DOI: 10.5281/zenodo.2606434 CZU 334.722(478)



THE DEVELOPMENT OF BUSINESS INCUBATOR'S NETWORK IN THE ECONOMY OF REPUBLIC OF MOLDOVA: ACHIEVMENTS AND PERSPECTIVES

Svetlana Gorobievschi*, Aliona Dodu

Technical University of Moldova, 168, Bd. Stefan cel Mare, Chisinau, Republic of Moldova *Corresponding Author: *svetlana.gorobievschi@imi.utm.md*

> Received: December, 20, 2018 Accepted: February, 19, 2019

Abstract. The biggest problem for many small and medium-sized enterprises (SMEs) is not the idea or the product they provide, nor the customers, but the market demand for their products / services. The very high prices of the logistics operating conditions of SMEs are decisive for the survival of a small business. Business Incubators (BI) come in response to the needs of the SME sector in the core business milestones, such as initiating and penetrating the market. BI aims to ensure that its captivity has a positive effect on the problems of work placement and ensuring a decent living for the population of a territory, a community. BI are part of a strategic framework of economic development of the Republic of Moldova, especially of the rural regions. The main purpose of this article is to develop the concept of BI as a logistical support of the SME sector in terms of network development as well as to improve the efficiency of their activity in the Clusters.

Keywords: SME sector, development strategy, business incubator, business concentration, incubator network, logistic support, small business efficiency, public actors, cluster.

Introduction

Every business, in the development process over time, goes through the folowing periods: initiation, maturity, development, stagnation and decline. Throughout these periods, the business is always sensitive and is a subject to distortions and risks that could cause disappearances.

Using a Business Incubator is a scientific and logic form of protectiong business growth rather than maturing. Statistics show that businesses starting out in Technology Incubators and in Business Incubators (BI) are more likely to survive in market conditions in the first 5 years than those starting out of BI.

The formal concept of BI has origin in the USA, in 1959. The BI concept is taken from English – Business Incubator, and was perceived as an institution that aims to create a favorable, sustainable environment for newly created and innovative companies with development potential. The US Small Business Administration in the early 2000's has confirmed that between 50% and 80% of newly established firms are bankrupt in their first 5 years of activity. Instead, about 87% of incubated firms (start-ups) survive over 5 years. Since the 1980's, the economic category of BI has enjoyed a great interest from those who have been involved in planning, legislation, and small business development. Special

structures and strategies have been explored and created to enable enterprises to start, survive and develop. This is how the Business Incubator concept emerged.

1. Methodological Concepts of the BI Essentials, Creation Steps and Key Factors of Success

The notion of "Incubator de Afaceri" was taken in Romanian exactly as in English -"Business Incubator", the meaning of these words closely corresponds perfectly to the English phrase.

We have to say, first of all, that it is an economic notion of the market economy and the free initiative, which in the developed countries crystallized 30 years ago and improved both theoretically, conceptually and practically, becoming model of organization and operation of small and medium business.

We describe the views of recognized scientists in the field.

In the opinion of economists D. Kuratko and La Follette, "The Business Incubator provides an effective link between talent, technology, capital and know-how to raise entrepreneurial skills and accelerate the development of new companies" [1].

US economist C. Campbell believes that "BI are institutions designed to meet market challenges such as unfair access to information and capital, and lack of focused business advice needed for new small businesses" [2].

A similar definition is presented by American economists Allen and McCluskey: "BI is a facility that provides adequate space, office services and business development assistance in an environment that contributes to the creation, survival and growth of a new business" [3].

According to the Romanian economist S. Dragomirescu "The conventional definition of incubators stems from what they represent: facilities offered to small businesses who are the tenants of these incubators; Providing entrepreneurs with both services and access to specialized management; consulting services are also available to them. Incubators may be placed in one or more arranged buildings, but they may also be "wall-hung" incubators that provide only occasional consultations and services "[4]. Another business-incubator specialist, R. Petree, mentions that "BI is a facility that provides favorable controlled conditions to support new business growth" [5]. In the opinion of renowned economists, namely R. Lalkaka and J. Bishop, "BI is defined as an organizational system in which activities are coordinated in order to protect new firms and facilitate their development" [6]. American economist J. Kmetz believes that "A modern BI is a combination of physical space and facilities, entrepreneurial ideas, administrative support, all together aiming at contributing to the development of new companies at the initial stage" [7]. Scholar A. Duff recognizes that "The BI is an organization that provides a range of business development services and access to a small space on flexible terms to meet the needs of new firms" [8].As we can see from the above, in most cases the definitions coincide. This is also confirmed by the European Commission's definition.

As defined by the European Commission, "BI is a place where newly created businesses are concentrated in a limited space. The purpose of incubators is to increase the growth and survival time of these businesses, providing them with modular spaces with common services (telecopiers, computers), and a commitment to provide specific services.

The focus is essentially on local development and job creation. Technological guidance is often left at a secondary level" [9]. Some of the definitions focus on the purpose

of BI and describe them as tools to provide them with some combination of resources needed to develop new businesses and / or increase them to a certain level of maturity and as local institutions based on encouraging and supporting the development of new business.

Thus, the US National Business Incubators Association (USNBIA) formulates the essence of IA seen as a managerial tool, namely: "BI is an instrument of economic development created to accelerate the growth and success of entrepreneurial companies through the support of business with resources and services.

The main objective of an BI is to produce successful firms that will leave the program financially viable "[10]. Hackett & Dilts cited many definitions in the literature that reflect different visions and directions.

They also cited other definitions that "focus on entrepreneurial aspects of business incubators that explain motivation in incubator development as a desire to encourage entrepreneurship and therefore contribute to economic development where it highlighted the innovation in their ability to help entrepreneurs in the development of new firms "[11].

