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SYSTEMIC RESEARCH OF ENTREPRENEURSHIP IN BULGARIA

The present study examines the contemporary theoretical formulations for studying and analyzing the factors that favor the entrepreneurial spirit and attitudes, promote the entrepreneurial environment in its integrity and determine the development of entrepreneurship. On this basis, an analytical model has been selected, which is applied for the purposes of the empirical study on the Bulgarian entrepreneurial ecosystem conducted by the author. The study is backed up by additional data so as to achieve a completeness of the scope and depth of the presentation of the entrepreneurial processes in Bulgaria and the progress in this area in recent years.

Keywords: entrepreneurial ecosystem; entrepreneurship; business environment; startups

JEL: M10; M13; O10; O30

The entrepreneurial ecosystem, as a term and concept, has gained popularity in the discussions and research on entrepreneurship in recent years. The concept of an entrepreneurial ecosystem allows for a deeper understanding of the driving forces and circumstances that lead to the dynamism of entrepreneurship and the achievement of high growth and stability. This approach also contributes to making a comprehensive and comparable analysis of the state and development of entrepreneurship and entrepreneurial culture in different countries, regions and cities, while at the same time highlighting the opportunities and challenges for the improvement of the consultative processes behind the formation of government policies on growth and competitiveness.

The entrepreneurial ecosystem in Bulgaria has been stepping up its development with the increase and diversification of the access to early-stage financing of entrepreneurial activity under the European Structural Funds during the previous programming period (2007 – 2013). There has been a noticeable development within the entrepreneurial community and an entrepreneurial environment and network are being established, which are mainly linked to startup technological enterprises and the opportunities for their financing through risk equity investment. In this sense, emphasis is often placed on a more narrow perception of the entrepreneurial ecosystem, and namely the *startup*¹ ecosystem, which is limited to high-risk initiatives with a strong innovative charge.

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¹ A startup is an institution designed to deliver a new product or service under conditions of extreme uncertainty (see Ries, 2011).

The aim of the study is to deepen the discussion on the concept of the entrepreneurial ecosystem and to present the conducted empirical study on the Bulgarian entrepreneurial ecosystem, complete with conclusions about its state and development.

The Entrepreneurial Ecosystem: Theoretical Framework

The term *entrepreneurial ecosystem* is a synthesis of the concepts of *entrepreneurship*, *ecosystem* and *system* (Acs, Szerb, Autio & Lloyd, 2017). Shapero (1975) concludes that entrepreneurship is, by most definitions, a form of behavior that involves taking an initiative, organizing socio-economic mechanisms to trigger resources and situations in order to achieve practical benefits, and accepting risk and failure.

In the context of the interdisciplinary nature of the concept of entrepreneurship, Kuratko (2017) presents the views of different schools about its essence at the macro and micro levels. The first group includes the perceptions of the impact of external environmental factors on the potential for entrepreneurial activity, the process of gaining access to finances, the political, cultural or economic rejection of the individual and his orientation towards entrepreneurship as an alternative. The second group focuses on the perceptions of the features that imply a successful entrepreneur, business opportunities and their discovery, and entrepreneurial strategies centered on the uniqueness of markets, leaders, products and resources. The process approach to entrepreneurship is also widely employed with its different structuring methods, including integrative, dynamic and framework methods.

According to Griffin (2017), in essence, entrepreneurship is the process of planning, organizing, running and taking the risk of starting an enterprise or a new business venture. Shane & Venkataraman (2000) derive three interrelated aspects of entrepreneurship. The entrepreneurial process starts with exploring the sources of business opportunities. The discovery of business opportunities is accompanied by the process of their evaluation and the subsequent benefit from their use. Entrepreneurial processes are carried out by a community of individuals. These aspects of entrepreneurship raise questions about the causes, times and ways of creating opportunities and their discovery by specific individuals.

Janssen (2016) links entrepreneurship with the *value creation paradigm*, where wealth creation is a function of the entrepreneur's own perceptions, and the *innovation paradigm*, expressed through different forms such as new products and services, business processes, organization or management. The latter corresponds to the understanding of entrepreneurship and its close involvement in reforming or revolutionizing existing models through innovation (Schumpeter, 1952).

The term *ecosystem* comes from the natural sciences and more specifically from ecology. According to the Oxford Dictionary's definition, it is defined as a biological community of organisms in constant interaction, including that with their

physical environment. The functioning of ecosystems is characterized by complexity and dependence on many elements, such as the structure, environment, past events and the impact (or response) of these events on the ecosystem (Chapin, Matson & Mooney, 2002). Living organisms and non-living components live together in the ecosystem, interacting dynamically as a *system*, insofar as the latter consists of multiple interconnected objects considered as one. In this way, certain features such as dynamics, transformation, productivity and circular logic (repeatability and intensification) can be identified. Strategies require the concept of a *business ecosystem* as a systemic approach to the interaction between different economic sectors aimed at developing around an innovation or the integration of the next series of innovations, which in turn requires the attraction of different types of resources, as well as networking among partners, suppliers and customers (Moore, 1993).

The entrepreneurial ecosystem is characterized by a high degree of complexity, ambiguity and interdisciplinarity, which means that a deeper understanding is necessary for the purposes of its successful implementation. However, an argument exists among the subject researchers around this concept. Some authors consider that the term *entrepreneurial system* is more precise, as it basically reflects the social in essence and requires human intervention and targeted action in order to achieve the identified development goals. We too consider that, as long as there are living and non-living elements, material components in active or passive interaction, the term *entrepreneurial ecosystem* describes the scope, diversity and complexity of the phenomenon more fully. It has also become popular in research projects and comparative studies of entrepreneurship over recent years, as well as in the discussions of entrepreneurial communities and within society.

The question arises about the level of entrepreneurship, its dynamics and sustainability, and accordingly, the components that affect it as part of the ecosystem. Cornwall & Perlman (1990) summarize the factors influencing the level of entrepreneurial activity in three directions. First, these include the level of demand for end products and services in the economy, the availability and accessibility of resources for new ventures, the impact of inflation on credit use, the promotion of new ventures through tax policies, the degree of regulatory barriers and political stability and the favorable public policies for long-term investments, as identified by Kent (1982). Second, part of the values of society are seen as engines of entrepreneurship (McClelland, 1961) – individual personal traits such as the need for achievement (the so-called *n-ach*), as well as emotional engagement (*affect*), persistence, passion, independence, etc. Third, the organizations themselves through their strategies, structures and processes also influence the development of entrepreneurial culture and activity. Hisrich & Peters (1995) place emphasis on the importance of *role models* that significantly influence career orientation and entrepreneurial motivation. The development of networks that support entrepreneurship is also important – through moral support from friends and family, and through professional support from mentors, associates, business associations and other participants in the ecosystem.

