BUSINESS SUPPORT STRUCTURES AND REGIONAL DEVELOPMENT. CASE STUDY – BIHOR COUNTY

Professor Ph.D. Anca Otilia DODESCU

University of Oradea, Romania E-mail: adodescu@uoradea.ro

Associate Professor Ph.D. Ioana Crina POP COHUT

University of Oradea, Romania E-mail: ipop@uoradea.ro

Abstract: In addition to our previous research regarding economic policies for regional growth and development suitable for Romania the actual research aims to investigate the business support structures as a viable instrument of regional development in Romania in the specific economic context of Bihor County. The present paper aims to investigate the situation of business support structures in the Bihor County (Romania) in the EU context, if the business support structures contribute to the local and regional development and what are the business support structures that can be developed by the Bihor County based on literature review and contextual analysis. The first part of the paper provides a literature analysis of the business support structures, agglomeration economies and regional development and provides an analytical framework of Bihor County's economic context. In the second part, the paper presents the business support structures from Bihor County followed by 4 case studies. The main conclusion of the paper is that, although there is an increased interest in the business support structures in Bihor county, the existing structures are insufficient and without a significant impact on local development, especially at the level of small towns and rural areas. The data used for contextual analysis are based on local and regional statistics, local and regional development strategies, public and internal data of public and private organizations regarding EU funded projects and business support structures.

Keywords: Business support structures, agglomeration economies, industrial clustering, regional development, Bihor County (Romania).

JEL Classification: M13, O1, M1.

1. Introduction

The role of business support structures is considered essential as tools for interpretation and action for regional development. The analysis of the theoretical trajectories followed by theories and models of regional development highlights that the progress in this area consisted in focusing on economies of scale and economies of agglomeration, including territorial advantages that encourage innovation capacity of firms and regions. Identifying the role of space in the innovative process became a topic of the highest relevance. The dynamic agglomeration economies which encourage companies' and regions' capacity for innovation - are the subject of the latest debates on business support structures as instruments of regional development. In this context, the present paper analyses the business support structures situation at local level in Romania based on simple and dynamic agglomeration economies, and try to identify the main factors that explain their impact on regional development.

Our contextual analysis is derived from a larger study looking at economic policies for regional growth and development suitable for Romania in the context of the economic and financial crisis and integration into the European model (Dodescu, 2013). We concluded that encouraging SMEs and innovation are emerging challenges for the regional policy of Romania and a new style of regional governance for cooperation and relativity, orientation towards the SME sector, technological progress, innovative and learning processes to capitalize the endogenous regional potential - is a necessary change to mature Romania's regional growth and development policies in the context of European Union (EU) integration (Dodescu, 2011a; Dodescu, 2011b; Dodescu and Chirilă, 2012a; Dodescu and Chirilă, 2012b; Dodescu, 2013). Looking at existing business support structures in the North-West Region of Romania, we identified the predominance of industrial parks as

long-term functional structures (Dodescu and Chirilă, 2012c), high difficulties in ensuring sustainability of economic agglomerations based on dynamic agglomeration economies, especially, innovative clusters, despite regional clustering potential (Popescu, Dodescu and Filip, 2014). Also, we identified that EU structural funds, particularly European Regional Development Fund (ERDF) - supported actions, have been the most significant in the field of encouraging business support structures in Romania, the Romanian strengths in this field are definitively related only with industrial parks (Dodescu and Chirilă, 2014; Dodescu, Filip and Chirilă, 2016).

The actual research aims to investigate the business support structures as a viable instrument of regional development in Romania in the specific economic context of Bihor County. Accordingly, the main research questions addressed in this paper are: What is the situation of business support structures in the Bihor County (Romania) in the EU context? How did the business support structures contribute to the local and regional development? What are the business support structures that can be developed by the Bihor County based on literature review and contextual analysis?

The paper is structured as follows: Section 1 provides a literature analysis of the business support structures, agglomeration economies and regional development; Section 2 provides an analytical framework of Bihor County's economic context; Section 3 presents the business support structures from Bihor County followed by 4 case studies in Section 4, and Section 5 summarizes and concludes the paper.

2. Business Support Structures, Agglomeration Economies and Regional **Development. Literature Review**

The observation that economic activities are generally grouped into space has led to the identification of the so-called spatial or "industrial clustering" phenomenon (McCann, 2001, p.53). In an attempt to explain the industrial clustering phenomenon, the literature uses the notion of "agglomeration economies", defined as economies of scale with specific locations. The existence of agglomeration economies and the positive effects of the agglomeration of companies on regional development were theorized by neo-classical authors such as Weber, but Alfred Marshall was the first to provide a detailed description of the sources and effects of these economies. They were defined by Alfred Marshall (1920) as external economies that are independent of the individual firm but which mark all firms located in the same area. In Marshall's approach, a good description of which is provided by McCann (2001), agglomeration economies are generally perceived as external economies that are independent of the individual firm but which mark all firms located in the same area.