The economist N. Titică mentions that "BI is an institution that aims to create a favorable, sustainable environment for newly established and innovative companies with development potential" [12].

The economist A. Braguţa writes: "The general acceptance of the notion of BI consists in defining such an institution as a local or regional partnership structure that offers small and medium enterprises a complex range of services in advantageous conditions, being mainly focused , on the introduction of innovative processes in industry and services for industry "[13].

The economist I. Banari believes that "the BI is a special structure designed to support and develop small businesses that are newly formed" [14].

Another definition of the BI was presented by Hackett and Dilts: "A business incubator is an office space that provides its tenants with a strategic, value added, monitoring and business assistance system.

This system controls and binds resources with the objective of facilitating the development of the new business of lessees, at the same time, taking into account the cost of their potential failure "[11].

Another definition is reflected by the scientist L. Bugaian, namely: "BI is a building dedicated to SMEs in order to develop a comprehensive support program that includes: guidance / guidance, networking activities, administrative support. Incubation is a comprehensive assistant program for business initiation and development "[15].

According to the Organization for Economic Co-operation and Development (OECD) and the Entrepreneurship and Enterprise Development Forum (FEED), BI are defined as areas for new businesses that provide premises, infrastructure and a clear set of services and utilities for capacity building of running the business during one year of development. [16,17].

In the authors' opinion, before defining the BI as an economic category, it is important to reflect the IA founders in the countries of Southeast Europe and the CIS, Table 1.

As we can see from Table 1, in most cases the actors forming the BI structure are:

- 1. Local authorities;
- 2. Government agencies;
- 3. Research and academic centers

		_	<u> </u>							
Armenia	Croatia	Georgia	Moldova	Poland	Romania	Serbia	Slovakia	Slovenia	Turcey	Ukraine
+	+	+	+	+	+	+	+	+	÷	+
+	+				+	+		+		+
	+				+	+	+	+	+	
		+	+	+	+	+	+	+	+	+
	+		+			+				
	+	+			+	+	+	+		
+				+		+				+
					+	+	+	+		
				+	+	+			+	
			+			+		+		
							+	+		
	+	+ + + + + + +	+ + + + + + + + + + + +	+ + Armenia + + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + +	+ + + Armenia + + + Armenia + + + + + + + + + + + + + + + + + + +	+ +	+ + +	+ + + + + + <	+ + + + + + <

Source: [18]

4. Private business;

5. Universities and research institutions.

Synthesizing the above-mentioned definitions we can conclude that BI are structures designed to support the development of businesses at the beginning of activity, namely:

- The BI provides the effective link between talent, technology, capital and knowhow to raise entrepreneurial skills and accelerate the development of new companies.

- The BI is an institution created for the SME sector to meet the challenges of the market.

- BI is a place where newly created businesses are concentrated in a limited space.

- The BI is a local or regional partnership structure.

- BI is a facility that provides favorable conditions for new business.

- It is an instrument of economic development that helps to stimulate the formation of SMEs.

- The BI is an organizational system in which the activities of newly created SMEs are coordinated.

- BI are areas for new businesses that provide infrastructure and a clear set of services and utilities for enhancing entrepreneurial capabilities.

Figure 1 presents schematically the essence of a Business Incubator as a management system.

Based on the synthesized theoretical and practical aspects of IA, we formulate the authors' *own definition* of the Business Incubator concept:

The Business Incubator is a form of managerial support designed to create and sustain new businesses by providing physical space, infrastructure networks, access to advisory services in relatively new areas by providing partnership relationships between civil society, entrepreneurship and Central Public Authorities and Local [19, 20].

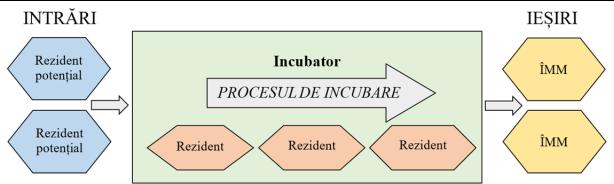


Figure 1. Essence of the Business Incubator as a form of managerial support.

Sourse: developed by the authors

2. Formation of the Business Incubators Network in the Republic of Moldova

The decision to initiate an BI is like other decisions that are made in relation to economic development, it must be based on a logical process of analysis of the various factors that can influence this process as well. It is necessary to know the hard and weak parts of the territorial area, region, place, where initiation and location of the BI is desired, an assessment should be made that fully defines the existing local logistic conditions.

The success or failure of an BI project, like other economic development initiatives, depends first and foremost on the manifestation of the community's interest in it, the demand and supply of certain services or products that are felt in the collectivity where it is desired organization of BI.

An BI project means developing many managerial activities. In this context, the *issues* to be clarified from the outset are: start-up technical assistance; setting extra low costs; types of services that can be provided; space for small businesses and available for them; the association of several enterprises of the same type in an IA.

To this end, the Small and Medium Sized Enterprises Development Organization (ODIMM) was founded on 19 July 2013 in the Republic of Moldova. ODIMM is a public institution responsible for organizing the process of building renovation offered by local public authorities and the legal registration of BI, as well as organizing legal processes for their proper functioning. Thus, the BI are treated as legal, independent entities, constituted by Local Public Authorities (LPA) in the form of Public Institutions. ODIMM is also actively involved in the process of selecting the top manager and potential residents of the BI [21].

ODIMM together with its partners from Turkey, Greece, Romania, Armenia and Ukraine launched the "Black Sea BI-NET" project.