Several models for exploring entrepreneurial ecosystems are known in this respect. They are based on the abovementioned perceptions of entrepreneurship to varying degrees and are characterized by the equivalence of the relevant significant features and approaches. The conceptual framework of the ecosystem brings out the institutional and individual stakeholders and the conditions in which they interact, with the immediate objectives of entrepreneurial activity being the stimulation of the entrepreneurial spirit, as well as the innovation and growth of the enterprises.

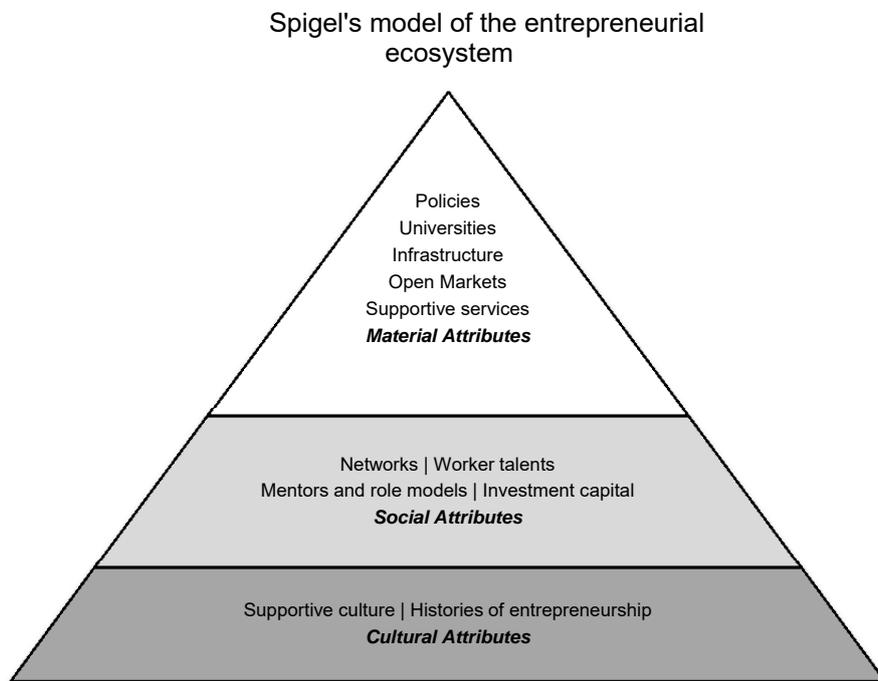
According to Mazzarol (2014), governmental macro- and microeconomic policies, regulatory framework and infrastructure, funds and finance, culture, mentors, advisers and support systems, universities as catalysts, education and training, human capital and workforce, as well as local and global markets are of key importance. Mason & Brown (2014) highlight the various actors such as businesses, investors, business angels², banks and other financial organizations, public institutions, universities, economic and social partners. It is the authors' belief that ecosystems are characterized by the formal and informal interaction among the set of institutional and individual actors (Mason & Brown, 2014). Acs, Szerb, Autio & Lloyd (2017) set the framework conditions for entrepreneurship, wherein entrepreneurial activity is measured by the rate of establishment of enterprises, the number of high growth enterprises, the number of serial entrepreneurs, the levels of entrepreneurial ambition, etc.

Spigel (2015) divides the attributes of the entrepreneurial ecosystem into three levels: cultural, social and material. They provide the resources that are needed, while simultaneously acting as an asset to entrepreneurship. They are structured pyramidally, having a bottom-up supporting role and a top-down reenforcing role (Figure 1). The first level of the pyramid, the basis for building an entrepreneurial ecosystem, includes the cultural attitude of society towards supporting entrepreneurship and the attitudes of individuals towards risk taking and creating innovations. Local examples of successful entrepreneurial projects (*role models*) play a significant role at this level. The second level of the pyramid describes the social aspects of the ecosystem, which include funding opportunities from family and friends, business angels, venture funds and banks. A skilled workforce ready to work for startups is another prerequisite. Developed social networks that unify entrepreneurs, mentors, investors and the workforce, allowing the free movement of knowledge and skills, as well as local entrepreneurs who are willing to advise young entrepreneurs are the driving force that helped build the social foundations of the entrepreneurial ecosystem. The third level of the pyramid shows the material features of the entrepreneurial ecosystem that enhance the impact of cultural and social environments. It is tied to: government programs or regulations that promote entrepreneurship

² These are private investors who invest funds, experience and contacts in non-public, mostly startup companies.

through direct funding and the removal of barriers to the emergence of new businesses, universities and other training institutions that train new entrepreneurs and disseminate new knowledge, organizations that provide specialized services to enterprises such as incubators, patent attorneys and accountants. The presence of sufficient office space, telecommunication and transport infrastructure, local markets, internationalization, and easy access to international markets are aspects that allow the acceleration of business development.

Figure 1



Source: Spigel, 2015, p. 57.

Therefore, the different aspects of entrepreneurship and the ecosystem must be included in the overall approach to the analysis, including the entrepreneurs' personal traits, support networks and role models, access to the necessary resources, tax policies and regulatory barriers, consumer demand in local and foreign markets. The active interaction between the cultural social and material elements of the entrepreneurial ecosystem ensures its reproduction over time, taking into account the surrounding environment for the startup and development of a business (Hadjitchoneva, 2015). In this sense, placing any of the various components of the

entrepreneurial ecosystem in its center or in the business environment would not be relevant. Various components can be and are in fact the basis of success, and their structure and their interaction lead to the transformation and productivity of the entrepreneurial ecosystem.

Each entrepreneurial ecosystem is a specific mix of distinctive features and stands out with its own uniqueness. Thus, specifying the generic causes and conditions of entrepreneurial ecosystems has limited practical value (Isenberg, 2011). This shifts the focus towards the specific contexts and trends with their relevant strengths and weaknesses in terms of each component, at each stage of development, as a necessary and essential precondition for identifying the goals and dynamics, and formulating the policies for managing the transformation, improving the productivity and achieving the sustainability of entrepreneurial ecosystems.

A Study of the Bulgarian Entrepreneurial Ecosystem: State and Development

The empirical study was developed on the basis of Spigel's analytical model of the entrepreneurial ecosystem and is divided into three main parts, which focus on the cultural, social and material attributes of ecosystems, respectively. It contains 13 closed questions, one of which is general, indicating the type of participant, and 12 are specific, following the pyramid logic of the bottom-up model. An opportunity for comment is provided after each question. The survey was conducted in the period April-June 2017 in the form of online surveys, semi-structured and structured interviews with various representatives of the Bulgarian entrepreneurial ecosystem. The cultural, social and material attributes of the ecosystem were studied among entrepreneurs (44.2%), investors (9.6%), mentors (3.8%), professors of management and business administration (5.8%), talents or qualified workforce (13.5%), government representatives (1.9%), potential entrepreneurs or other participants in the entrepreneurial ecosystem (21.2%).

