepreneurial System model by World Economic Forum*

The report of the World Economic Forum (2013) proposes an entrepreneurial ecosystem model consisting of the eight pillars considered to make up an ecosystem (Figure 5). The first one is “Accessible Markets”.

**Figure 5.** Pillars of Entrepreneurial Ecosystems by World Economic Forum



Source: World Economic Forum (2013)

In this model, the constituent elements of accessible markets are the Domestic Market and Foreign Market, each of which includes (i) Large companies as customers; (ii) Small/medium companies as customers; and (iii) Governments as customers.

*Entrepreneurial System model by Aspen Institute*

In practical guidelines for assessing the entrepreneurial ecosystem (“Entrepreneurial Ecosystem Diagnostic Toolkit”), researchers from the Aspen Network of Development Entrepreneurs identified eight domains, and the key actors associated with each of them. At the same time, these domains affect the growth of entrepreneurship in different ways. They were placed on a spectrum, ranging from direct influence, partially direct influence, and indirect influence (Table 1).

**Table 1.** Domains of Entrepreneurial Ecosystem by Aspen Network of Development Entrepreneurs

Direct		Partially Direct					Indirect
Finance	Support	Policy	<u>Markets</u>	Human Capital	Infrastructure	Research & Development	Culture
Banks	Incubators	National Government	Domestic Corporations	Universities	Electricity providers	Public Research Centers and Laboratories	Media
Venture Capital	Accelerators	State Government	International Corporations	Technical Training Institutes	Transport providers	Private Research Centers and Laboratories	Government
Angel Investors	Industry Associations / Networks	Local Government	Consumers	High Schools	Communications (Mobile, internet)		Schools
Foundations	Legal services		Distribution Networks	Community Colleges	Other utility providers (gas, water)		Professional Associations
Microfinance Institutions	Accounting Services		Retail Networks				Social Organization
Public Capital Markets	Technical Experts / Mentors		Marketing Networks				
Development Finance Institutions	Credit Rating Agencies						
Government							

Source: adopted by the author based on Aspen Network of Development Entrepreneurs (2013)

Markets, according to the Aspen Network of Development Entrepreneurs, have a partially direct influence on the growth of entrepreneurship and include contributions from domestic and international corporations, consumers, distribution networks, as well as retail and marketing networks.

Thus, the analysis of the main models of the entrepreneurial ecosystem showed that markets (available markets) are one of the main components without which it is impossible to develop business in the region. Mandatory indicators that characterize this component include (i) the presence of a sufficient number of enterprises (a special role belongs to large corporations), (ii) the presence of consumers, including early customers, and (iii) entrepreneurial networks.

## Assessment of the “Markets” component within the entrepreneurial ecosystem of the Republic of Moldova

As part of the applied scientific project “Multidimensional assessment and development of the entrepreneurial ecosystem at the national and regional level in order to boost the SME sector in the Republic of Moldova”, implemented at the National Institute for Economic Research ([www.ince.md](http://www.ince.md)) in June-October 2022, a survey of entrepreneurs has been carried out to assess the factors of the entrepreneurial ecosystem, including for each of its components. In total, 204 enterprises from 25 districts of the Republic of Moldova participated in the survey. Table 2 presents the main characteristics of the sample.

**Table 2.** Characteristics of the enterprises in the sample

Indicator	Values	Share, %
<b>Size</b>	Micro (1-9 pers.)	66.7
	Small (10-49 pers.)	25.0
	Medium (50-249 pers.)	5.9
	Large (250 and more pers.)	2.5
<b>Type of activity</b>	Agriculture	10.9
	Industry	15.4
	Trade	25.4
	Services	45.8
	Construction	2.5
<b>Location area</b>	Urban area	73.0
	Rural area	27.0
<b>The period of existence of the enterprise</b>	<1 year	1.5
	1-2 years	10.3
	3-5 years	19.1
	>=6 years	69.1

Source: elaborated by the author based on the entrepreneurs’ survey

The assessment of the entrepreneurial ecosystem of the Republic of Moldova was aimed at achieving two goals. First of all, such an analysis serves to determine the nature and characteristics of the entrepreneurial ecosystem in the country. In addition, the results of the entrepreneurial ecosystem assessment reveal the enabling factors and barriers to the development of entrepreneurship. The data obtained during the assessment can serve as a good basis for revising the regulatory framework governing entrepreneurship.