The project aimed at creating an International Incubator Network in the Black Sea basin, transferring technologies, exchanging best practices and supporting incubated SMEs to internationalize.

The ODIMM report states that "BI is a public institution created by the Organization for the Development of the SME Sector in partnership with the Ministry of Economy, Local Public Authorities, with the financial support of the European Union, on the basis of the Policy Matrix established by the Adaptation to the Budget Support Program "EU Economic Stimulation in the Rural Areas" [22].

Through ODIMM support, the Moldovan Business Incubators Network (RIAM) was established on December 16, 2013 - a platform for cooperation and exchange of experience between incubators. Currently it is made up of 11 members (business incubators).

RIAM, formed in 11 districts of the Republic of Moldova, is composed of BI from: Soroca, Stefan Voda, Leova, Rezina, Singerei, Dubasari (Coşniţa), Ceadir-Lunga, Nisporeni, Cimişlia, Calaras and Cahul.

The creation of the BI took place on the basis of the Budget Support Program "Economic Stimulation in the Rural Areas" of the EU, signed on 14.12.2012, and important amounts of financial means were allocated from the State Budget: in 2011 - 10.2 million lei; in 2012 - 15.1 million lei; in 2013 - 10.2 million lei; in 2014 - 14.0 million lei, in 2015 - 15 mln. lei, in 2016 - 15 million lei, 2017-15 mln. lei [23].

The general objectives of setting up the IA in Moldova were:

• Creating a business environment conducive to the development and growth of SMEs.

• Promoting entrepreneurial culture and improving managerial performance.

• Strengthening a dynamic private sector able to cope with competitive forces and competition.

• Facilitate SME access to funding sources, increase the number of competitive economic activities, strengthen the investment climate and reduce unemployment in target areas.

Based on the above, we present the current RIAM and BI structure within it, created with the support of development partners, Table 2.

Table 2

RIAM structure in Moldova, BI and their donors, 2017										
The name of BI	Founding date	Support granted								
1. BI Soroca	16.12.2009	ENTRANSE 2 Your Business Program, funded by the Government of Norway								
2. BI Ştefan Vodă	12.04.2012	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
3. BI Leova	04.10.2012	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
4. BI Rezina	23.11.2012	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
5. BI Sângerei	08.08.2013	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
6. Bl Dubăsari	16.09.2013	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
7. BI Ceadâr Lunga	10.07.2014	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
8. BI Nisporeni	19.11.2014	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
9. BI Cimișlia	23.04.2015	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
10. BI Călărași	19.06. 2017	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
11. BI Cahul	17.08.2017	Budget Support Program "Economic Stimulation in Rural Areas" funded by EU								
Courses Flaker	ورواب والجريم ووالجريروا أومخم	10 22 241								

NAM structure in Moldova, BI and their donors, 2017

Source: Elaborated by the author on [19, 22, 24]

According to the data in Table 2, the first business incubator was opened in Soroca in 2009. After that, 3 BI were created in 2012, in 2013-2014 - 2 incubators, in 2015 an incubator, and in 2017 two incubators were created in Călărași and Cahul.

3. Management within RIAM

3.1. The operational capacity of the IA

All BI within RIAM are located in buildings with 2-4 floors, with an average rental area of over 1000 m² (Table 3).

The locations were provided by the Local Public Authorities (LPA) and renovated with the financial support of the European Union. As a rule, on the ground floor there are administrative offices and production areas, which have separate entrances and counters for electricity, and office spaces, conference rooms, etc. are located on the upper floors.

Table 3

Occupied areas, m ² The name of Bl	The total area of the building	Total rental area	The area of production space	The area of the office space	Adminis- trative space	Common space
BI Soroca	1773,0	1200,0	996,0	204,0	125,0	448,0
BI Ştefan- Vodă	1872,2	862,5	371,0	491,5	135,0	874,7
BI Leova	1180,0	724,0	117,4	606,6	52,4	403,6
BI Rezina	1147,2	674,32	487,2	187,2	144,7	328,2
BI Sîngerei	1285,4	734,42	126,0	608,0	47,7	503,3
BI Dubăsari	1026,1	557,78	242,3	315,5	136,2	332,2
BI Ceadîr-Lunga	1966,4	1094,8	282,0	812,0	49,0	822,6
BI Nisporeni	2100,0	1218,0	306,0	918,0	50,0	832,0
BI Cimişlia	1336,4	944,2	202	742,2	43,7	270,1
BI Călărași	2000,0	nd*	nd	nd	nd	nd
BI Cahul	nd	nd	nd	nd	nd	nd

Operational capacity of IA, 2017, m²

As we can see from Table 3, the largest production space has BI Soroca and Rezina, and the largest areas for offices are at BI Ceadâr-Lunga and Nisporeni.

Regarding the degree of space utilization in BI of RIAM, this is satisfactory.

The BI, which have a working period of more than 2 years, have an employment rate of 75%, which tends on average to that of the European BI of 80-85% [23].

Following the assessment of the BI residents' types of activity presented in Table 4 for the years 2016-2017, it was observed that the share of production and service activities differs from one region to another.

Thus, in North statistical area, the total activity in BI represents 25,46% of which production activity is 8,33% and services are 17,13%. In the Center statistical area the share of the total activity represents 32,87%, where the production activity occupies 10,19% and the activity activity is 22,69%.

In the South statistical area, the share of total activities is 41,67%, of which the production activity is 12,04% and the activity of services is 29,63%, which corresponds to the dynamics of the territorial distribution of SMEs in the country. An important indicator determining the degree of RIAM development in the Republic of Moldova is the degree of density of the country's BI per 100,000 inhabitants, which confirms that this process is at an early stage (Annex 1).