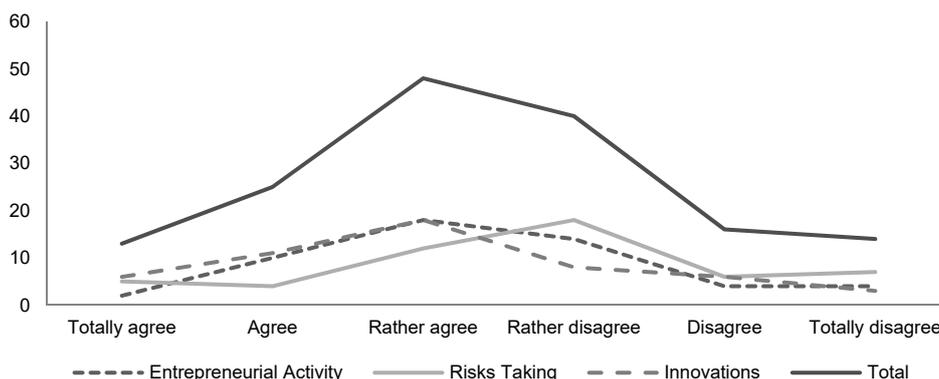
Cultural attributes of the entrepreneurial ecosystem

As the results of the survey show, in Bulgaria there is a nascent culture of supporting entrepreneurship (see Figure 2). 58% of the respondents answered affirmatively, with 35% of them agreeing with the statement³. About 59% of the respondents stated that they are not ready to take risks yet. The Bulgarian entrepreneur is open to innovation, according to 67% of respondents.

³ The study uses Likert's six-step scale: totally agree, agree, rather agree, rather disagree, disagree, totally disagree.

Figure 2

Bulgarian culture in support and contribution to entrepreneurial activity, risk taking and innovation



The participants' comments vary considerably. According to some, the cultural environment in the country is “*the best in Continental Europe, second only to that in Germany*”, and “*starting a business in Bulgaria is much easier than in many other countries where the price at the start or at the later stages of development is much higher*”. While according to others, “*the cultural and economic situation blocks mass entrepreneurship*”. An emphasis is placed on two groups of “*generations*” – those under the age of 40, who are very positive about entrepreneurship and those who are older, “*parents who do not understand their role and place*”.

The dominant perception is that “*few things can be achieved through personal efforts and personal initiative*”. Entrepreneurial activity is still associated with “*the availability of contacts and connections, not so much with hard work and the discovery of business opportunities with added value*” and also the “*investors are not looked kindly upon*”. According to the respondents, there is a lack of “*entrepreneurial experience*”, “*business flair*”, “*financial culture*” and understanding of the ways of business growth, even the “*naivety*” of the Bulgarian entrepreneur is commented upon. The belief is that the existing understanding of risk is distorted, because “*everyone wants to win, but nobody wants to lose*”. Good technological knowledge is recognized, and innovation is generally well received by the Bulgarian entrepreneurial community.

54% of the respondents could list fewer than 10 successful examples of entrepreneurship, 33% could mention between 10 and 50 successful entrepreneurship stories and only 14% could name more than 50 inspiring role models. Among the most recognizable ones are *Telerik (Progress)*, *Walltopia*, *Imperia*, *Flipps (Bianor)*,

⁴ The accumulation of experience has gone through some examples of unsuccessful startups in recent years, such as *Ore/Soft*, *Stepsss*, *Speedifly*, *Chipo Labs*, etc.

Kanbanize, ChaosGroup, Enhancv, Melissa, betahaus, eBag, Roobars. The list continues with *Melon, Bee Smart Technologies, Viscom, Fight, FinAnalytica, Kentavar, Tuk i Tam. EasyPay* and *ePay* are also mentioned. It is considered that *Eleven* and *LaunchHub* investments can be cited as successful examples, as well as “almost 500 businesses that are developing well”⁵. “Approximately 50 unicorn companies”⁶ are recognized. In support of this assertion, it is pointed out that there are many good examples which, however, prefer the “do not show” behavior in public. According to some investors, “successful business examples are not those who are looking for a quick exit (exit from the business), but those who are ready to go further” and contribute to the long-term growth of the economy.

According to the GEM Bulgaria report (2016), entrepreneurship is perceived as a good career choice by nearly 60% of the adult Bulgarian population, but only 35% are ready to start an entrepreneurial project. In 2016, as compared to 2015, some improvements in percentage data, although small, are observed regarding the identification of good opportunities for starting a business in Bulgaria, the perceptions of the needed skills and the number of potential entrepreneurs, which is once again associated with difficulties in discovering business opportunities⁷. As early as 2012, Bulgarians show greater disinterest in working on a salary, but only 36% confirm that they expect that business opportunities will arise for them over the next five years⁸. Even though business ideas and/or competencies existed, the main obstacles during that period were a shortage of financial resources and an unfavorable economic climate for startups. Thus, 36% are reported to have started a company, to manage a business or intend to start one. This indicator ranks Bulgaria second among the European countries. However, at the same time, Bulgaria holds the first place with 40% of entrepreneurs who have gone bankrupt - almost twice as many in comparison with other European countries. According to NSI data for the period from 2012 to 2014, there is a slight increase in the number of active enterprises – with 1.1% from 2012 to 2013 and with 1.6% from 2013 to 2014⁹, while there is very little variation in the number of newly established companies versus active companies – with 13% in 2012 and almost 12% in 2013 and 2014. 87% of the established companies have survived for a maximum of one year and 61% have survived for two years at the most. The rate of company termination has fallen from 11% to 9% over the period considered.

⁵ Examples of successful startup companies are constantly appearing in the Bulgarian public space. Such examples are: *Dronamics, TaxiMe, EnduroSat, iCard, Listen Up, Prospecto Group, Elvis.bg, dWood, Escreo, Clusterize, Playground Energy, GoMama* and many others.

⁶ Companies known as “unicorns” are private startups with a value of over \$ 1 billion. In our opinion, this issue should be carefully considered and further study is needed in the light of the established definition.

⁷ For more information, see GEM Bulgaria 2015/2016 and 2016/2017.

⁸ See Flash Eurobarometer 354, Entrepreneurship in the EU and beyond (2012).

⁹ The number of the active enterprises in 2014 is 332 800. See <http://www.nsi.bg>.

For 2016, GEM Bulgaria reports that a relatively high percentage of startup entrepreneurial initiatives are already becoming established businesses, i.e. they are managing to survive for long enough. During this period, there is an emergence of a dynamic entrepreneurial community, oriented towards innovation and high efficiency. The GEM Bulgaria reports for 2016 and 2017 come to the conclusion that Bulgarian entrepreneurship develops at two-speeds – a few companies that are active in value creation through innovations and many companies that are not engaged in business models oriented around innovation. At the same time, according to data from SAFE (2016)¹⁰, more than 51% of Bulgarian small and medium-sized enterprises (SMEs) are declared as being innovative¹¹. High growth enterprises¹² account for 25%, placing us in fourth place in the rankings (as compared to Romania, which holds the lead with 32% of SMEs), while gaselles¹³ account for 3% (as compared to 6% for Romania). Of the 150 patents published by the European Patent Office (EPO), more than half have been published in the last six years (4 patents in mid 2017; 9 patents in 2016; 8 patents in 2015; 17 patents in 2014; 22 patents in 2013; and 23 patents in 2012¹⁴).

