#### JM CHAIR EU Financial Regulation

## **EUFIRE**

Research and Teaching Activities on European Union Financial Regulation Project number 574702-EPP-1-R0-EPPJMO–CHAIR

Period of implementation: 2016-2019







Co-funded by the Erasmus+ Programme of the European Union Carol I Boulevard, no.22 Iasi, Romania

Email: eufire@uaic.ro Official Site: www.eufire.uaic.ro

Lucrarea este rezultat al activitatii de cercetare si predare in cadrul Catedrei Jean Monnet finantate cu sprijin financiar din parte Uniunii Europene <u>JM CHAIR EU Financial Regulation EUFIRE</u> Project number 574702 – EPP – 1 – RO – EPPJMO – CHAIR

# ENTREPRENEURSHIP DYNAMICS IN EU. A COMPARA-TIVE PERSPECTIVE

Mihaela Tofan

Ana-Maria Bercu

Angela Roman

**ABSTRACT.** The main aim of the paper is to investigate the dynamics of entrepreneurial activity in EU Member States. We take into consideration 26 EU Member States, for the period 2008-2015. The research is based on the annual data provided by the Global Entrepreneurship Monitor (GEM) through the Adult Population Survey (APS). Our paper makes a deep analysis of the entrepreneurship literature and the European legal framework concerning the entrepreneurs and entrepreneurial activity, in order to sustain the methodical approach. Using the indicators given by GEM, the results show a strong correlation between the level of economic development of the countries and the entrepreneurship activity.

*Keywords:* entrepreneurship, entrepreneurial activity, business, economic development *JEL Classification:* L26, J23, O31

#### 1. Introduction

The major implications of state authorities at the level of national economies reflect the consensus to see the entrepreneurship as a strategic tool to promote, develop and expand the knowledge, innovation and creation of new business environment and to respond to a new business Era. As it was shown in literature, the importance of entrepreneurship and its impact on economic growth are highlighted in numerous studies (Wennekers and Thurik, 1999; van Stel et al, 2005; Wong et al, 2005; Acs et al, 2008). A large number of public authorities in a number of countries aim to promote entrepreneurship in developing national economies.

The role of entrepreneurship in achieving economic and social objectives and the need to promote entrepreneurship is in the spotlight of policymakers at EU level. The European Commission highlighted it by both the Lisbon Strategy and the Europe 2020 Strategy.

The concern of the European Commission to promote entrepreneurship is highlighted through the Small Business Act, adopted in 2008 and it aims to promote and support entrepreneurship and SME growth (European Commission 2008). In April 2011, reviewing the Small Business Act, the European Commission proposed Entrepreneurship Action Plan in 2020 (European Commission 2013), which was adopted in January 2013 as part of the Europe 2020 strategy.

The major negative implications of the recent international crisis on the national economies has brought into focus of the policymakers the crucial need for entrepreneurship promotion, that may have a key role in supporting economic recovery and reduce unemployment, which in some countries has reached alarming levels.

Starting from those stated above, the objective of our paper is to discuss and to highlight the characteristics of entrepreneurship in the EU countries, expressed through key indicators that are measured and monitored by the Global Entrepreneurship Monitor (GEM).

## 2. Literature review

One of the engines of economic growth and innovation is the entrepreneurial activity, as being seen by Schumpeter in 1934 (Nooteboom, 1994). In his *Theory of Economic Development*, Schumpeter shows the major role of the entrepreneur as a prime cause of economic development, putting the new technologies in the first plan and naming this *the creative destruction*.