According to Annex 1, where the BI density in the Republic of Moldova was analyzed at 100 thousand inhabitants, we confirm that this indicator has a tendency to increase from 0,29 BI to 100 thousand inhabitants in 2014 to 0,4 BI per 100 thousand inhabitants, 2017, since the number BI is growing.

North area	Center area	South area*
37	49	64
18	22	26
55	71	90
17,13	22,69	29,63
8,33	10,19	12,04
25,46	32,87	41,67
	37 18 55 17,13 8,33	37 49 18 22 55 71 17,13 22,69 8,33 10,19

Table 4 Distribution of BI activities by activity domains and statistical areas. 2016-2017

Note: * the southern area including UTA Gagauzia

Source: Annual report on BI activity, 2017 [24]

However, from the point of view of the regional location - we find that the BI are not uniformly located, because in the North statistical area the density of BI is the lowest, compared to other areas. Thus, in 2017 it constituted the value of 0,2 BI per 100 thousand inhabitants. A median density was registered by the BI in the Center statistical area - with an index of 0,38 BI per 100 thousand inhabitants. The highest density of BI is recorded in the South statistical area – 0,72 BI per 100 thousand inhabitants.

3.2. Training activities in the BI

During the 2014-2017 period in RIAM training sessions were held in different areas. More than 2877 consultations were provided to the BI residents and the entrepreneur in the incubator operating area. On average, each year the number of trained persons was about 700 people; 185 events dedicated to entrepreneurship and 270 events with the participation of the Business Incubators management team were organized.

Based on Table 5 data, the number of training in BI is decreasing in favor of the number of exchange programs. This indicates that the residents of these incubators are interested in continuing their work within the RIAM and are increasingly involved in the exchange of experience projects. Beneficiaries of BI services are not just their residents, as incubators have also been given the role of Information and Consultancy Centers for entrepreneurs from the districts where they are located.

Table 5

1	Frainin	g activ	vities c	arried	out wi	thin Bl	of RIA	M, 20	14-201	L7.			
The name of BI	Training in Bl					Project training				Exchange of experience			
	201	201	201	201	201	201	201	201	201	201	201	201	
	4	5	6	7	4	5	6	7	4	5	6	7	
1. BI Soroca	29	14	6	5	-	-	-	3	2	3	5	5	
2. Bl Ștefan Vodă	5	8	1	2	2	2	2	3	3	2	2	3	
3. BI Leova	8	-	2	2	-	-	-	1	1	-	-	3	
4. Bl Rezina	7	9	5	1	-	1	1	1	3	1	2	2	
5. Bl Sângerei	7	9	1	4	5	2	2	3	2	-	-	5	
6. Bl Dubăsari	7	4	2	2	-	2	2	2	1	2	2	2	
7. Bl Ceadîr-Lunga	3	4	2	4	1	2	2	1	1	1	1	4	
8. BI Nisporeni	-	6	3	3	-	1	1	3	1	3	4	5	
9. BI Cimişlia	-	7	2	2	-	3	3	2	-	1	1	3	
10. BI Călărași				3				2				2	
11. BI Cahul				2				2				4	
TOTAL	66	61	24	30	8	13	13	23	14	13	18	38	

Source: Annual report on BI activity, 2014-2017 [23, 24, 25]

The BI hosted and organized a series of events, training courses, seminars, workshops which are meant to contribute to the development of the entrepreneurial skills of the managers of the incubated companies, as well as of the economic agents in the districts. The fields required for training were: business start-up; legal registration; business management; accessing funds; bookkeeping consultations, etc.

3.3. Evaluating the performance indicators of the IA

On December 31, 2017, 180 resident companies were hosted in the 11 BI, with cumulative 864 jobs, Table 6.

The predominant number of incubated businesses (over 90%) were legally registered as Limited Liability Companies (LLCs). The choice of this type of organizational-legal form of enterprises is due to the fact that these forms have a number of substantial comparative advantages. In the 11 BI there were registered companies with mixt profile, which proved that the beneficiaries of the incubation programs are both production (manufacturing) companies and service providers. Entreprices form the trade sector are not eligible for incubation.

Overall, in the BI of the Republic of Moldova there are located:

• 49 manufacturing companies;

• 131 service providers.

The overall strategic objective of incubation defines the purpose of establishing the BI and is based on supporting the development of start-up or early-stage enterprises. Thus, in 2017 from 180 of the resident companies of BI 87 are start-up companies.

At present, the development of female entrepreneurship is a priority in our country, which confirms the data of Table 6: from 180 residents, 75 companies are founded / administered by women (or 42%), and 410 places are created in incubators for women (or about 47%). Also, in the BI were identified 89 companies founded / managed by young people, and per total in the BI 344 jobs were created for young people.

Table 6

	Number of		including:		Number of	including:		
The name of BI	rezidents, total	Start- up	Young people	Women	jobs, total	Young people	Women	
BI Soroca	17	4	3	9	190	51	101	
BI Stefan-Vodă	11	3	3	5	78	20	28	
BI Leova	16	11	7	4	60	38	22	
						Continua	tion Table 6	
BI Rezina	13	6	3	6	40	10	21	
BI Sîngerei	30	14	22	18	202	115	96	
BI Dubăsari	9	2	2	1	12	2	1	
BI Ceadîr-Lunga	20	6	12	8	132	35	97	
BI Nisporeni	28	13	18	11	90	43	31	
BI Cimişlia	10	8	3	3	22	7	4	
BI Călărași	16	12	9	6	25	14	4	
BI Cahul	10	8	7	4	13	9	5	
TOTAL	180	87	89	75	864	344	410	

Performance indicators of BI within RIAM, 31.12.2017

Source: Elaborated by the author [23, 25, 26]

In general, the management situation in RIAM is as follows:

• The largest number of residents are accommodated by the BI in Sângerei and Nisporeni.