According to the Global Innovation Index, Bulgaria shows innovation developments, climbing from the 44th position in 2014 to the 36th position in 2017¹⁵. *Progress (Telerik)*, *Imperia Online*, *Imperia Mobile*, *SoftGroup*, and *Nutrigen et IT Talents* are listed as notable examples of entrepreneurial success in Bulgaria (See GEM Bulgaria, 2016). Apart from these, almost all the examples of entrepreneurial success listed by the respondents are mainly related to the information and communication technology sector. The company *Imagga*, which is the winner in the category of best *startup* for developments in the field of artificial intelligence, is the first success of a Bulgarian *startup*, recognized by CESA¹⁶ in 2016. The co-founders of *PaperHive* and *Dronamics* are among the 20 most successful European entrepreneurs under the age of 30 in the European *Startups*¹⁷ Special Ranking (there

¹⁰ http://ec.europa.eu/growth/access-to-finance/data-surveys_bg.

¹¹ These are enterprises that have delivered products or services, production business processes, a new management organization (innovative or significantly improved) or a new approach to the sale of products or services on the market in the last twelve months.

¹² According to the definition accepted by the study, these are enterprises with an annual average growth of 20% over a three-year period.

¹³ According to the definition accepted by the study, these are enterprises with an average annual growth rate of 20% over a period of three to five years from the point of their establishment.

¹⁴ See EPO, <https://worldwide.espacenet.com>.

¹⁵ See <https://www.globalinnovationindex.org/analysis-indicator>.

¹⁶ The Central European Startup Awards (CESA), part of the Global Startup Awards, is a series of events taking place since 2014 in the countries of Central and Eastern Europe (CEE), whose aim is to recognize, promote and build contacts between startups and the entrepreneurial ecosystem, <http://centraleuropeanstartupawards.com>.

¹⁷ See www.eu-startup.com.

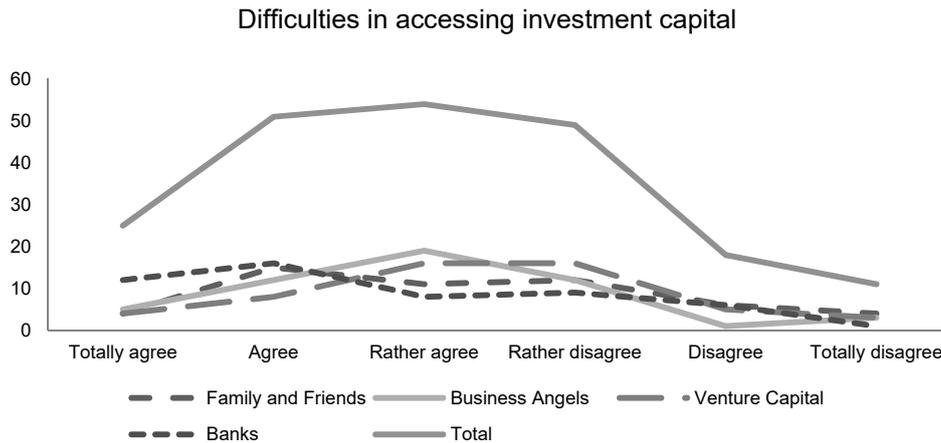
are only four other Central and Eastern European entrepreneurs in the top 20: one from Poland, one from Slovenia, one from Croatia and one from Estonia). Bulgarian inspirational entrepreneurial stories are spreading and being discussed more and more in the community by *The startUp magazine*, the *WakeUp and StartUp Podcast*, *tbmagazine*, *Economic Development Innovation and Technology (EDIT)*, etc.

Social Attributes of the Entrepreneurial Ecosystem

With regard to investment capital, 58% of the respondents more or less affirm the presence of difficulties in getting funding from family and friends, while only 54% admit to having encountered obstacles in finding venture capital funding. Obtaining funding by *business angels* and bank financing presents a difficulty alike for the respondents (69%) (Figure 3).

Overall, the data show that funding from venture funds and family and friends is more accessible to Bulgarian entrepreneurs than funding from *business angels* and banks.

Figure 3



On the one hand, the study concludes that “*access to finances is hampered*” and that there is a lack of information on the “*application programs and the required documents and criteria*”, while on the other hand, “*there is capital but it goes hand in hand with some limitations*”. According to respondents’ comments, access to family and friends’ capital is not difficult, but it is “*too limited*” and “*absolutely insufficient*”. “*Very limited capital*” is provided by business angels, who are still not “*very recognizable*”. Still, according to the respondents “*business angel society exists, but more time and experience is needed for it to grow*”, and “*business angels have to grow in terms of expectations, understandings and risk-taking*”.

The contribution of *Eleven* and *LaunchHub* is noted in this regard. It is stated that *Bulgaria is a “champion in the region”* as regards the number of funded companies

– more than any other Balkan country (with the exception of Turkey). Poland is closest to Bulgaria in terms of the number of risk investments. Startups in Bulgaria are “8 times more” than those in Romania. At least 400 companies have investments, 260 of which are actively monitored and 140 are not under observation. We have a greater number of [funded] projects than Romania. Moreover, the expectations are for 270 million EUR from the funds plus 50 million EUR in institutional capital and 50 million in private capital. In order to accelerate the development of the Bulgarian economy, an economic growth of 4% has to be achieved – a minimum of 100-200 million EUR for startups and several billion EUR with a horizon of 3-5 years are needed. If the 120 risk investments of *Eleven* achieve a success rate of 3-5%, this will be a great success. Investors believe that there is “*little knowledge about financial programs*” and “*huge liquidity that begs for creativity*” on the part of entrepreneurs.