Definitions of entrepreneurial activity are multiple and reflect its complex nature. Hébert and Link (1989) find a list of 12 different concepts of entrepreneurship in economic environment, reflecting the social and economic functions of entrepreneurship. The evolution of business environment and the economic changes at the country level determine new understandings of the concepts in entrepreneurial area: occupational and behavioural view of entrepreneurship (Wennekers, 2006). The occupational entrepreneurship is about the individuals, who own and manage a business and assume its risk, and the behavioural entrepreneurship refers to the attitudes and behaviour to feel and explore the economic opportunity. The dynamics of entrepreneurship is define by the rate of nascent entrepreneurship or the prevalence of young enterprises and a wide-ranging diversity across nations (Global Entrepreneurship Monitor - GEM) (Wennekers, van Stel, Thurik, Reynolds, 2005). In this regard, many governments put the entrepreneurial activity as a positive effect on well-being of their people and build the public policy framework in direct relation with the entrepreneurial dynamics. For a better understanding of cross-county variation in entrepreneurship, a range part of studies share some models which reflect the importance of micro and macro conditions (Global Entrepreneurship Monitor by Reynolds et al., 1999 and 2000, Entrepreneurship Policy Typology by Stevenson and Lundström, 2001) and the Country Institutional Profile by Busenitz et al., 2000, The Eclectic Framework by Grilo, Thurik, 2005). All these studies have an important contribution in the field of entrepreneurial activity. The GEM model (Reynolds et al., 1999 and 2000) explain the importance of individual decision making process, showing a distinction between capacity and opportunities, taking into consideration the economic and demographic conditions, and The Eclectic Framework (Grilo, Thurik, 2005) make a distinction between different types of government policy which influence the entrepreneurship. Due to the economic growth and competitiveness in global markets, the responsibilities of public authorities increase in order to stimulate the entrepreneurial activity (Audretsch et al., 2001; Carree and Thurik, 2003).

Some findings shows that the factors as unemployment have a negative influence on entrepreneurial activity, and general trends as globalisation, the ICT revolution and deregulation may have a positive effect on entrepreneurship (Noorderhaven et al., 2004). The study has taking into consideration 15 Member States of European Union. Another study made by Ilmakunnas et al. (1999) on a cross-section of approximately 20 OECD-countries finds that the income inequality has a positive influence on the self-employment, also the specific technological variables as Internet services and the availability of the computers. The entrepreneurship differs strongly among countries, not only because of economic development, but from cultural diversities (Hofstede et al., 2004 and Noorderhaven et al., 1999).

#### 3. Legal framework on entrepreneurship

Entrepreneurial activity is carried out based on free initiative in a competitive environment and respecting the freedom of trade. The public authorities have the liability of ensuring free trade, protection of fair competition, and providing a favorable framework for the use of all factors of production. Norms of entrepreneurship include the regulatory framework for commercial transactions (branch of private law), supplemented by rules of public law, which concerns entrepreneurial activity (rules of financial law, taxation and social security legal framework, rules of administrative law, labor law and so on).

The legal framework for entrepreneurial activity generates specific rights and obligations for all persons involved. The scope of those effects of participation in entrepreneurial transactions is governed by the principle of free trade, understood as dual aspect. First, it means that the access to entrepreneurial activity cannot be restricted, any person wishing to perform trade acts and deeds have the right to participate freely in business transactions. Although it is postulated as a fundamental principle of law, this rule is not absolute; there are two exceptions of the free trade principle: disqualifications and incompatibility to be trader. Disqualification is a penal sanction for an entrepreneur who has used a trade activity to commit criminal offences and who received a conviction for those crimes. Such person can be punished by the court of criminal penalty of forfeiture of the right to be merchant. The application of this penalty has additional character and only the judge is able to decide whether to administer a complementary punishment.

Incompatibility with entrepreneur legal regime is a measure at legislative power disposal, in the consideration of the legal speculative purposes of the commercial activity. The law provides categories of professions or functions absolutely incompatible with the entrepreneurial activity, such as the civil servant, official, judge, doctor or clerical.

Secondly, the principle of free trade means that each entrepreneur is free to choose the type of activity that he thinks to be best performed, in order to achieve the maximum possible entrepreneurial result. There are still some limitations in this respect also, if we consider the scope of commercial activities such as activities that constitute a state monopoly, which cannot be exercised based on free initiative (e.g. coinage, manufacture of weapons) and activities that are unlawful or have immoral purpose (e.g. human organ trafficking or prostitution).