• Most start-ups were launched in BI in Sângerei and Nisporeni.

• The largest number of jobs created are in BI Sângerei and Soroca (more than 90% of the total rental area was leased, respectively, to Sângerei and Soroca BI, with the largest number of women and young people, because of the availability of workforce compared to adjacent districts.

3.4. Assessment of Economic Activity Indicators of BI Residents

In order to evaluate the level of quantitative development of the BI there were analyzed as indicators such as: turnover, absolute change and dynamic pace. The total turnover of the BI residents, reported on 31.12.2017, is over 87 million lei, table 7.

Table 7

Dynamics of turnover of BI residents in RIAM, 2014-2017 (thousand lei; %)											
	÷	Turr	nover		Abs	olute chai	nge	Dynamic rhythm,%			
The name of BI	2014	2015	2016	2017	2015-	2016-	2017-	2014-	2015-	2017-	
	2014	2015	2016	2017	2014	2015	2016	2015	2016	2016	
BI Soroca	11710,1	14655,9	15125,2	18800	+2945,8	+469,3	+3674,8	25,16	3,2	24,3	
BI Stefan-Vodă	9970,3	11803,2	13423,4	4655	+1832,9	+1620,2	-8768,4	18,38	13,7	-65,3	
BI Leova	2975,9	3648,0	3555,0	4100	+672,1	-93	+545	22,58	-2,5	15,3	
BI Rezina	4007,2	4500,0	3500,0	2000	+492,8	-1000	-1500	12,3	-22,2	-42,9	
BI Sîngerei	6927,2	7500,0	6411,0	6540	+572,8	-1089	+129	8,27	-14,5	2,0	
BI Dubăsari	767,0	2500,0	2000,0	735,247	+ 1733	-500	-1264,8	3,3 times	-20	-63,2	
BI Ceadîr-Lunga	2254,0	5395,5	9305,4	10520	+ 3141,5	+ 3909,9	+1214,6	2,4 times	72,5	13,1	
BI Nisporeni	919,0	32276,6	36000,0	38000	+ 31357,6	+ 3723,4	+2000	35 times	11,5	5,6	
BI Cimişlia	-	2866,0	4715,2	1,187	+ 2866	+ 1849,2	-4714	-	64,5	-100	
BI Călărași	-	-	-	500	-	-	+500	-	-	-	
BI Cahul	-	-	-	500	-	-	+500	-	-	-	
TOTAL	39530,8	85145,3	94035,2	86351,4	+ 45614,5	+ 8889,9	-7683,8	2,2 times	10,4	-8,2	

TOTAL 39530,8 85145,3 94035,2 86351,4 + 45614,5 + 8889,9 -7683,8 2,2 times 10,4 -3 Source: Elaborated by the author on ODIMM's data, 2014-2017 [23, 24]

From the analysis of the data from Table 7 during the period 2014-2017 the highest value of the turnover was registered in 2014 at Soroca BI – 11,7 million lei; BI Nisporeni - 32 million lei in 2015, in 2016 - 36 million lei and 38 million lei in 2017. The arguments for these performances are explained by the solid surface occupied by these BI, as well as the large number of new arrivals.

Between 2014 and 2017, there was a substantial increase in residents' sales to some BI. Thus, BI Nisporeni registered the turnover growth of about 41.3 times; at BI Ceadir-Lunga - about 4,7 times and BI Soroca - about 1,6 times.

A negative dynamics of turnover was recorded at BI Sângerei, which decreased about 2,1 times, at BI Rezina - about 2 times and at BI Cimislia, where the residents practically did not register incomes in 2017. The reason for this decline was the decline in the turnover of residents in this statistical area.

In the period 2014-2017, a steady trend of total turnover on the BI has been maintained, from 39,5 million lei in 2014 to 94 million lei. In 2017, there is a negative trend of diminishing the total turnover to 86,4 million lei, or 8,2%, compared to the year 2016. This decrease was caused by the sharp decrease in sales at BI Ştefan-Vodă, Cimişlia, Rezina

and Dubăsari, caused by difficult climate conditions of the year that negatively influenced the results of the agri-food sector activities.

However, if we analyze the dynamics for the entire 2014-2017 period, the trend is positive, because in 2017 turnover in all BI of RIAM increased by 46,8 mil lei compared to the year 2014, or increased 2,2 times, which shows general positive trends in the development of the BI in Moldova. In order to estimate the performance of BI on statistical areas, the comparative dynamic analysis of the performance indicators of RIAM and SMEs by statistical areas of the Republic of Moldova is made, table 8.

Table 8

Indicators	Statistical area	Entities	2014	2015	2016	2017	Absolute change (+, -)	Average rhythm of dynamics, %
	North	SME	12139,7	15324,59	15849,57	19015,92	+6876,2 2	+56,6
		RIAM	18,637	22,1559	21,5362	25,34	+6,7	+36,0
Turnover,	Center	SME	11864,7	16665,84	17737,81	19099,38	+7234,6 8	+61,0
mln. lei		RIAM	8,613	39,2766	41,5	41,24	+32,63	+378,8
-	South	SME	7143,1	9835,23	10323,12	11950,66	+4807,5 6	+67,3
		RIAM	15,200	23,7125	30,999	20,962	+5,76	+37,9
	North	SME	49717	55282	53444	55966	+6249	+12,6
		RIAM	219	239	248	392	+173	+79,0
Number of	Caratar	SME	48839	54129	54535	54421	+5582	+11,4
employees, persons	Center	RIAM	135	172	150	167	+32	+23,7
persons -	Cauth	SME	33223	37336	36982	37859	+4636	+14,0
	South	RIAM	168	223	212	305	+137	+81,5
	N a set la	SME	244,18	277,21	296,56	339,78	+95,6	+39,2
Labor	North	RIAM	85,10	92,70	86,84	64,64	-20,46	-24,0
producti-	Contor	SME	242,93	307,89	325,26	350,96	+108,03	+44,5
vity, thousands -	Center	RIAM	63,80	228,35	276,67	246,95	+183,15	+287,1
lei/ pers.	South	SME	215,91	263,43	279,14	315,66	+99,75	+46,2
- /	South	RIAM	90,48	106,33	146,22	68,73	-21,75	-24,0