For Marshall, the agglomeration effect is based on the following sources: a) Information spillovers, b) Local non-marketed inputs, c) Economies resulting from the local concentration of qualified work (Marshall, 1920, pp.319-326; McCann, 2001, pp.56-57). These three sources of agglomeration economies can allow firms in a local agglomeration to achieve economies of scale external to any firm but internal to the group. The key feature of each source of agglomeration economies is the reduction of transaction costs as a result of spatial clustering. Clustering increases the likelihood that specific information will be transmitted, that specialized services required will be offered, and that the suitably qualified workforce will be available in that location, as opposed to dispersed locations (McCann, 2001, p.57).

Consequently, agglomeration economies are territorial contexts characterized by the specialization of certain sectors, technologies or industrial fields that lead to economic agglomerations. Typically, economic or industrial agglomerations are associated with superior economic performance in a particular area, with the most well-known examples

being: Silicon Valley for the IT industry, Hollywood for the film industry, Wall Street-New York or London for financial services, Paris or Milan for the fashion industry, etc.

There are many types of economic agglomerations called broader business support structures – business centers, business incubators, industrial parks, industrial districts, technology parks, clusters, etc. The simplest forms of economic agglomeration are economic centers that do not involve specialization in a certain industrial branch and technological relationship, business incubators, industrial parks, cities, regions, etc. creating agglomeration economies can fall into this category (Dodescu, 2013, p.118). The most well-known forms of economic agglomerations, including specialization in a particular branch of industry and technological relationship, are the industrial districts defined by Alfred Marshall (1920) (Marshallian industrial district), redefined by Italian regionalists, especially Giacomo Becattini (2010) (Italian districts or "new industrial districts") and industrial clusters, defined by Michael E. Porter (1998a) (Porterian industrial cluster). Even though some authors consider industrial districts a particular form of clusters (Porter and Ketels, 2009), in fact, the variety of definitions and approaches to the differences between the two concepts being surprisingly vast (Karlsson, 2008).

The dominant features of an industrial district are the high degree of vertical and horizontal specialization (component firms tend to be small and focus on a single function in the production chain) and a very high dependence on the market (Becattini, Bellandi and de Propis, 2009). There are a wide variety of examples: the glass industry district of Bavaria (Germany) or Bohemia (Czech Republic), the textile industry in Lower Austria (Austria), the technical district in Slovenia etc., the most known being the industrial districts of the fashion industry in the region of Emilia-Romagna (Italy) (Dodescu, 2013, p.118).

The fundamental difference between industrial districts and clusters is related to the relationship with the innovation process. Defined as "geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries and associated institutions (eg. universities, standardization agencies, professional associations) in a particular field that compete but also cooperate" (Porter, 1998a, p.197), the Porterian clusters are the best-known regional development strategy that enjoy the widest implementation in practice, the Silicon Valley IT cluster (USA), the electronics and biotechnology cluster of Cambridge (UK), Grenoble (France), Munich (Germany) or Pisa, Piacenza and North - East of Milan (Italy), being the most cited examples.

Porter's model (1998a, b) is based on the argument that agglomeration provides the individual firm with another way to organize its transactions in an environment of rapidly changing information and technology, proximity generating mutual visibility among competitors. In other words, companies can see the competitive progress of each, and this visibility is an incentive for companies to continue to improve their own competitiveness (McCann, 2001, p.62). The superior ability of clusters to produce territorial advantages that encourage firms and regions' capacity for innovation is related with so-called "dynamic agglomeration economies": spatial, geographical proximity between firms, facilitating the exchange of knowledge - the source of innovative activities concentration; relational proximity between firms, defined as the interaction and cooperation between local agents, which determines the processes of collective learning and socialization: the source of local innovative capacity; institutional proximity in the form of rules, codes and norms of behavior that facilitates cooperation between actors, socializing about knowledge and assisting economic actors (individuals, firms and local institutions) in the development of organizational forms: the source of interactive learning (Capello and Nijkamp, 2009, p.6).

At the confluence of the two categories - industrial districts and clusters, depending on the degree of specialization in a certain area, there are the *scientific and technological parks*, the most eloquent examples are: Montpellier, Sophia-Antipolis - France; Gnösjo district - Sweden; Baden-Württemberg - Germany; London - Bristol - United Kingdom etc.

Economic literature connects dynamic agglomeration economies not only with clusters, but also with innovative environments - "innovative milieux" (Camagni, 1991; Aydalot and Keeble, 1988) - where specialization in a particular branch of industry and technological relationship is the fundamental condition, respectively "learning regions" (Morgan, 1997), creative regions, knowledge-based regions knowledge based regions etc. (Armstrong and Taylor, 2000, pp.292-300), "Dommel Valley" at the Belgian-Dutch border formed by high-tech regional groupings of companies and specific knowledge-based organizations as the most cited example.

The impact of economic agglomerations on regional development is proportional to the presence of dynamic agglomeration economies, defined as territorial benefits that encourage firms and regions' innovation capacity. The typology of economic agglomerations according to the type of agglomeration economies (simple and dynamic) and the presence of specialization and technological relations is presented in Table no. 1, according to the typology described by Sölvell, Lindqvist and Ketels (2003).