Entrepreneurs have several specific legal obligations arising from specific regulation for the activity that is developed, in addition to tax burdens. Among the specific obligations, the most important are accounting obligations and the respect for free competition. When we refer to the specific obligations of entrepreneurial activity for a particular sector (e.g. transport, education, public health), the regulation in force provides a particular legal framework, precisely dealing with the liabilities involved.

In EU law, entrepreneurial activity has not benefit yet of a proper and unique legal framework. Each Member State, based on the principle of subsidiarity, is able to regulate the development of entrepreneurial activity autonomously.

Addressing shortcomings in the past and placing Europe on a trajectory of sustainable growth strengthened in the future, there is a shared responsibility of Member States and EU institutions regarding entrepreneurship regulation. Before the economic and financial crisis that began in 2008, Europe's economy was confronted with structural challenges to the competitiveness and growth and barriers to entrepreneurship. Many of them continue to exist, but the crisis has also been a catalyst for profound change and restructuring. Admitting that EU Member states economies are interlinked, the EU has to reshape its economic governance to ensure effective policy responses to current and future challenges. It is also the role of the regulation to help economy sectors to pass through current transformations. Europe 2020 Strategy has responded to this challenge, aiming future growth and competitiveness, sustainable and inclusive entrepreneurial activity.

To boost growth and employment in Europe, Europe needs more entrepreneurs. Following a review in April 2011 of the Small Business Act and the adoption in October 2012 of the Communication on industrial policy, the Commission has proposed Entrepreneurship 2020 Action Plan (European Commission, 2013), which was adopted in January 2013 as part of Europe 2020 strategy. This sets out a new vision and a series of actions to be taken at EU level and Member State level to support entrepreneurship in Europe. The plan is based on three strategies: developing education and training in entrepreneurship; creating the right business environment; models and involvement of specific groups.

The Action Plan considers three fields in need for immediate intervention:

1. Education and entrepreneurship training to support growth and business creation

2. Strengthening the framework conditions for entrepreneurs by removing the existing structural barriers, supporting entrepreneurs in key stages of the lifecycle of businesses, launching new business opportunities in the digital age; facilitating the transfers of businesses; adopting a new approach regarding bankruptcy and enterprise insolvency, and offering a second chance for honest entrepreneurs; adoption of clearer and simpler regulation.

3. Boosting entrepreneurial culture in Europe: training the next generation of entrepreneur.

The level and nature of entrepreneurship varies greatly among Member States and the reasons for a lack of enthusiasm for entrepreneurial careers are therefore different. Some Member States with higher levels of entrepreneurship receives fewer successes than other but in general, people who intend to become entrepreneurs face a difficult environment. Factors such as legislative and normative feature influence the decision to go entrepreneurial. Such factors are generated mainly by the state, its institutions, and accession to the European Union and its regulations, directly concerning laws, regulations, government ordinances, the provisions of a special nature or other bills that relate directly to the business environment. Regardless of status, field of activity or items that are specific for an individual entrepreneur, the factors mentioned influence the direction a company has to follow to achieve its purpose. At the individual level, each company must show an adaptive behaviour and understanding of the market regulation in which it operates.

For instance, in Romania entrepreneurs are considered traders and they may act both as natural and legal persons (companies, RAs, mutual interest organisations and economic interest groups). State authorities and its territorial administrative units, associations and foundations are not allowed to perform entrepreneurial activity. Individuals who have an entrepreneurial activity must exercise them as a profession, regularly and for profit.