Dynamics of RIAM and SMEs economic performance indicators on statistical areas of the Republic of Moldova, 2014-2017

Source: Elaborated by the author on [27, 28]

Assessing the dynamics of changing key performance indicators such as *the turnover and labor productivity of* RIAM and SMEs in the Republic of Moldova, it was found that in RIAM the growth rate of economic indicators was higher than in the SME sector only in the Center area, while in North and South the trend was decreasing. Thus, the SMEs in the Center statistical area had the average turnover growth rate of 61%, and for RIAM residents the turnover increased in the same period by 3,8 times in the same period.

For the South statistical area, the average rate of turnover of SMEs amounted to 67,3%, and for RIAM residents the turnover increased by 37,9%. The same trend is also observed in the North statistical area, where the average turnover dynamics of RIAM

residents was lower than the average values for SMEs (36% vs. 56,6% respectively), the reasons being the non-favorable climate conditions of the year 2017.

In all the statistical areas analyzed, the growth rate of the number of employees for RIAM exceeds the growth rate of employees in SMEs, as the BI mission consists primarily in job creation and entrepreneurship education, secondly in the start-up formation. The upward trend in labor productivity in the North and South statistical areas for 2014-2017 (RIAM - 24%) was due to an increase in the number of employees that far exceeded the growth rate of turnover.

Synthesizing the results obtained, the author concludes that the development of the SME sector is directly dependent on the development of RIAM, which confirms the BI's manifestation within RIAM as a form of SME support and promotion.

3.5 Evaluation of the BI's economic efficiency indicators

To evaluate economic efficiency analysis of the BI management in Moldova there are analyzed their economic and financial indicators. Due to the limited space of the publication, the authors avoided presenting the dynamics of these indicators exposed to the 7 (seven) BI analysis in the areas (Nisporeni, Ceadir-Lunga, Rezina, Singerei, Dubasari, Leova, Soroca). From the 11 operational incubators in our country, all of them RIAM members, only 5 (five) BI present annual financial reports (BI Călăraşi and BI Cahul were only formed in 2017). Thus, for research, the economic activity of more than half of the incubators in the country was assessed, which is representative.

Most of the BI presents its revenues, obtained from the rendered services, under the heading "Other operating income". In dynamics, BI's incomes shows growth trends, which confirms the acceleration of their activity. The highest increase in the incomes from the operational activity for the period 2014-2017 was recorded at the BI Nisporeni - about 2 times, the BI Leova - about 1,5 times, the BI Dubasari – 67,9% and BI Soroca - 58,1 %. At BI Ceadâr-Lunga and BI Rezina there was a decrease in incomes in 2017 compared to 2014, although in the years 2015 and 2016 the incomes were much higher.

According to its statute, as non-profit public institutions, the BI Ceadâr-Lunga, Rezina, Nisporeni and Leova presents the net profit as zero in the "Profit and loss statement". For its part, the BI Dubăsari and Sângerei recorded losses from its activity for the years 2014 and 2017. In 2016 at BI Sângerei the financial situation improved and a net profit amounted to 261,1 thousands lei. The only BI that recorded net profit during the 2014-2016 period was BI Soroca, but in 2017 the situation has changed considerably, as losses amounted to 284,1 thousands lei. This decrease in the financial result took place against the backdrop of job growth and reduced labor productivity, which led to increased sales costs and administrative expenses. As far as the immobilization coefficient is concerned, it falls within the optimal limits at BI Rezina and Sângerei, the other BI being below the optimum level, which confirms a small share of long-term assets in total assets.

Regarding the liquidity indicators, which express the ability of the BI to honor their current payment obligations, these were optimal at BI Ceadir-Lunga, Dubasari, Soroca, Leova and Sângerei. The high value of liquidity ratios is explained by lower current BI debts as compared to current assets. At BI Rezina, the liquidity coefficients do not fall within the range of optimal values, because they record very high current debts - of about 7,5 million lei in 2017. Regarding the financial stability indicators, the financial autonomy coefficient was within the optimal limits only at the BI Dubăsari, Ceadâr-Lunga (in 2016) and Soroca (in