According to the respondents, the conservativeness of the banks is coming to the fore, and they are definitely not the best partner for startup investment, hence the resulting difficulties in accessing startup capital. The only exception is one banking institution¹⁸, which makes risk investments in companies from the *Eleven* and *LaunchHub* portfolios, and, along with the provision of financial resources, applies the venture investors approach in order to support their management and development. According to the latest report of the study on the access to finance for businesses in the EU, which has been conducted by the European Commission ever since 2008, in 2016, 55% of the Bulgarian enterprises did not encounter obstacles in finding external funding to pursue their ambitions for growth, while in 2014 they did not exceed one third (for reference, their share on the European level is 44%) (see SAFE, 2016). Bulgaria ranks second among the countries (after Germany), for which there are no barriers to the access to financing. The Bulgarian companies are equally divided (30%) in their opinion about the obstacles related to insufficient guarantees or a very high interest rate or price. 50% of Bulgarian SMEs need funding of between 25 and 250 thousand EUR in order to implement their growth plans over the span of the next two or three years. When external financing is needed, the preferences of the managers of the companies are focused on bank loans (67% of enterprises). Only 3% of businesses prefer *equity investment*, as compared to 6% on average for the European Union (between April and September 2016, equity capital was used by only a small portion of European SMEs, 11% on average), even though such capital is not an obstacle for 94% of Bulgarian enterprises (see SAFE, 2016, p. 30). The companies that have the most preference for this type of financing are gaselles and high growth enterprises (11% and 7%, respectively). The problems of the Bulgarian enterprises are mainly associated with the lack of skilled labor or experienced managers (27%), finding clients (21%) and competition (17%).

¹⁸ UniCredit Bulbank's Special Projects Division. However, there is no further publicity concerning the development and the success of the investments in the selected projects.

During the previous program period, the *LaunchHub* and *Eleven* Venture Risk Investment Funds gave impetus to the Bulgarian entrepreneurial ecosystem. *Eleven* is ranked third in the top 10 *seed accelerators* in Europe¹⁹. Other investors include *BlackPeak Capital*, *Empower Capital*, *PostScriptum*, *Neveq*, *Rossllyn Capital* and *Unicredit Bulbank*. There are two business angel organizations in Bulgaria that stand out: the *Bulgarian Association of Business Angels (Bulgaria angels)*, which was announced by the World Business Forum of Angels as being the most promising network of business angels in Southeast Europe, and *CEO Club Angels*, which provides expert knowledge, contacts and mentorship to help increase the value of companies and invests mainly in the post-acceleration development phase. In 2016, Bulgaria joined the *SME Initiative*²⁰ of the EC, the European Investment Bank and the European Investment Fund and took advantage of 102 million EUR, being the third country to implement this horizontal initiative. More than 600 million EUR have been evaluated as loans with favorable conditions for SMEs. Nine contracts have been concluded with several banks and the National Guarantee Fund, amounting to 556 million EUR for SMEs from the European Strategic Investment Fund. The planned amount from the Fund of the Funds is 606 million EUR²¹, up to the cumulation of 1.4 billion EUR, according to the overall assessment. The Bulgarian Development Bank has allocated 150 million EUR for Infrastructure and Innovation.

According to the study, the development of the entrepreneurial ecosystem in terms of the creation of social networks for contact between entrepreneurs, mentors, investors and the workforce, as well as the readiness of successful local entrepreneurs and mentors to give advice to young entrepreneurs is becoming more stable. The situation is less reliable when it comes to the employment of a skilled workforce that has the skills and willingness to work in a startup business. As can be seen in Figure 4 (section 4-6), the entrepreneurial community's perception of the difficulty of engaging talents is prevalent. The perception of the development of social entrepreneurial networks and the presence of successful entrepreneurs and mentors who give advice is positive. 64% of the respondents (of which 26.9% are adamant) believe that accessibility to talents is difficult, while 9.6% say that there is no such difficulty at all. Qualified employees are busy, and there is "*reluctance to start a venture business that does not guarantee short-term finances*". The reasons are lower pay and fear of taking risks. For entrepreneurial activity it is important to possess not only the knowledge and skills, but also the psychological stand and stability. There is a serious shortage of sales competencies, as well as a clash with life problems and crises (insecurity, family balance and expectations) that lead to the instability of entrepreneurial initiatives.

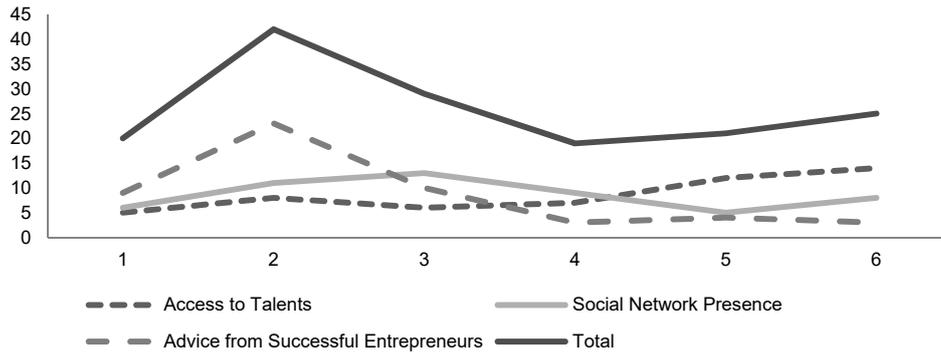
¹⁹ See European Accelerator Report from Gust and Fundacity (2015), <http://gust.com/european-accelerator-report-2015>.

²⁰ http://www.eif.org/what_we_do/guarantees/sme_initiative/

²¹ <http://www.fmfib.bg>, <https://www.minfin.bg/bg/page/1085>

Figure 4

Access to talents, advice from successful mentors and entrepreneurs, developed social networks*



* The six-grade scale between „yes“ and „no“ is used.

A distinct point of view is the one that there are “fewer and fewer talents, which is actually good because it forces businessmen to create higher value using more expensive and fewer resource”. A peculiar call to action is present among the respondents’ answers – to distance ourselves from the “mantra existing at the moment that there are no people” and to look for an answer adequate to the situation. More than half of the respondents (58%) believe, albeit not very confidently, that Bulgaria already has a developed social network of contacts between entrepreneurs, mentors, investors and the workforce. However, the comments range from “there is no such system” to “it’s the most developed mentoring system in the world”. The phenomenon of the so-called “digital nomads” can be observed, in which foreigners create and contribute to the development of the local entrepreneurial community.

According to 81% of the respondents, to a certain extent there are mentors available to give advice. An example of this are the meetings with the founders of *Telerik*. It is noted by the respondents that there are high-level mentors, IT CEO (Executive Directors from the ICT sector), etc., but the strategy that encourages young entrepreneurs to be highly proactive is also important. The trend is positive, more and more seminars and lectures are being organized to inform young entrepreneurs and an intensive exchange platform has been created by *LaunchHub* and *Eleven*, thanks to which more and more starting entrepreneurs have an idea who to contact for informal advice. The importance of the TED platform²² is specifically mentioned.

²² Abbreviation of Technology Entertainment and Design: Platform for Promoting Ideas Valuable for Dissemination, see www.ted.com.