Professional character of committing entrepreneurial activities is a matter of fact, that in case of dispute between traders can be proved any means permitted by law. In Romanian law system, it usually refers to evidence from witnesses, documents, presumptions and expertise. Commercial transactions have a very wide range of evidence, faster payments necessarily assuming simplifying procedures for taking evidence. The legal status of entrepreneurial profession implies the existence of two elements for each activity committed by a natural person: an issue of fact (factum), which consists of systematic exercise and repeated acts with the intention to obtain profit, and a psychological element (animus), which refers to the intention to become a trader, i.e. to acquire a certain social status. For individual entrepreneur, the legal framework for the establishment and performance of specific activity is outlined in the provisions Govern Ordinance no. 44/2008 (adopted after the accession to the EU). If the costs of starting an individual business are high, more people are likely to set up a company. The main law to regulate the business environment in Romania is Law no. 31/1990 on companies. This law established forms of constitution of companies and their obligations and rights. Romania's companies can become one of the following forms: general partnership, limited partnership, limited partnership by shares, limited company, limited liability company. The most frequently encountered form of company is a limited liability company (LLC). Each partner is obliged to make a deposit core capital, which will be used to pay the debt or other financial commitments in the event of liquidation of the company. This is why the liability is limited: the company is liable only up to core capital. The partners conclude partnership agreement stating, among other things, the amount invested by each partner and how the profit distribution will be made jointly. According to the Romanian law in force, such limited liability company may also be established by a single partner.

Since the entrepreneurial environment in Romania has passed the stage of "organizational", the public authorities had to develop other bills. Such a draft law aims to stimulate start-ups. In the present context, the entrepreneurial activity is often present in SMEs, regulated in the Romanian legal framework in Law 346/2004, which has been largely amended by Law 62/2014. This former legal document provides the framework for entrepreneurial professional forming and integrating best practices in the European Union through the design and implementation of external funds. The programs designed for small and medium enterprises taken into consideration are: microfinance fund for small and medium enterprises focused on entrepreneurship, peak innovation and introduction of new technologies; research programs, development and consultancy on management, marketing, networking, investment in small and medium enterprises, in order to provide pragmatic solutions to increase functionality and performance of domestic and international companies; fund for the co-financing of organic products; small grants fund for micro-enterprises; programs for organizations, in every region of the country, innovative clusters, with focus on products for export, financed from European funds, which exploit the potential and specific conditions of each area; fund "risk capital" to finance the establishment of innovative startups

To set up a company and to face bankruptcy are characteristics of a dynamic and healthy economic and entrepreneurial environment. The overwhelming majority of bankruptcies are caused by a chain of delayed payments or other objective problems, which are, in other words, "honest failures" not caused by fraud of entrepreneurs. However, entrepreneurs apply the presumption of fraud in many bankruptcy law, they must follow complex procedures before being exculpated. In some Member States, the procedure takes so long that entrepreneurs will not consider creating a new company. In some cases, law prohibits them to establish a new business, for lifetime or for an important period. Even after exonerating them, people whose companies have gone bankrupt are stigmatized and face difficulties in obtaining financing for a new business. Therefore, many potential entrepreneurs simply give up and do not take into account the possibility of a new entrepreneurial activity. Despite this, entrepreneurs who start a business for the second time are more successful and their presence in the market is much longer; these companies grow faster and employ a larger number of workers. In our opinion, a failure entrepreneurship should not lead to a "life sentence" to prohibit any entrepreneurial future action, but should be viewed as a chance to learn and do things to go well. Therefore, any initiative to encourage a new generation of entrepreneurs must include ensuring that, where their first idea is not fruitful, they will not be prevented forever to try again to launch a new company. Laws on bankruptcy must ensure rapid and effective remedies and liquidation procedures shall be faster and less expensive, as well as measures for the rehabilitation of bankrupts.

The Commission adopted in December 2012 a Communication on a new European approach to bankruptcies and insolvency companies, to create a stimulant business environment, for example by increasing the effectiveness of national laws on insolvency, including the duration and the costs necessary to fully discharge the obligations after bankruptcy. Meanwhile, as a first measure to be taken, the Commission adopted a proposal to modernize regulation on insolvency proceedings, which ensures cross-border recognition of saving businesses and include ways to facilitate the submission of applications recovery in another Member State.

## 4. Analysis of the dynamics of entrepreneurial activity in the EU countries

Our study aims 26 EU Member Countries, which are analysed from the perspective of entrepreneurship, for the period 2008-2015. The analysis is based on annual data provided by the Global Entrepreneurship Monitor (GEM), one of the most important entrepreneurial studies, which measure the level and nature of entrepreneurial activity around the world. Referring to EU countries, it is noted that the GEM does not provide data for Cyprus and Malta, and for Bulgaria are provided data only for 2015. Our research investigates the dynamics of key indicators of entrepreneurship, which are measured by the GEM through Adult Population Survey (APS).