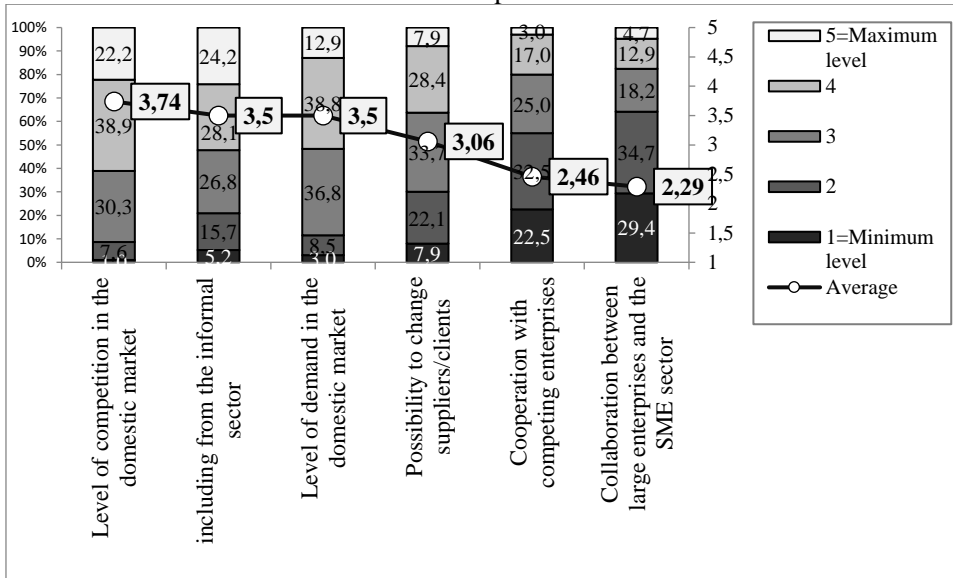
The survey used a 5-point Likert scale: entrepreneurs were asked to evaluate each indicator of the Markets component, from “1” (the most negative value) to “5” (the most positive value).

Describing market opportunities in Moldova, entrepreneurs gave the highest rating to the level of competition in the domestic market (61.1% of respondents gave the maximum score of 5 or 4; the average score was 3.74) (Figure 6). While for individual



entrepreneurs, a high level of competition in the domestic market can be considered an obstacle, a challenge for business development, from the point of view of ecosystem development, this is certainly the key to the successful development of entrepreneurship in the region and the economy as a whole. A characteristic feature of the market of the Republic of Moldova, according to entrepreneurs, is a fairly high level of competition from the informal sector, partly represented by the shadow economy.

**Figure 6.** Assessment of indicators characterizing the market opportunities of an enterprise



Source: elaborated by the author based on the entrepreneurs' survey

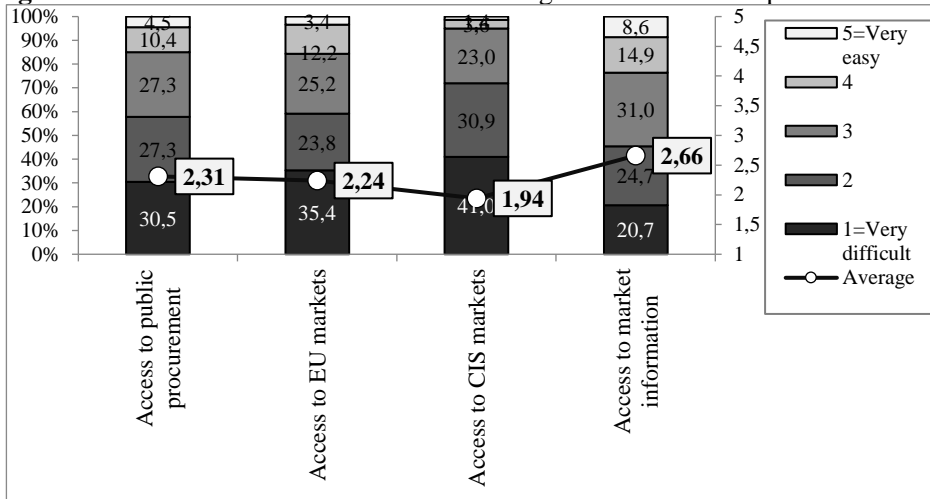
The level of demand in the domestic market is also rated quite high by entrepreneurs: 12.9% of respondents gave the maximum rating, 38.8% - scored "4", and the average score is 3.5. Accordingly, entrepreneurs see the existence of the possibility of replacing suppliers/customers, although the assessment of this indicator is closest to the average (3.06).