Among the organizations whose activities are related to the promotion of entrepreneurship and the development of the entrepreneurial network and environment in Bulgaria are *Endeavor Bulgaria*, the *Association of Bulgarian Leaders and Entrepreneurs (ABLE)*, the *Bulgarian Association for Venture Capital (BVCA)*, *ICT Cluster*, *Startup Grind*, the *Bulgarian Entrepreneurship Center (BEC)*, etc. *Endeavor Bulgaria* builds a business support network by attracting talents and investments; it has a program for selecting, mentoring and accelerating entrepreneurs with great potential, providing access to mentors, networks and strategic advice. *ABLE* organizes the *Get in the Ring*²³ international competition and helps connect startups with international investors. *BVCA* promotes the role of private investors as a source of funding for promoting entrepreneurship and innovation, and for business growth. *ICT Cluster* works to increase the competitiveness of the Bulgarian ICT industry and to create cross-border business opportunities and cluster cooperation. *Startup Grind* is an initiative that was founded in the Silicon Valley. *BEC* is a relatively new organization with an affinity for training, mentoring and financing Bulgarian entrepreneurship.

The *Digital|K Conference*²⁴ and the *Webit Festival*²⁵ are significant events for the entrepreneurial ecosystem in Bulgaria, which attract thousands of participants, including investors, founders and executive directors of successful businesses, entrepreneurs, politicians and leaders from all over the world. The participants in the study classify the *Webit Festival* as a huge event with incredible PR, for Bulgaria as well, however, they do not see any immediate benefits from it, such as follow-up contacts or added value from the specialized part.

Material Attributes of the Entrepreneurial Ecosystem

A slight prevalence of negative responses over the positive ones (51.9% vs. 48.1%) is observed in the attitudes towards the presence of government programs and regulations that support entrepreneurship through direct funding. However, there is a significant difference in respondents' perceptions of the presence of government programs and regulations that remove barriers to new ventures (73.1% negative responses to varying degrees).

The understanding that companies are funded “*not by chance*” is prevalent. There are doubts about the use of certain financial instruments by the State, noting that it is “*necessary to pay attention to the application*” of programs and regulations. There are high expectations regarding the Fund of Funds.

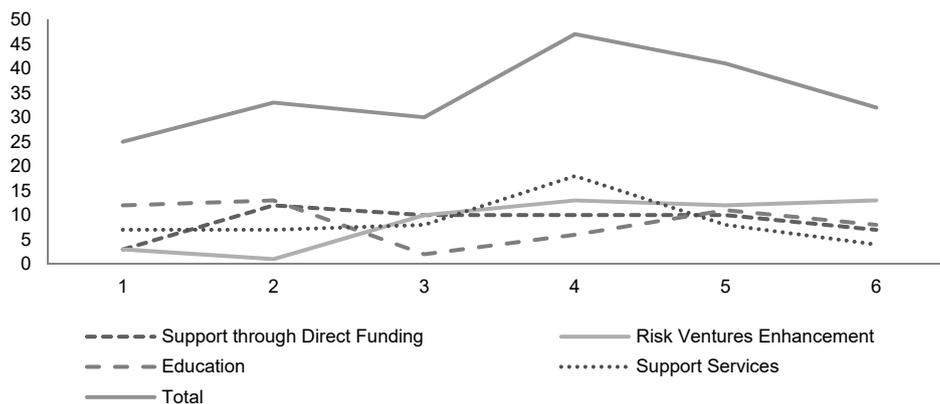
²³ For more information, see <https://getinthering.co>.

²⁴ Leading event for digital transformation, which attracts a number of business and entrepreneurs, see <https://www.digitalk.bg>.

²⁵ Forum on Innovation, Policies, Investments, Entrepreneurship and Digital Economy, bringing together world leaders from many countries, see www.webit.bg.

Figure 5

Presence of government programs and regulations, education and training, supporting entrepreneurship services*



* The six-grade scale between „yes“ and „no“ is used.

The entrepreneurial community does not recognize government initiatives to promote risk endeavors. A number of comments are negative, for example: “*lack of development*” for years, “*all of them are absurd*”, “*there is no one thing (for example a regulatory or administrative facilitation for a startup business) to mention*”, etc. In single cases, there are more positive assertions that barriers to business are possible to overcome, regulations are good, but could be better. It is generally considered that the pessimistic attitude prevails among the older part of society.

Government support through the direct financing of entrepreneurship is supported through the *Operational Programs* as part of Bulgaria's strategic development for higher competitiveness and innovation. According to the study carried out by Richard Madison of the Brighton School of Business and Management, published in *Forbes*, in 2015 the capital of Bulgaria is among the ten best places in the world to set up a startup²⁶, mainly because of the government's tax policies, but also because of the coverage and high speed of the Internet, the relatively low costs of creating a company, the low cost of operational activity and the presence and role of investment funds.

Government policies on promoting entrepreneurship and reducing administrative burdens on business are mainly conducted through the implementation of several strategic documents.

²⁶<https://www.forbes.com/sites/amyguttman/2015/11/29/top-10-cities-in-the-world-to-launch-your-startup-some-may-surprise-you/3/#34170a97690d>

Specific measures to strengthen the entrepreneurial culture and the development of a new generation of entrepreneurs, entrepreneurship education and training to support the creation and growth of business, as well as a better administrative and legislative business environment are introduced through the *Entrepreneurship 2020 – Bulgaria Action Plan*. Policies concern the promotion of entrepreneurship, entrepreneurship among women and young people (under 29 years old), the exchange of experiences between different generations of entrepreneurs, support for employment, the introduction and updating of entrepreneurship programs in schools, vocational education and universities. From a government perspective, reducing deadlines for obtaining licenses and permits, supporting financial instruments, programs in the agricultural sector and supporting business growth by promoting the use of ICTs are central to improving the entrepreneurial environment.

In line with the European Commission's Small Business Act, the *National Small and Medium enterprises (SMEs) Promotion Strategy (2014-2020)*²⁷ was created. It introduces the European vision for: a better environment for entrepreneurs; a second chance in case of bankruptcy; giving priority to the smaller enterprises; the response of the public administration to the needs of SMEs; skills building and all forms of innovation; aid to SMEs in relation to public procurement and state aid procedures; facilitated access to finance; transformation of challenges and environment into opportunities; help for making better use of the opportunities offered by the single market and taking advantage of expanding markets.

Conducting research and creating innovation through the attraction of private investment is at the heart of the *Innovation Strategy for Smart Specialization 2014-2020*²⁸. The digital transformation of the Bulgarian industry by 2030 is expected to be achieved through the creation of conditions for the modernization, automation and competitive positioning of the Bulgarian economy (*the concept of Industry 4.0*).

With regard to education and training and in particular whether there are enough universities and other educational institutions to train future and startup entrepreneurs and to contribute to the dissemination of new knowledge, 51.9% of the respondents gave a positive answer, with 48.1% being convinced that there are enough educational institutions. However, there is the question of distinguishing between quantity and quality of education. According to the respondents, its rather theoretical nature does not contribute to the realization of startup entrepreneurs, but at the same time "the entrepreneur does not become such in the university and this is not necessary", entrepreneurship is a skill and it is learned through doing, not in theory. The best combination for the acquisition of entrepreneurial skills is a small investment and mentoring by people with as much experience as possible." Otherwise, there are enough educational institutions and, if desired, the young entrepreneurs could grasp the subject matter very quickly. There are multiple training

²⁷ See the Council of Ministers' Decision No 37 of 23 January 2014.