2015), the other BI being dependent on borrowed funds. In turn, the equity ratio was optimally limited to BI Ceadâr-Lunga, Soroca and Dubăsari. The BI from Cahul, Călărași and Cimişlia, members of RIAM in 2019 will benefit from a Rolling Fund to facilitate access to finance for resident entrepreneurs in the form of a preferential loan, free of interest and commissions. The Rolling Fund is a tool for the development of resident entrepreneurs, benefiting from all Business Incubators, members of the RIAM. The granting of loans from the Fund's financial means amounting to 300,000 lei is made within the limits of the available sources and does not constitute an obligation of the Business Incubator towards the residents. Fund's financial means may be allocated to residents for a period not exceeding three years. The amount of the loan granted through the Fund for a resident shall not exceed 20% of the Fund size or 60,000 MDL, granted over the entire incubation period [29]. In order to streamline the process of information and consultation of SMEs, a Business Helpdesk and Business Center similar to the ODIMM Development Organization will be set up in each Business Incubator. Implementation of this initiative will be possible thanks to World Bank support [29]. For the overall economic analysis of the BI activity, the authors carried out the SWOT analysis, aiming at identifying the current situation and determining the possible strategic directions for the development of BI in the RM, taking into account all factors of the external environment and the internal development environment. The SWOT analysis for the BI in Moldova has shown that this business support infrastructure has a satisfactory potential and great opportunities, but the risks that BI have to face in its current work must be taken into account. The liquidation of foreign constraints depends heavily on the country's political factors, namely: public policies developed and implemented in the field of education, financial-banking, Central Public Authorities and Local Public Authorities management, public policies in the rural sector, and so on.

The final task of the authors is to elaborate the directions of action aimed at reducing the weaknesses of the internal environment. According to the results obtained, the SWOT analysis proves that Moldova has several advantages and opportunities compared to the weaknesses and risks of RIAM's development: + 21, pro and 13 against, which confirms that the strategic direction of the BI *must be growth but with the liquidation of the existing weaknesses of the entrepreneurial environment*.

If we refer to the fact that the Government is paying much attention to road repairs, there are many national and international meetings on the search for investors across the country, including the Moldovan diaspora; permanent improvement of the legal framework - all these actions are positively reflected on the entrepreneurial environment. Thus, taking into account the latest Governmental achievements in this direction, we can argue that the stargate on the BI is one of growth and reduction of existing weaknesses.

Thus, the analysis of the domestic development factors of native AI allows us to conclude that the practice of BI's activity proves that their services are still not sufficiently demanded because:

- the normative basis of the BI is insufficient for their creation and operation;
- the inhomogeneous territorial location of the BI on statistical areas (South, Center and North) is detected;
- local support infrastructure insufficiently developed;
- the difficult economic and financial situation in some BI's;
- low level of entrepreneurial skills;
- insufficient level of technological transfer;
- difficulties in generating and selecting innovative business ideas for inclusion in the BI.

Conclusions and recommendations

1. Currently the legal basis of the BI as a managerial support is not formed.

2. The authors of the paper propose the following definition for the assessment of the BI as an economic category: *Business Incubator is a form of managerial support designed to create and support new businesses by offering physical spaces, infrastructure networks, access to consulting services in relatively new areas,* by ensuring partnership relations between civil society, entrepreneurship and Central and Local Public Authorities.

3. By synthesizing the results obtained, the authors conclude that the development of the SME sector is directly dependent on the development of RIAM, which confirms the BI's manifestation within the RIAM as a form of logistical support and SME promotion. The BI situation in the Republic of Moldova confirms that they have the form of SME support, offering rent and organizational support, business consulting centers, but the situation in the country is rather difficult because most of the BI have financial problems, being unable to operate independently.

4. The economic and financial situation of the BI in the Republic of Moldova, taking into account their specificity as public institutions, is generally satisfactory, with high reserves for efficiency of the activity. Services provided to incubated companies do not even cover the operational costs of maintaining the BI. The government and international organizations recognize that there is a need to improve the capacity of the existing BI and to strengthen the RIAM network with financial support from both the Government and the outside.

5. At present, the operational BI in the Republic of Moldova have the following characteristics:

- the average incubation period is 2-3 years. During this period, residents benefit from services, which can be grouped as follows: providing office space and manufacturing space at a lower price than the commercial one; administrative and technical services; business consulting and guidance; access to finance, etc.;
- the average incubation capacity is 15-20 enterprises;
- the average number of employees in each incubator is 3-4 people;
- the average area of an BI is 1400 m²;
- on the basis of the initial funding of the BI, the sources of development partners, in particular EU budget support, were sources.

6. The distribution of the residents by statistical areas in the Republic of Moldova is uneven. Thus, their distribution on the areas had the following values: North statistical area – 25,46%; Center statistical area – 32,87%; South statistical area (including UTA Gagauzia) – 41,67% of total residents in the country. The heterogeneous distribution of RIAM causes disparities in the territorial economic development and living standards of the population.

7. Research has shown that RIAM is undergoing training and BI are in the process of development, many of which require support in redirecting work and compliance with the BI's operating principles, excluding the erroneous view that the task of the BI is limited only to rent their spaces. The analysis shows that the current BI cover Ceadâr-Lunga, Cimişlia, Ştefan-Vodă, Nisporeni and Sângerei rural areas, regions where the best performances in the SME sector are registered.

8. The BI of the Republic of Moldova, as defined in the research, has the role of supporting the development of newly created enterprises so that they can reach a level of

stability and autonomy, leaving the BI and becoming SME to operate on own, with increased chances to face the competitive environment in the country.

9. We mention that in order to promote and publicize the activities and ensure the transparency of BI, services and opportunities of BI of RIAM, webpages and open accounts were created on social networking sites, where they can place the latest news, information, activities. BI also has printed promotional materials: leaflets, brochures, banners, calendars, etc., which familiarize the population of RM with the role and actions of RIAM aimed at developing the small business in the country.

10. Towards further development of start-ups in BI and their launching into the entrepreneurial environment with the aim of developing the SME sector, the Moldova Strategy 2012-2020 provides for the formation of Clusters, which are recognized as potential engines of economic growth and innovation. This proposal is welcome because in the global economy the cluster is considered to be one of the most widespread models of economic cooperation that generates considerable impact on increasing efficiency and increasing the competitiveness of enterprises, accelerates the process of modernizing and improving the structure of industry, stimulates the development of the scientific-innovation process, ensures the increase of the investment attractiveness of the regions of the country.