Unfortunately, networks between enterprises, cooperation practices are not sufficiently developed in the entrepreneurial ecosystem of the Republic of Moldova. Thus, in terms of cooperation with competing enterprises, negative assessments prevail: 55.0% of the interviewed entrepreneurs rated "1" or "2"; the average score was 2.46. Cooperation between large enterprises and small and medium-sized enterprises (SMEs) is, according to entrepreneurs, the least developed in Moldova (64.1% of negative assessments, average score of 2.29), although the potential for effective interaction between enterprises of various sizes exists in the areas of production, marketing, access to finance, staff training and consulting, etc. (Figure 6).

The access of Moldovan enterprises to foreign sales markets is quite limited.

According to entrepreneurs, access to the markets of the CIS countries is currently the most difficult (71.9% of respondents rated this indicator as “1” or “2”, the average score is 1.94) (Figure 7). The main reason may be the military conflict in the region, as well as the pronounced pro-European course of the country.

**Figure 7.** Assessment of indicators characterizing the access of enterprises to markets



Source: elaborated by the author based on the entrepreneurs' survey

Also, 59.2% of the interviewed entrepreneurs find it difficult to access the markets of the European Union (average score of 2.24).

Access to public procurement by enterprises, especially those belonging to the SME sector, is significantly difficult (according to 57.8% of respondents, average score of 2.31). The state needs to create opportunities for participation in tenders of the widest possible range of potential bidders, including small and medium-sized enterprises.

In terms of the availability of information on sales markets, negative assessments of entrepreneurs exceed positive ones (45.4% compared to 23.5%; the average score is 2.66). At the same time, almost a third of respondents (31.0%) rated this indicator as neutral (Figure 7).

## Conclusions

As the analysis of entrepreneurial ecosystem models has shown, markets are one of the main components. To characterize and evaluate this component, different indicators can be used, which can be divided into three main groups: (i) the presence of a sufficient number of enterprises (large corporations play a special role), (ii) the presence of consumers, including early customers, (iii) entrepreneurial networks.

The assessment of the market component in the Republic of Moldova carried out based on a survey of entrepreneurs, showed an excess of negative evaluations (scores) over positive ones.

The market opportunities of enterprises are characterized by a fairly high level of competition in the domestic market, including from the informal sector, as well as a relatively high level of demand for goods/services in the domestic market. However, the practice of cooperation with other enterprises is still not sufficiently developed, in particular, cooperation between large enterprises and the SME sector is at a minimum level.

The market access factor was assessed negatively by the majority of entrepreneurs, especially since access to both the CIS markets and the EU markets is particularly difficult at present.

## References

- Aculai, E., Stratan, A., Vinogradova, N. (2020). Features of the Entrepreneurial Mindset of SMEs' Owners in the Moldavian Unfriendly Environment. In: Ramadani, V., Palalic, R., et al. (eds.) *Organizational Mindset of Entrepreneurship*. Springer Nature Switzerland AG, 101-119. [https://doi.org/10.1007/978-3-030-36951-4\\_6](https://doi.org/10.1007/978-3-030-36951-4_6)
- Aspen Network of Development Entrepreneurs (2013). *Entrepreneurial Ecosystem Diagnostic Toolkit*. Available: [https://www.aspeninstitute.org/wp-content/uploads/files/content/docs/pubs/FINAL%20Ecosystem%20Toolkit%20Draft\\_print%20version.pdf](https://www.aspeninstitute.org/wp-content/uploads/files/content/docs/pubs/FINAL%20Ecosystem%20Toolkit%20Draft_print%20version.pdf)
- Audretsch, D., Cunningham, J., Kuratko, D., Lehmann, E., and Menter, M. (2019). Entrepreneurial ecosystems: economic, technological, and societal impacts. *The Journal of Technology Transfer*, 44(2), 313–325. doi: 10.1007/s10961-018-9690-4
- Audretsch, D.B., Keilbach, M.C., Lehmann, E.E. (2006). *Entrepreneurship and Economic Growth*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195183511.001.0001>
- Isenberg, D. (2011). The entrepreneurship ecosystem strategy as a new paradigm for economy policy: Principles for cultivating entrepreneurship. The Babson Entrepreneurship Ecosystem Project. 13 p. Available: <http://www.innovationamerica.us/images/stories/2011/The-entrepreneurship-ecosystem-strategy-for-economic-growth-policy-20110620183915.pdf>
- Jackson, D.J. (2011). What is Innovation Ecosystem? National Science Foundation, Arlington, VA. 11 p. Available: [https://erc-assoc.org/sites/default/files/topics/policy\\_studies/DJackson\\_Innovation%20Ecosystem\\_03-15-11.pdf](https://erc-assoc.org/sites/default/files/topics/policy_studies/DJackson_Innovation%20Ecosystem_03-15-11.pdf)
- Koltai, S. R., Muspatt, M. (2016). *Peace through entrepreneurship: Investing in a startup culture for security and development*. Brookings Institution Press, JSTOR. 240 p. Available: <https://www.jstor.org/stable/10.7864/j.ctt1dgn6g8>