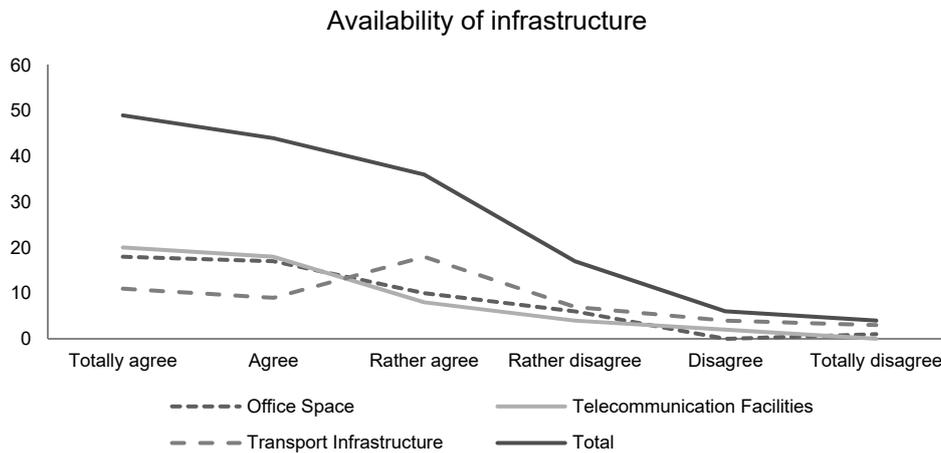
²⁸ See the Council of Ministers' Decision No 857 of 3 November 2015.

initiatives supported by the European funds. Furthermore, the role of the Internet in the discovery and accumulation of knowledge today is not to be underestimated. However, entrepreneurial activity is associated with mentality and, more precisely, it is created in a society in which risk-taking, followed by taking the prize is encouraged.

34.6% out of the 57.7% negative responses disagree that there are enough companies and organizations that provide support services for risk ventures such as patent advocacy, incubators, or accountancy houses. The majority of the comments claim that there are more than enough and that Bulgaria is no worse than the markets it compares itself with. *“The situation might be better in some places, but at least the startup in the high technology and innovation sectors is not a problem from a State perspective.”* The insufficient support capacity is visible not on a local level, but in connection with the internationalization of companies. According to the respondents, *“few companies are able to help businesses to become international, optimize holding structure, taxes, patents, etc.”* It is assumed that the patent is *“not for an entrepreneur but rather for big businesses”*. Regarding accounting, it is proposed that companies be exempt from accounting if they have a turnover *below* a certain amount, namely, entrepreneurs with a turnover not exceeding 100 BGN to be subject to exemption from the obligation to keep account of it.

The majority of the respondents agrees that infrastructure, including office space, telecommunication services and transport infrastructure, are sufficient to launch and grow risk endeavors. Thus, it is defined as the most developed component of the entrepreneurial ecosystem in Bulgaria. On average, over 80% of the respondents consider that the infrastructure in Bulgaria is sufficient for entrepreneurial activity (Figure 6).

Figure 6



There are a number of positive aspects, such as good location, good offices, low operating costs, direct flights to all major European cities. Telecommunication services received 88% positive responses, indicating that Bulgaria is in the top 3

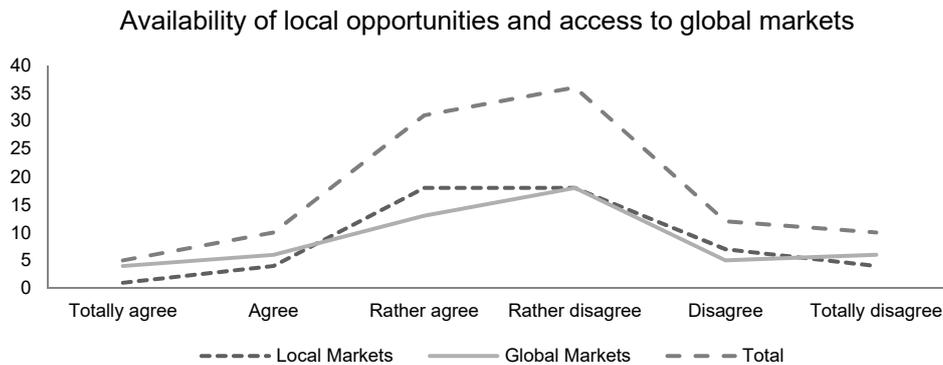
for Internet quality at a lower price. The transport infrastructure provoked some contradictory comments, mainly in terms of the European funds absorbed, but it received mostly positive answers (73%).

The first Bulgarian Science and Technology Park – *Sofia TechPark* – is a relatively new initiative of the Bulgarian government, geared towards creating a unique and innovative environment. It is designed as an incubator aimed at implementing projects in order to promote the development of research and innovation, providing services to help commercialize new technologies, products and services, support startups and innovative ideas.

By the end of 2017, the number of *co-working spaces* reached 30, most of which are located in Sofia (for more details, see EDIT, 2018). *Betahaus*, *Soho*, *Puzl coworking*, *Cosmos coworking camp*, *NGO House*, *CoShare HIVE*, *1Hub*, *Malkite5*, *Startup center*, *Startup factory*, *beehive*, *bizlab*, *limacon*, *Sbar* are such networks for exchange and mentoring for entrepreneurs. *StartUP Academy* and *UniStart* offer entrepreneurship training programs. The *Software University* and the *Telerik Academy* train specialists for the ICT sector. *Start It Smart* supports the young generation to launch its own entrepreneurial initiatives. The *Startup weekend* offers a 54-hour startup program during which the life of the startup is recreated. The *Junior Achievement* organization provides numerous training initiatives and entrepreneurship programs in secondary level education.

As expected, when the availability and sufficiency of local opportunities to launch risk ventures, as well as opportunities for unimpeded access to global markets are studied, the negative views can prevail. In both cases, 56% of respondents gave negative responses against 44% of respondents who gave positive ones (Figure 7).