11. Transition to the new forms of logistical support of start-ups in the clusters would also contribute to the homogeneous distribution of SMEs on the territory of the Republic of Moldova, which can also contribute to the elimination of disproportionalities in the economic development level of the country.

Bibliographical references:

- 1. Kuratko, D., La Follette, W. Small Business Incubators for Local Economic Development. In: *Economic Development Review*, nr. 5, 1987, p. 49-55.
- 2. Campbell, C. *Change agents in the new economy: business incubators and economic development*. Minneapolis: Charles Stewart Mott Foundation, 1989, p. 12.
- 3. Allen, D., Mc Cluskey, R. Structure, policy, services and performance in the business incubator industry. In: *Entrepreneurship Theory and Practice*, 1990, p. 61
- 4. Dragomirescu, S. *Incubatorul de afaceri în 15 întrebări și răspunsuri* [Business Incubator in 15 questions and answers]. București: Litera, 1993, p. 9
- 5. Petree, R., Petkov, R., Spiro, E. Technology park-concept and organisation. In: *Summary report for Center for Economic Development*, Sofia, 1997, p. 9
- 6. Lalkaka, R. și Bishop, J. *Rolul incubatoarelor de afaceri în dezvoltarea economică* [The role of business incubators in economic development]. București: ALL BECK, 2000, p. 15
- 7. Kmetz, J. Business incubators for Central and Eastern Europe. Budapest, 2000, p. 1
- 8. Duff, A. *Best practice in business in Business incubator management*. USA: AUSTEP Strategic Partnering Pty Ltd, 2000, p. 11
- 9. European Commission. Benchmarking of business incubators. Brussels, 2002, p. 4
- 10. United Nations, Economic Commission For Europe. *Best practice in business incubation*. New York, Geneva: United Nations, 2001, p. 4
- 11. Hackett, S., Dilts, D. A Real Options-Driven Theory of Business Incubation. In: *Journal of Technology Transfer*, 2004, p. 49
- 12. Titica, N. Rolul incubatoarelor de afaceri în dezvoltarea întreprinderilor mici și mijlocii [The role of business incubators in the development of small and medium-sized enterprises]. În: *Economica*, nr. 3-4, 2002, p. 61
- 13. Braguța, A. Incubatorul de afaceri o soluție a managementului contemporan pentru dinamizarea dezvoltării antreprenoriale [Business Incubator a solution of contemporary management for boosting entrepreneurial development]. În: *Materialele Conferinței Internaționale "Rolul științei și învățământului economic în realizarea reformelor economice din Republica Moldova"*, ASEM, 2003, p. 39

- 14.Banari, I. Dezvoltarea unei afaceri [Developing a business]. În: *Conferința națională "Fizica și tehnologiile moderne*", nr. 1-2, 2004, p. 60
- 15. Bugaian, L. Rolul infrastructurii de afaceri în inițierea, incubarea și dezvoltarea micilor afaceri [The role of business infrastructure in initiating, incubating and developing small businesses]. Prezentare ODMM, Chișinău, 2012
- 16. Ușurelu, L. Ghidul Pas cu Pas pentru crearea incubatoarelor regionale de afaceri. Chișinău, 2013, p.12
- 17. Oecd. Business incubation international case studies, 1999.
- 18. Sipos, Z., Szabo, A. *Benmarking of business incubators in CEE and CIS transitio economies*. Budapest, 2006, p. 15
- 19. DODU, A. Conceptul Incubatorului de afaceri ca formă de promovare a IMM-lor [Business Incubator Concept as a form of SME promotion]. In: *"Meridian ingineresc"* nr. 3, "Tehnica-Info", Chişinău, 2009, p. 75-77.
- 20. Dodu, A. Practicile internaționale de funcționare a incubatoarelor de afaceri [International practices for operating of business incubators]. In: *Conferința Științifică Internațională Ediția a IV-a "Creșterea economică în condițiile internaționalizării"*, 3-4 septembrie 2009, Chișinău, IEFS, 2009, p. 143-147
- 21. Raportul ODIMM pe activitatea incubatoarelor de afaceri pentru anul 2012, pag. 4
- 22. Raportul anual pe activitatea incubatoarelor de afaceri pentru anul 2014, 2015. 20p.
- 23. Raport anual de activitate al Ministerului Economiei și Infrastructurii pentru anul 2017, pag. 48-49
- 24. Raportul ODIMM pe activitatea incubatoarelor de afaceri pentru anul 2017. Infrastructura de suport în afaceri
- 25. Dodu, A., Rețeaua Incubatoarelor de afaceri din R. Moldova: indicatori de performanță [Business Incubators Network in Moldova: performance indicators]. In: *Conferința colaboratorilor, doctoranzilor și studenților UTM*, 17 noiembrie 2017, p. 294-295.
- 26. Gorobievschi, S., Dodu, A. Evoluția activității Incubatoarelor de afceri în contextual mediului antreprenorial al Republicii Moldova [Evolution of Business Incubators Activity in the Context of the Entrepreneurial Environment of the Republic of Moldova]. In: *Dezvoltarea economic-socială durabilă a Euroregiunilor și a Zonelor transfrontaliere.* Iași: Performantica; Institutul de Cercetări Economice și Sociale "GH. ZANE", 2017, p. 229–237.
- 27. Banca de date statistice Moldova [online]. [accesat 10.02.2019]. Disponibil: www.statistica.md
- 28. Rețeaua incubatoarelor de afaceri din Republica Moldova [online]. [accesat 10.02.2019]. Disponibil:https://riam.md/.