Table no. 1 Forms of agglomeration economies

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Forms of	No specialization or	Specializing in a particular branch of				
agglomeration	technological networking	industry and technological networking				
economies						
Agglomeration	Economic centers	Marshallian industrial districts				
economies	Business incubators Industrial parks	New industrial districts				
Efficiency and	Urban agglomerations					
flexibility	Regions					
Dynamic agglomeration economies Innovation and modernization	Creative regions Learning regions Knowledge-based regions	Clusters (Porterian industry cluster), Innovative environments (innovative milieux), Scientific research parks, Scientific parks, Scientific and technological parks, Bio-medical parks, Technopolis, etc.				
mouci mzauon						

Source: Dodescu, 2013, p. 121.

3. Bihor County's Economic Context

Bihor County has a varied economic structure, characterized by the shift from the preponderant development of strongly labour-intensive sectors to the development of the service sector. Out of the 17,891 active local units in Bihor county, one third (33.08%) are active in commerce, 12.80% in transport and warehousing, 11.47% in industry - predominantly in manufacturing (10.17% of the total), 8.99% in professional, scientific and technical activities, 8.95% in construction, 5.01% in hotels and restaurants and 4.06% in agriculture, forestry and fishing (BhCDS, 2017).

In the last five years, the highest turnover was recorded in "Wholesale and retail trade; repair of motor vehicles and motorcycles", followed by "Industry" (BhCDS, 2017). Companies in 'Wholesale and retail trade; repair of motor vehicles and motorcycles" and "Industry", followed at quite some distance by those in the fields of "Transport and storage" and "Constructions", have the most important contributions to the total turnover

achieved in Bihor County, suggesting that the county economy relies heavily on these sectors.

Even though trade, transport and construction have a significant share in Bihor County's economy, the contribution to gross value added is lower compared to industry, and does not require qualified personnel or specific skills compared to industry, therefore strategic documents focus more on industry, especially manufacturing, while policies, programs and funding schemes encourage business start-ups in industry, especially in intensive technology.

Areas of activity in the manufacturing industry in which Bihor County is more developed relative to the national level based on the number of employees, which indicates the local specialization, are: computers, electronics and optics; textile and clothing industry; plastics and non-metallic products; furniture industry (BhCC, 2017, p.42).

At the level of the year 2011, Bihor County ranks 1st at the national level in the manufacture of computers and peripheral equipment by number of employees (2.084), but also as turnover (2.52 billion RON); 1st place in the manufacture of other electronic components as number of employees (841) and 2^{nd} place as turnover (151 million RON); 3^{rd} place as number of companies / employees and 4^{th} place when considering turnover in the manufacture of electronic subassemblies (BhCC, 2017, p.42).

In 2015, in the top 3 of Bihor County's manufacturing industry, the following areas can be found: Manufacture of computers and electronic and optical products; Tanning and finishing of hides; manufacture of travel and haberdashery, harness and footwear, preparation and dyeing of fur; food industry (BhCDS, 2017).

The export analysis also reveals a certain degree of specialization of Bihor County towards certain industrial areas, noting that Bihor County is currently experiencing a trade deficit and a downward trend in exports in 2013-2015 following the trend of growth in 2010-2012.

The highest values of exports are recorded in the following groups of goods: "machinery and appliances, equipment" (42.4%), "footwear and similar goods" (17.7%), "various goods and products, including furniture" (9.2%), "textiles, knitwear, clothing" (6.1%), "optical and measuring instruments and machines, medical devices and musical instruments" (4,4%), "food, beverages and tobacco"(3%), "live animals and animal products" (2.9%), "common metals and articles thereof" (2.8%), "transport means and materials" (2,5%), "vegetable products" (2.5%), "plastics, rubber and products thereof" (2.2%), "wood products excluding furniture" (1.1%), "paper, cardboard and products thereof" (1.1%) (BhCDS, 2017).

In line with the Framework Document for Smart Specialization Strategy in North West Region, areas of smart specialization identified at the regional level are grouped on pillars, as follows: Pillar I - Health and well-being with smart specialization fields or priorities: agro-food, cosmetics and food supplements, health; Pillar II - New materials and products with the fields or priorities of smart specialization: furniture, paper / plastic / packaging, production technologies (machinery and equipment), metal processing technologies; Pillar III - Towards a Digital Transformation with smart specialization field or priority: Information and Communication Technology (NWRDA, 2017, p.87).

According to the Romanian Universe Platform, the radiography of companies in the above-mentioned intelligence domains (in decreasing order) in Bihor County in the year 2017 is as follows: out of a total of 7857 companies, 1150 are in the field of Informatics, Telecommunications, (317 companies), Software consulting, Web sites (315 companies), On-line services management (167 companies), Peripheral computers (113 companies), Internet, telephony and telecommunications (100 companies) etc.; 349 companies are in Metallurgy & Metalworking. 439 companies in the Machinery & Equipment

Manufacturing sector; 4.326 companies in the Construction & Building Materials field; 1,273 companies in the Health & Beauty field and 320 companies in the field of rubber, plastic, ceramics. (RoUP, 2017).

At the territorial level, the business environment in Bihor County is concentrated in the urban environment, especially in the Oradea Metropolitan Area. In addition, there is a very pronounced agglomeration effect of economic activity around 5 cities in Bihor County: Aleşd, Beiuş, Marghita, Salonta and Valea lui Mihai. A positive aspect is that such concentration areas are located in several localities in different areas of the county, providing important data on labor mobility in rural areas. (BhCC, 2017, p.34).