- Mason, C., Brown, R. (2014). Entrepreneurial Ecosystems and Growth Oriented Entrepreneurship. OECD, LEED. The Hague, Netherlands. 38 p. Available: <https://www.oecd.org/cfe/leed/Entrepreneurial-ecosystems.pdf>
- Moore, J.F. (1993). Predators and prey: A new ecology of competition. *Harvard Business Review*. Vol. 71. № 3, May-June 1993, 75–86. Available: <https://www.researchgate.net/publication/13172133>
- Nagy, H., Tóth, T., Oláh, I. (2012). The role of local markets in the sustainable economic development of Hungarian rural areas. *Visegrad Journal on Bioeconomy and Sustainable Development*, 1, 27-31. Available: <https://vua.uniag.sk/sites/default/files/27-31.pdf>
- OECD et al. (2020). SME Policy Index: Eastern Partner Countries 2020: Assessing the Implementation of the Small Business Act for Europe, SME Policy Index, European Union, Brussels/ OECD Publishing, Paris, <https://doi.org/10.1787/8b45614b-en>.
- Smallbone, D., Welter, F. (2003). Entrepreneurship in transition economies: Necessity or opportunity driven? Babson-Kauffman Entrepreneurship Research Conference (BKERC), January, 2003. Available: [https://www.researchgate.net/publication/235966724\\_Entrepreneurship\\_in\\_transition\\_economies\\_Necessity\\_or\\_opportunity\\_driven](https://www.researchgate.net/publication/235966724_Entrepreneurship_in_transition_economies_Necessity_or_opportunity_driven)
- Stam, E. (2015). Entrepreneurial Ecosystems and Regional Policy: A Sympathetic Critique. *European Planning Studies*, 23:9, 1759-1769, DOI:10.1080/09654313.2015.1061484
- Stam, E., Spigel, B. (2016). Entrepreneurial Ecosystems. Utrecht School of Economics, 15 p. Available: [https://www.uu.nl/sites/default/files/rebo\\_use\\_dp\\_2016\\_1613.pdf](https://www.uu.nl/sites/default/files/rebo_use_dp_2016_1613.pdf)
- Stam, E., Van de Ven, A. (2021). Entrepreneurial ecosystem elements. *Small Business Economics*. Volume 56, 809–832. Available: <https://link.springer.com/article/10.1007/s11187-019-00270-6>
- Vogel, P. (2013). Building and assessing entrepreneurial ecosystems. Presentation to OECD LEED Programme Workshop on Entrepreneurial ecosystems and Growth-oriented entrepreneurship, The Hague, 7 November, 2013. Available: <https://www.slideshare.net/OECDLEED/6-vogel-building-and-assessing-entrepreneurial-ecosystems>
- World Economic Forum (2013). Entrepreneurial Ecosystems Around the Globe and Company Growth Dynamics: Report Summary for the Annual Meeting of the New Champions, September 2013. [https://www3.weforum.org/docs/WEF\\_EntrepreneurialEcosystems\\_Report\\_2013.pdf](https://www3.weforum.org/docs/WEF_EntrepreneurialEcosystems_Report_2013.pdf)