Figure 7



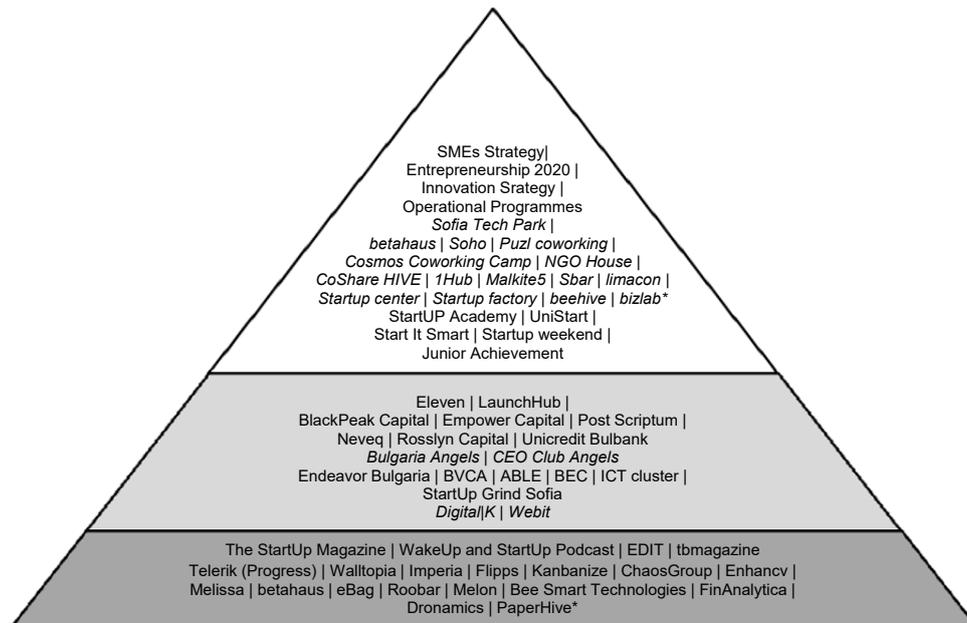
The local market is defined as “*small*” or “*very small*” but still “*sufficient*” for the initial stage of starting a business, i.e. for the testing of the entrepreneurial activity, but not for its subsequent growth. However, the proximity to the European market overcomes this limitation. According to the respondents, efforts should be made to improve the perception abroad of Bulgarian culture and business as a whole, which

would contribute to the improvement of the access to global markets. According to them, “the obstacles are related to the image of the country and only truly good products can help improve it”. In addition, there are few initiatives to inform about opportunities and access to foreign markets²⁹. According to SAFE (2016), the problems identified by the SMEs from 2011 to 2016 are mainly related to customer finding³⁰, followed by competition, regulation and production or labor costs.

As a result of the empirical study and the additional research, the Bulgarian entrepreneurial ecosystem is represented by the Spigel Model, incorporating the main components and the participants in the ecosystem in the three levels (cultural, social and material) of interaction and development (Figure 8).

Figure 8

The Bulgarian entrepreneurial ecosystem, presented by the Spigel Model



*The presented list is not exhaustive.

Source: Spigel, 2015.

²⁹ According to the data of the National survey on digital SMEs carried out by EDIT in 2017, 78% of startups in Bulgaria work on international markets (EDIT, 2017). According to GEM (2017), only 6.74% of the Bulgarian entrepreneurs reported about 25% or more of international sales in 2016. Nevertheless, the various samples used by the cited studies should be taken into consideration.

³⁰ Finding customers is a major problem for 25% of businesses and a major problem for the period mentioned.

According to GEDI (2016, 2017) and GEM (2016, 2017), the level of entrepreneurial activity increased in 2016 compared to 2015. The survival rate of companies to the point of becoming an established business has also increased. Still, the low motivation and the prevalence of entrepreneurial activity dictated by necessity rather than by the introduction of improvements continue to be seen. However, the percentage of entrepreneurs who believe they are supplying a new product on the market has grown. The so-called *elite* innovation is emerging. Bulgaria's performance during the two consecutive years of the present research on the conditions of the entrepreneurial framework³¹ in Bulgaria doesn't show any drastic differences, however, there is some sign of deterioration in 2016, as compared to the previous year. Overall, the access to physical infrastructure, tax policies and policies on administrative formalities, the quality of commercial and professional infrastructure and accessibility, and entrepreneurship financing in the country are above or around the average level. Government programs for the promotion of entrepreneurship and for new enterprises, entrepreneurial education at the vocational, secondary and university level, cultural and social preconditions for entrepreneurship, R&D and entrepreneurship education at the primary level of education show a slight decrease or positions below the average level. Internal market dynamics marks a distinguished improvement in 2016.

Conclusions and recommendations

The global phenomenon of the *Entrepreneurial Revolution* and its significance for the 21st century is comparable to the Industrial Revolution of the 20th Century (Kuratko, 2017). Entrepreneurship is an important factor for economic development, marked by innovation, value for society, leadership and competitiveness. Policies for the promotion of entrepreneurship must take into account the level of development of the society and the economy. The entrepreneurial spirit and attitude are at the heart of entrepreneurial culture and entrepreneurial development. The ecosystem approach allows for a deeper study and understanding of the entrepreneurial environment, its participants and interactions in their entirety and complexity.

In recent years, the local entrepreneurial ecosystem in Bulgaria is being dynamized as well. The appropriate policies and initiatives to promote and develop its individual components will bring about the necessary stability so as to achieve growth and internationalization, and hence have an impact on the economy. Long-standing attitudes and a number of weaknesses accompany the different elements of the Bulgarian entrepreneurial ecosystem, which has a strong and often polar impact on the perceptions of the various actors. However, we can take into account the positive developments of the local entrepreneurial ecosystem, and the local

³¹ The entrepreneurial environment was studied through national expert studies on the basis of the so-called model of the entrepreneurship framework conditions, which are nine and include: government policies, finance, education, research and development, infrastructure, the market, the supportive services and the cultural environment.

startup ecosystem in particular, which is becoming an increasingly dynamic, active and open community, with a strong focus on innovation in ICT-related circles.

Concentration is observed in the capital city and, to varying degrees, in the larger cities in the country. A dynamic accumulation of experience, changing attitudes and expectations are under way. The distinguishing features of the entrepreneurial ecosystems' components that have a positive effect on entrepreneurship are the favorable tax policies and the policies aimed at new financing mechanisms especially for entrepreneurship, the vibrant networks of the entrepreneurial community and the sufficient infrastructure.

Entrepreneurial activity and risk-taking could be helped through some institutional and administrative levers that are as of now still underdeveloped. From top to bottom in the pyramid structure of the entrepreneurial ecosystem, it is necessary to stimulate the process of promoting entrepreneurship and raising the educational base and value for society through consistent government policies and initiatives. The focus should be placed on the financial instruments and financial literacy. Some of the policies to alleviate administrative constraints and barriers to entrepreneurship that should be applied are the effective implementation of the digital government, the reduction of general corruption levels, the special regime of tax and/or social burdens for startups and the wider popularization of access to financial instruments and opportunities. Many more significant efforts and public policies are needed for the internationalization of the Bulgarian companies and for overcoming the shortcomings of the small internal market, as well as in relation to human capital, competition, research and development transfer. And yet, the change of culture is at the heart of the successful development of the overall entrepreneurial ecosystem in Bulgaria.

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