4. Business Support Structures in Bihor County

Business support structures in Bihor County have been developed especially in the Oradea Metropolitan Area; their development in the rural area will contribute in the future to the reduction of intra-county disparities regarding the development of the business environment.

Looking at existing business support structures in the Bihor County, we identified that, as well as in Romania and in the North-West region (Dodescu and Chirilă, 2014; Dodescu, Filip and Chirilă, 2016), EU structural funds, particularly European Regional Development Fund (ERDF) - supported actions, have been the most significant in the field of encouraging business support structures in Bihor County. The business support structures established with EU non-reimbursable financial aid until the present are shown below in Table no. 2.

Table no. 2 Business support structures established with EU non-reimbursable financial aid in Bihor, 2018

Type of Business support structure	Project title	Beneficiary/ Partners	Project value (Euro)	ERDF co-funding PHARE/ HU-RO CBC/ FP7 (Euro)			
Regional Operational Programme (ROP) 2007-2013							
	Supporting the development of the re	gional and local bus	siness environment	I			
Industrial Park	Creating a Business Infrastructure in Oradea City and Providing Public Utilities to the Eurobusiness Industrial Park Oradea	Oradea Municipality	17.165.334,49	6.677.048,00			
Industrial Park	Creating a Business Infrastructure in Oradea City and Providing Public Utilities to the Eurobusiness Industrial Park Oradea – stage II	Oradea Municipality	4.289.228,91	169.891,25			
PHARE CBC Romania-Hungary Programme 2004-2006							
Business Incubator	Euroregional Business Incubator Oradea	Bihor County Council	376,000.00	98,044.00			
Business Center	Integrated Center for Business Development by Promoting Regional Tourism and Culture	Town Hall of Alesd, Bihor County	335,650.00	300,058.75			
HU-RO CBC Programme 2007-2013							
Business Center	Non-Profit Center for Business Support in Hajdú-Bihar and Bihor	Chamber of Commerce and	3.999.867,69 (of which for	3.261.760,74 (of which for			

	Counties: Development of Operational and Cooperation Facilities (Business Center of Oradea Fortress)	Industry Hajdú- Bihar, Oradea Municipality	Romania: 912.327,43)	Romania: 775.478,32)		
Business Incubator	Business incubator for Cross- border Tourism development	Town Hall of Vadu Crişului, Bihor County	552 633,86	466,766,86		
Business Center	"Increasing the economic competitiveness in the rural areas of Hajdu Bihar - Bihor Euroregion - Business Incubators", Cross-border Center for Business Encouragement and Development in Tetchea	Town Hall of Tetchea, Bihor County	1.115.305,00 (of which for Romania: 600.000,00)	948.009,25 (of which for Romania: 18.000,00)		
	FP7, Regions of Knowledge Programme (REGIONS-2007-2)					
Cluster	Creating a Central European Thermal Water Research Cluster	INNOVA Észak-alföld Ltd (HU) Romanian Partners: University of Oradea, NW RDA, Transjex Ltd.	223.014,00	199.986,00 (of which for Romania: 37.277,00)		

Source: Made by author based on: OCH, 2018a; RIS3 NV, 2018; NWRDA, 2018; KEU, 2018; CORDIS, 2018.

In 2018, in Bihor County there were 3 functional industrial parks in Oradea, with a very high impact - Eurobusiness Industrial Park Oradea I, II, III, established as seen in Table no. 2 with EU non-reimbursable financial aid through Regional Operational Programme 2007-2013, to which it is added 2 industrial parks in project, in the rural area – Tileagd and Săcueni, only Tileagd has obtained the title of industrial park so far. Eurobusiness Industrial Park I is located in Oradea, about 4 km from the Bors customs border on Hungary, with a total area of 130 hectares, with a 99.22% occupancy rate (Adlo, 2018); Eurobusiness Industrial Park II, located in Oradea, near DN 79 Oradea-Deva and DN 76 Oradea-Arad, with a total area of 83 hectares, occupying 45.65% (Adlo, 2018); Eurobusiness Industrial Park III, situated on the Uzinelor Street, about 8 km from the Bors customs border on Hungary, with an area of 15 hectares, with a occupancy rate of 53.17% (Adlo, 2018). Tileagd Industrial Park is located 25 km from Oradea, it has an area of 9.3 hectares, it has 19 plots and Săcueni Industrial Park will be located 46 km from Oradea and 5 km from the Săcueni custom border on Hungary, it has an area of 5 hectares (BhCC, 2018).

In 2018, in Bihor County there were also established with EU non-reimbursable financial aid - 2 business incubators, but with a limited service offer and low impact -Euroregional Business Incubator in Oradea (presented below as study case, currently closed) and Business incubator for cross-border tourism development in Vadu Crisului (establishing for travel agencies for mutual promotion of tourist attractions from the Bihor-Hajdu-Bihar Euro-region, respectively Hungary spa tourism and Romania mountain tourism, currently inoperable), and 3 business centers - Business Center of Oradea Fortress (functional), Integrated Center for Business Development by Promoting Regional Tourism and Culture in Aleşd (create as a commercial spaces for SME's which have tourism activities, but currently inoperable) and Cross-border Center for Business Encouragement and Development in Tetchea (presented below as study case), all of them established, as seen in Table no. 2, with EU non-reimbursable financial aid through PHARE CBC Romania-Hungary Programme 2004-2006 and HU-RO CBC Programme 2007-2013.