To highlight the differences but also the similarities that exist among countries with regard to entrepreneurship, we believe that it is important to group the countries according to their level of economic development (*see Table 1*).

Since 2008, GEM classifies analyzed economies in three stages of economic development, as defined by the World Economic Forum's Global Competitiveness Report: factordriven economies, efficiency-driven economies and innovation-driven economies. This classification takes into account two criteria, namely the level of GDP per capita and the share of exports of mineral goods in total exports. Countries that export more than 70 percent of mineral products (using the average at five-year) are considered factor driven economies. In this category are included the countries that are dominated by subsistence agriculture and extraction businesses, which rely on unskilled labor and natural resources. Efficiency-driven economies are characterized by developing industry, productivity growth due to economies of scale and development through financial institutions, which provide conditions for development of small scale manufacturing sector. For innovation-driven economies, the growth of research and development is specific, increasing the knowledge (which allows the production of new and unique goods and services), as well as expanding the services sector (Bosma and Levie, 2010, p. 5).

Depending on the level of economic development, the European Union is predominantly innovation driven so, in 2015, from the 28 countries classified, only seven are efficiency-driven economies and no country is listed in the category factor-driven economies (*see Table 1*).

	Stages	of economic development
	Efficiency-driven Countries	Innovation-driven Countries
2008	Bulgaria, Croatia <sup>1</sup> , Estonia <sup>1</sup> , Hungary <sup>1</sup> , Latvia <sup>1</sup> , Lithuania <sup>1</sup> , Poland <sup>1</sup> , Romania, Slovak <sup>1</sup> Republic	Austria, Belgium, Cyprus, Czech Republic, Denmark, Fin- land, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovenia, Spain, Sweden, United Kingdom
2009	Bulgaria, Croatia <sup>1</sup> , Hungary <sup>1</sup> , Latvia <sup>1</sup> , Lithuania <sup>1</sup> , Poland <sup>1</sup> , Romania <sup>1</sup>	Austria, Belgium, Cyprus, Czech Republic, Denmark, Esto- nia, Finland, France, Germany, Greece, Ireland, Italy, Lux- embourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom
2010	Bulgaria, Croatia <sup>1</sup> , Estonia <sup>1</sup> , Hungary <sup>1</sup> , Latvia <sup>1</sup> , Lithuania, Poland <sup>1</sup> , Romania, Slovak Republic <sup>1</sup>	Austria, Belgium, Cyprus, Czech Republic, Denmark, Fin- land, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovenia, Spain, Sweden, United Kingdom
2011	Bulgaria, Croatia <sup>1</sup> , Estonia <sup>1</sup> , Hungary <sup>1</sup> , Latvia <sup>1</sup> , Lithuania, Poland <sup>1</sup> , Romania, Slovak Republic <sup>1</sup>	Austria, Belgium, Cyprus, Czech Republic, Denmark, Fin- land, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovenia, Spain, Sweden, United Kingdom
2012	Bulgaria, , Croatia <sup>1</sup> , Estonia <sup>1</sup> , Hungary <sup>1</sup> , Latvia <sup>1</sup> , Lithuania <sup>1</sup> , Poland <sup>1</sup> , Romania	Austria, Belgium, Cyprus, Czech Republic, Denmark, Fin- land, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom
2013	Bulgaria, Croatia <sup>1</sup> , Estonia <sup>1</sup> , Hungary <sup>1</sup> , Latvia <sup>1</sup> , Lithuania <sup>1</sup> , Poland <sup>1</sup> , Romania, Slovak Republic <sup>1</sup>	Austria, Belgium, Cyprus, Czech Republic, Denmark, Fin- land, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovenia, Spain, Sweden, United Kingdom
2014	Bulgaria, Croatia <sup>1</sup> , Hungary <sup>1</sup> , Latvia <sup>1</sup> , Lithuania <sup>1</sup> , Poland <sup>1</sup> , Romania	Austria, Belgium, Cyprus, Czech Republic, Denmark, Esto- nia, Finland, France, Germany, Greece, Ireland, Italy, Lux- embourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom

 Table 1. Classification economics EU28 countries, according to stages of economic development

		Austria, Belgium, Cyprus, Czech Republic, Denmark, Esto-
	Lithuania <sup>1</sup> , Poland <sup>1</sup> , Romania <sup>1</sup>	nia, Finland, France, Germany, Greece, Ireland, Italy, Lux-
		embourg, Malta, Netherlands, Portugal, Slovak Republic,
		Slovenia, Spain, Sweden, United Kingdom

*Note:* <sup>1</sup>In transition from efficiency-driven to innovation-driven economy.

Source: authors own elaboration on the basis World Economic Forum, Global Competitiveness Reports

Benchmark entrepreneurship in the EU countries, we consider, according to GEM methodology, a set of key indicators, namely: total early-stage entrepreneurial activity, motivational index, established business ownership rate and business discontinuation rate. These indicators permit to measure the entrepreneurial activity, according to the business cycle-life phases, namely: nascent, new business, established business and discontinuation (Kelley *et al.*, 2016).

*Total early-stage entrepreneurial activity* (TEA) is considered one of the most important indicators of entrepreneurship and it indicates the dynamic of the propensity of a country. This indicator measures, according to the methodology GEM, percentage of individuals (between 18 and 64 years of age) who are actively involved in starting a new business (nascent entrepreneurs) or running a new business that is less than 42 months old (new entrepreneurs). Therefore, TEA includes nascent entrepreneurs and new entrepreneurs.

Total early-stage entrepreneurial activity (TEA) is of major importance for a country's economy because the entrepreneurs involved in this phase of entrepreneurial activity are expected to create jobs and innovation. According to the research of GEM, TEA rates tend to decrease with increasing the economic development of a country because the higher levels of GDP provide better opportunities for jobs (Amorós and Bosma, 2014, p. 12).

The data in *Table 2* shows significant differences between the two groups of countries, namely the average value of TEA rate is much higher in the efficiency-driven countries compared with the situation of the innovation-driven countries, for the entire period from 2008 to 2015. On the other hand, we note a significant heterogeneity between countries in the same group. Thus, among countries efficiency-driven the highest TEA rates were recorded in Latvia, where the number of persons involved in early-stage entrepreneurial activity ranged from 6.5% in 2008 to 14.1% in 2015. Large values of TEA rate, over 9%, were registered in Lithuania and Poland. In comparison, are much lower TEA rates, which were recorded in Romania and Croatia, in particular in 2008 - 2010. Such a situation shows that in both countries there was a less potential for creating new jobs through young companies. For the innovation-driven countries, the highest TEA rates, above the group average (6.3%), were registered in Estonia (11.3%), Slovakia (10.3%), Austria (9.6%), Luxembourg (8.7%), Netherlands (8%), Portugal (7.9%) and Ireland (7.6%). In these countries, more than 7.5% of the adult population was involved in starting or running a new business. At the other extreme, there are Italy, Denmark, Germany and Belgium, where the TEA rate was less than 5%. At EU level, TEA rate ranged from 5.8% in 2008, 5.3% in 2010 (due to the recent financial crisis, it has seen the lowest value) to 8% in 2015. The data reflect a decrease in the number of persons involved in early-stage entrepreneurial activity by 0.5% in 2010, compared to 2008, due to deteriorating of economic environment. Instead, the indicator is growing by 2.6% in 2015 compared with 2010, which was due, in particular, to increasing the share of nascent entrepreneurs (see Table 3), amid improving economic growth in the EU.

Over the period 2008-2015, on average, the highest level of early-stage entrepreneurs, well above the EU average (7%), was registered in Estonia (12.5%), Latvia (11.3%), Slovakia (10.9%) and Lithuania (10.4%). In these countries, on average, the percentage of people in-

volved in early-stage entrepreneurial activity was over 10%. In comparison, the lowest TEA rate was registered in Italy (4%), Denmark (4.59%), Belgium (4.7%) and Germany (4.7%).