Despite existing industrial agglomerations, industrial tradition and its high clustering potential in computers, electronics and optics; textile and clothing industry; plastics and non-metallic products; furniture industry, tourism and hospitality etc. none of these industries are covered with active clusters in the Bihor County. As seen in Table no. 2, there is a cluster established through FP7 Programme in Bihor in renewable energies and services in tourism, but unfunctional at date.

In recent years, the number of new generation business support structures (new generation business centers, co-working offices, business hubs, accelerators, maker spaces, etc.) has increased, indicating a growing interest from young people, especially in hightech sectors, for example - Trade Center Oradea, Coworking Oradea, Incubator107 Oradea, Oradea Tech Hub, etc. Although these examples are listed in official documents (NWRDA, 2017, p.87), their impact at the local level is still low, except - Trade Center Oradea (functional), a business center with private financing developed on 5 floors, class A offices, conference rooms (800sqm) and exhibition spaces (2200sqm), underground and outdoor parking (1000s) (TCO, 2018). Regarding Coworking Oradea, below, we present the way of organizing the existing co-working offices in the Bihor County. Regarding *Incubator107 Oradea*, we did not find any publicly available data, the official website does not work, and the official social media website presents some events for promoting entrepreneurship with low or non-existent impact, the newest being more than one and a half years old.

5. Case Studies

Business Incubator: Euroregional Business Incubator Oradea

Description: Oradea Euroregional Business Incubator is a project initiated by the Bihor County Council, funded by the European Union from the Phare CBC 2004-2006 Fund. Project code: RO2004/016-940.01.01.08/Phare CBC 2004, Contractor: Ministry of Public Finances 376,000.00 EUR, Contractor: Bihor County Council 98,044.00 EUR; location: Armatei Romane Street, No.1; Location consisting of semi-basement, ground floor and two floors making up a total area of 828.33 sqm, project completed in 2006.

Context: The specific objective of the project is to promote and support economic cooperation between young entrepreneurs in the counties Bihor and Hajdu Bihar (Hungary). The overall objective of the project is to tighten contacts between communities and economic actors in Bihor County and their partners in Hajdu Bihar County, in order to create a solid basis for balanced economic and social development of the whole area, with benefits for both partners.

Approach: The business incubator has the role of providing specialized services to certain categories of entrepreneurs, acts as a complementary factor to the existing organizations supporting the development of private small and medium enterprises. The business incubator is based on a partnership between the local actors in the two counties -Bihor and Hajdu Bihar, involved both in the private sector of small and medium enterprises, but also in the public sector, namely the local public authorities, namely the Bihor County Council, as well as the Hajdu Bihar Self-Government. Results: Construction of the business incubator building in a built-up area of 828.33 sqm and the arrangement of 23 parking spaces.

Impact: incubating 14 companies within the incubator

Considerations regarding success: A finished and equipped building located in the central area of Oradea City; it could become a place for those who want to start a business and need the opportunity to rent affordable premises for starting a business. Currently, the incubator is closed, public information about this location is inexistent. Although it is a building managed by a public entity, we have not identified any information regarding activity reports, opening hours, rental rates, lists of companies hosted here etc. (BhCC, 2006; PA, 2018; CN, 2007).

Business Center: Cross-border Center for Business Encouragement and **Development in Tetchea**

Description: The Cross-Border Center for Business Encouragement and Development was developed within the frameworks of the project "Increasing the economic competitiveness in the rural areas of Hajdu Bihar - Bihor Euroregion - Business Incubators", cod HURO/1101/011/2.1.1, financed under the Hungary-Romania Crossborder Co-operation Program 2007-2013, with a total value of approximately EUR 1.1 million. The manufacturing incubator in Tetchea has an area of approximately 1000 sqm. It includes production facilities and 7 office spaces. At the time of launch, May 2015, a factory in the textile industry was already operating in the incubator.

Context: Supporting productive and service-oriented SMEs capable of making effective use of existing resources. Pilot rural cross-border economic development project promoting the integration of services, manufacturing and agriculture activities, facilitates the achievement of a high degree of cooperation among entrepreneurs from different branches of the economy, which leads to the creation of new jobs.

Approach: The monthly tariffs required for the use of the premises of the business incubator cost 1.5 EUR/sqm for the productive space, and 3 EUR/sqm for the office space. Companies located here can work for a maximum of 3 years. Services offered, besides the renting of production/office spaces, include: access to utilities, secretarial services, personnel recruitment services, training courses, consultancy services, accounting services (outsourced services, offered on request).

Impact: At the local level, this incubator has a significant impact. At the time of launch, there were already 25 people working in the business incubator, and the forecasts involved the creation of 70-80 jobs, two thirds of which would be occupied by employees from the commune. Besides, the conditions that must be met by the companies incubated here are related to the creation of new jobs, namely: the establishment of at least 20 jobs in the first year and the maintenance of this number for the whole period of the contract in the case of the companies operating in the production hall, and having at least 2 employees in the case of the companies to be incubated in the office spaces.

Considerations regarding success: Located in the rural area – Tetchea commune, close to local producers, the size and facilities of the business incubator are significant strong points to make local manufacturers initiate and develop their traditional activities. Currently, the center is unfunctional, public information about center's activity is inexistent (THTC, 2015; Bihor, 2015; E-Bh, 2015).

New Generation Businesses Support Structure: Coworker Oradea

Description: Coworker – is an on-line platform for identifying and registering workspaces in common for people who want to start a business in over 142 countries. Coworking Oradea spaces can be requested via an on-line message, through which the following services can be requested: a tour of the available spaces, or by purchasing a Free Day Pass through which the applicant can spend one day in the workspace and decide whether it is a right fit for him/her. If the entrepreneur wishes to work in the Coworking premises, he/she is asked to complete a membership application form that sets details such as the start date, the requested duration etc.

Context: Business hubs, incubators and accelerators where entrepreneurs can grow their business idea and which offer a variety of services, from basic ones such as internet access, advice on accessing funding, to networking with potential business financiers, are a concrete way of promoting and supporting entrepreneurial initiatives. According to the Entrepreneur of the Year's Romanian Business Environment Barometer, there were a total of 22 hubs, incubators and business accelerators in Romania in 2015, 8 of which located in Bucharest (Impact Hub, TechHub, ConnectHub, Gemini Solutions Foundry, Innovation Labs, Synergy Hub, WeLoveDigitalASE Startup), 6 in Cluj Napoca (Cluj Hub, Cluj CoWork, STEP-Up, Simplon, Spherik Accelerator, Chaos Cowork Cluj), 2 in Constanța (City HubConstanta, Forte Life -Social Hub) and Braşov (Hub OneZero, Hub 1317), 1 in Oradea (Coworker), Iaşi (The Grape), 1 in Timişoara (The start-up Hub), and 1 in Sibiu (Central Hub), (EY, 2015).

Approach: Coworking identifies three essential aspects of work in common spaces: 1. Increasing labour productivity because being surrounded by creative, intelligent and motivated people working under the same roof is considered to have a positive influence in this direction. Also, the accessibility of the equipment (printers, copiers, WiFi, etc.) helps to increase the productivity of the start-up entrepreneurs. 2. Connections that are created can increase the number of customers, partners and even investors that help them grow their business to the next level. 3. Flexibility - the program is flexible in the set time range; even if the size of the team is not known in the future, Coworking spaces do not conclude fixed long-term contracts to limit the number of team members.

Impact: The impact is still low, but promising. There are only two Coworking spaces in Oradea, with a total number of 8 individual workspaces:

- Coworking Oradea, located on Mihai Eminescu Street no. 25A, Coworking Oradea addresses entrepreneurs who want a place where they can focus, who like to interact with people who have similar interests or who want a flexible program. These spaces allow the separation of private life from work and provide a creative atmosphere. Facilities: WiFi, printer, copier, smart TV, X-box for those who want a few relaxing moments, a customer/meeting space, fully equipped kitchen, smoking area, internal courtyard for relaxation, bike rental. Advice on accessing funds, marketing, business plan, etc. is also provided. It does not offer any private office spaces. There are 6 spaces available at work stations (desks), the tariff is 40 lei per day or 400 lei per month.
- Oradea Tech Hub, situated in Oradea Fortress, in a newly renovated area of the fortress dedicated to business support structures. Oradea Tech Hub is a non-profit organization set up by an enthusiastic IT group. In order to access and work in the Oradea Tech Hub spaces, the applicants must be accepted as members by the Board of Directors. The main objective is to support IT business start-ups, to create a learning space that supports and promotes entrepreneurship in this area, increasing the number of specialties in software and hardware. It is a hub that provides training and supports development and innovation and wants Oradea to become a highly qualified IT destination. Facilities: conference room (also suitable for presentations), coffee break space, copier, printer, scanner, two workstations at individual desks with the possibility of extension according to the number of accepted members. The prices for this location are not made public; they are communicated only to the accepted members.

Considerations regarding success: Availability of a space that encourages work and creativity, at affordable prices. Those who are at the start of a business can save time and money by using a workspace with technical facilities and office equipment, creating ties and a friendly work environment, a flexible program that provides business start up advice (Coworker, 2018).

6. Conclusions

The analysis of business support structures in Bihor County shows, as well as in Romania and in the North-West region (Dodescu and Chirilă, 2012c; Dodescu and Chirilă, 2014; Dodescu, Filip and Chirilă, 2016), that EU structural funds, particularly European Regional Development Fund (ERDF) - supported actions, have been the most significant in the field of encouraging business support structures and the predominance of economic agglomerations based on simple agglomeration economies (industrial parks, business incubators, business centers); excepted industrial parks, most of them, especially those located in rural area, are unfunctional.

Business support structures in Bihor County have been successfully developed especially in the Oradea Metropolitan Area – 3 industrial parks, 2 business centers – one with EU financing and one with private financing, and few new generation business support structures. The most importantly, both in terms of size and impact at the local and regional level, are industrial parks achieved by Oradea City Hall, namely Eurobusiness Industrial Park Oradea I, II, III. However, at the level of other cities in Bihor County we have not identified any functional business support structure at present. At rural area, in Bihor County there are 2 industrial parks - Tileagd and Săcueni - in project, with great difficulties in financing and starting the specific activity; 2 business incubators and 2 business centers, all of them established with EU financing but all of them unfunctional.

Although we welcome the appearance of new generation business support structures - co-working offices, business hubs, etc. in Bihor County, we were surprised to find that despite its high clustering potential in computers, electronics and optics; textile and clothing industry; plastics and non-metallic products; furniture industry, tourism and hospitality etc., none of these industries are covered with active clusters in the Bihor County. Also, we noticed the total absence of the economic agglomerations based on dynamic agglomeration economies which could encourage Bihor County's capacity for innovation.

The projects in preparation at Bihor County level in order to access the ROP 2014-2020 funding for a business incubator in creative industries with a great clustering potential (applied by Oradea City Hall), as well as for a scientific and technological park (prepared by Bihor County Council in partnership with Oradea University), as well as setting up innovative clusters in smart specialization fields established at regional level are key emerging challenges for the local and regional development.

References:

- Armstrong, H. and Taylor, J., 2000. Regional Economics and Policy: Third Edition. Oxford: Blackwell, pp.292-300.
- Aydalot, P. and Keeble, D., 1988. Milieux innovateurs en Europe. Paris: GREMI.
- Becattini, G., 2010. Industria e carattere: saggi sul pensiero di Alfred Marshall. Milano: Le Monnier, Firenze, Mondadori Education.
- Becattini, G., Bellandi, M. and de Propis, L. (eds.), 2009. A Handbook of Industrial Districts. Northampton: Edward Elgar Publishing House.
- Bihon On-line Newspaper, 2015. The first production incubator in the country. [online] Available at: http://www.bihon.ro/primul-incubator-de-productie-din- tara/1537663> [Accessed 15 June 2018].

- 6. Bihor County Departament of Statistics (BhCDS), 2017. *Statistical Yearbook of Bihor County 2016*.
- 7. Bihor County Council (BhCC), 2017. Bihor County's Sustainable Development Strategy, 2014-2020, pp. 34-42. [pdf] Available at: http://www.cjbihor.ro/hotarari2017/anexa/h203.pdf> [Accessed 20 June 2018].
- 8. Bihor County Council (BhCC), 2006. *Euroregional Business Incubator Oradea*. [online] Available at: http://incubator.cjbihor.ro/ [Accessed 4 July 2018].
- 9. Camagni, R. (ed.), 1991. *Innovation Networks: Spatial Perspectives*. London: Belhaven Press.
- 10. Capello, R. and Nijkamp, P., eds., 2009. *Handbook of Regional Growth and Development Theories*. Edward Elgar Publishing, p.6.
- 11. Coworker, 2018. *Romania, Oradea*. [online] Available at: https://www.coworker.com/romania/oradea [Accessed 12 July 2018].
- 12. Crisana Newspaper, 2007. Euroregional Business Incubator. [online] Available at: https://www.crisana.ro/stiri/actualitate-2/incubator-de-afaceri-euroregional-87970.html [Accessed 2 August 2018]. Dodescu A., Filip, P., Chirilă, L., 2016. Regio From Public Sector Perspective in North-West of Romania. Transylvanian Review of Administrative Sciences, pp.22-40. [online] Available at: http://www.rtsa.ro/tras/index.php/tras/article/view/492 [Accessed 21 August 2018].
- 13. Dodescu, A. and Chirilă, L., 2014. Business environment development and regional policy in North-West Region of Romania. *Procedia Economics and Finance*, 15, pp.626–634.
- 14. Dodescu, A., 2013. Economic Policies for Regional Growth and Development. Challenges for Romania in the context of the economic-financial crisis and integration in the European model. Bucharest: Expert Publishing House.
- 15. Dodescu, A. and Chirilă, L., 2012a. Regional innovation governance in the context of European integration and multi-level governance challenges. A Case Study of North-West Region of Romania. *Procedia Economics and Finance*, 3, pp.1177-1184.
- 16. Dodescu, A. and Chirilă, L., 2012b. Multi-level governance and strategic planning for regional development policy. The Case of Romania in the context of European integration. In: Beauclair, A. and Reynolds, L. (eds.), *Sustaining Regional Futures Conference Proceedings*, 2012 Regional Studies Association Global Conference, Beijing, China, 24-27 June 2012. [pdf] Available at: http://www.regionalstudies.org/uploads/Multi-level_governance_-
 - __Dodescu_Anca_and_Chirila_Lavinia_-_RSA_Beijing_2012.pdf> [Accessed 15 August 2018].
- 17. Dodescu, A. and Chirilă, L., 2012c. Industrial parks in Romania. From success stories to emerging challenges. In: Mahadevan, V. and Zhang. C. (eds.), *International Journal of e-Education, e-Business, e-Management and e-Learning*, 2(4), August 2012, pp.331-335. Singapore: International Association of Computer and Information Technology Publishing.
- 18. Dodescu, A., 2011a. Experiences and Tendencies to Decentralize the Capabilities of the Economic Policy at the European Union level. *The Annals of the University of Oradea. Economic Sciences*, TOM XX, No. 1-Selected Papers/2011, pp.47-61.
- 19. Dodescu, A., 2011b. Governance versus Entrepreneurship and Regional Growth and Development. Challenges for Romania in the context of Economic Crisis and European Integration. In: Despres, Ch. (ed.), *Conference Proceedings of 7th*

- European Conference on Management Leadership and Governance ECMLG 2011, SKEMA Business School, Sophia-Antipolis, France, pp.99-104. Reading, UK: Academic Publishing Limited.
- 20. E-Bihoreanul (E-Bh), 2015. The first production incubator in Romania was Ţeţchea. [online] inaugurated in Available at: afaceri-din-romania-bazat-pe-productie-a-fost-inaugurat-la-tetchea-120906.html> [Accessed 2 August 2018].
- 21. EY, 2015. Entrepreneurs talk. The Barometer of the Romanian Business [pdf] Environment, p.66. Available http://www.eyromania.ro/2014/sites/default/files/attachments/ESO%202015.pd f> [Accessed 4 August 2018].
- 22. Karlsson, C., 2008. Handbook of Research on Clusters. Edward Elgar Publishing House.
- 23. Keep.EU (KEU), 2018. Project Increasing the economic competitiveness in the rural areas of Hajdu Bihar - Bihor Euroregion - Business Incubators, The Programme: 2007 - 2013 Hungary - Romania (HU-RO). [online] Available at: https://www.keep.eu/keep/project- ext/41404/RuralBusiness?ss=8547a9bbead0fb15d1c467c226f70d38&espon=> [Accessed 7 August 2018].
- 24. Marshall, A., 1920. Principles of Economics. London: Macmillan, 1982, 8-th edition, pp.319-326.
- 25. McCann, P., 2001. *Urban and Regional Economics*. Oxford: Oxford University
- 26. Morgan, K., 1997. The Learning Region: Institutions, Innovation and Regional Renewal. Regional Studies, 31(5), pp.491-503.
- 27. North West Regional Development Agency (RIS3 NV), 2018. Intelligence Specialization in Research and Innovation, p.30. [pdf] Available at: http://www.nord-vest.ro/wp-content/uploads/2017/11/RIS3-NV-180718.pdf [Accessed 24 July 2018].
- 28. North West Regional Development Agency (NWRDA), 2017. Framework Document for Intelligent Specialization Strategy North West Development Available http://www.nord-vest.ro/wp- Region, p.87. [pdf] at: content/uploads/2016/08/Documentul-cadru-regional_11-04-2017.pdf> [Accessed 24 July 2018].
- 29. Oradea City Hall (OCH), 2018a. Project management with international funding. [online] Available at: http://www.oradea.ro/subpagina/directia- management-projecte-cu-finantare-internationala> [Accessed 18 June 2018].
- 30. Oradea City Hall (OCH), 2018b. Oradea will have a business Incubator for Available industries. [online] at: <www.oradea.ro/print/stirioradea/oradea-va-avea-un-incubator-de-afaceri-destinat-industriei-creative> [Accessed 18 June 2018].
- 31. Oradea Local Development Agency (Adlo), 2018. *Industroal Parks*. [online] Available at: ocupare> [Accessed 26 June 2018].
- 32. Popescu, D., Dodescu, A. and Filip, P., 2014. Cloud Service Management System for Innovative Clusters. Application for North-West Region of Romania. International Journal of Computers Communications & Control, 9(4), pp.465-474.

- 33. Porter, M.E. and Ketels, C., 2009. Clusters and Industrial Districts: Common Roots, Different Perspectives. In: Becattini G., Bellandi M. and De Propris L. (eds), A handbook of industrial districts, Cheltenham: Edward Elgar, pp.172-183.
- 34. Porter, M.E., 1998a. Clusters and the new economics of competition. *Harvard* Business Review, November-December, pp.77-90.
- 35. Porter, M.E., 1998b. On Competition. Boston: Harvard Business School.
- 36. Public Affairs (PA), 2018. Euroregional Business Incubator Oradea. [online] Available at: http://afaceripublice.itcnet.ro/proiect/1811/Incubator-de-afaceri- euroregional-Oradea.html> [Accessed 6 August 2018].
- Universe Platform (RoUP), 2017. [online] <www.romanian-universe.ro> [Accessed 6 August 2018].
- 38. Sölvell, O., Lindqvist, G. and Ketels, Ch., 2003. The Cluster Initiative Greenbook. Stockholm: Bromma tryk AB.
- 39. Town Hall of Tetchea Commune (THTC), 2015. The Methodology for awarding the premises in the building of the Business Incubator in production. The project "Increasing the economic competitiveness in the rural areas of Hajdu Bihar -Euroregion **Business** Incubators". [pdf] Available at: http://www.tetchea.ro/fisiere/stiri/Regulament_Incubator.pdf 18 Accessed June 2018].
- [online] 40. Trade Center Oradea (TCO), 2018. Available at: http://www.tradecenteroradea.ro/ [Accessed 20 August 2018].
- 41. UE Projects (UEP), 2018. Rehabilitation and refunction of the B, C, D and E corps from Oradea city in order to start the second stage of rehabilitation and refunctionalization and introduction into the tourist circuit of city oradea city of oradea, european multicultural multicultural center - stage II. [online] Available at: http://www.proiecteue.ro/proiecte.php?proiect=781 [Accessed 20 August 2018].