In 2010, in the context of sovereign debt crisis, the share of the adult population involved in starting or running new businesses registered the most significant decline compared to 2008, particularly in Greece (-4.4%), Spain (-2.7%) and Italy (-2.3%) (*see Table 2*). For Greece, the TEA rate decrease is due, largely, to reducing the share of nascent entrepreneurs (*see Table 3*). In comparison, in Spain and Italy, the TEA rate decrease is due, in particular, to reducing new business ownership rates.

In 2015, the percentage of early-stage entrepreneurs was above the EU average of 8% in eight European countries, namely Latvia (14.1%), Estonia (13.1%), Romania (10.8%) Luxembourg (10.2%), Portugal (9.5%), Ireland (9.3%) and Poland (9.2%). Through the countries with TEA rate well below the EU are noted, in particular, Bulgaria (3.5%), Germany (4.7%) and (4.9%).

	2008	2009	2010	2011	2012	2013	2014	2015	'08-'10 <sup>1</sup>	'10-'15 <sup>2</sup>
	1			Efficie	ency-driv	ven Count	ries			
BG	-	-	-	-	-	-	-	3.5	-	-
HR	7.6	5.6	5.5	7.3	8.3	8.3	8.0	7.7	-2.1	2.2
HU	6.6	9.1	7.1	6.3	9.2	9.7	9.3	7.9	0.5	0.8
LV	6.5	10.5	9.7	11.9	13.4	13.3	-	14.1	3.1	4.4
LT	-	-	-	11.3	6.7	12.4	11.3	-	-	-
PL	-	-	-	9.0	9.4	9.3	9.2	9.2	-	-
RO	4.0	5.0	4.3	9.9	9.2	10.1	11.3	10.8	0.3	6.5
Av.	6.2	7.6	6.7	10.0	10.1	10.7	9.8	8.9	0.5	2.2
				Innova	tion-dri	ven Coun	tries			
AT	-	-	-	-	9.6	-	8.7	-	-	-
BE	2.9	3.5	3.7	5.7	5.2	4.9	5.4	6.2	0.8	2.6
CZ	-	-	-	7.6	-	7.3	-	-	-	-
DK	4.0	3.6	3.8	4.6	5.4	-	5.5	-	-0.3	-
EE	-	-	-	-	14.3*	13.1*	9.4	13.1	-	-
FI	7.3	5.2	5.7	6.3	6.0	5.3	5.6	6.6	-1.6	0.9
FR	5.6	4.4	5.8	5.7	5.2	4.6	5.3	-	0.2	-
DE	3.8	4.1	4.2	5.6	5.3	5.0	5.3	4.7	0.4	0.5
GR	9.9	8.8	5.5	8.0	6.5	5.5	7.9	6.8	-4.4	1.2
IR	7.6	-	6.8	7.2	6.2	9.2	6.5	9.3	-0.8	2.6
IT	4.6	3.7	2.4	-	4.3	3.4	4.4	4.9	-2.3	2.5
LU	-	-	-	-	-	8.7	7.1	10.2	-	-

 Table 2. Dynamic of TEA rates in EU countries in the period 2008-2015 (%)

NL	5.2	7.2	7.2	8.2	10.3	9.3	9.5	7.2	2.0	0.0
РТ	-	-	4.4	7.5	7.7	8.2	10.0	9.5	4.4	5.1
SK	-	-		14.2**	10.2	9.5**	10.9	9.6	-	-
SI	6.4	5.4	4.7	3.7	5.4	6.5	6.3	5.9	-1.8	1.3
ES	7.0	5.1	4.3	5.8	5.7	5.2	5.5	5.7	-2.7	1.4
SE	-	-	4.9	5.8	6.4	8.2	6.7	7.2	4.9	2.3
UK	5.9	5.7	6.4	7.3	9.0	7.1	10.7	6.9	0.5	0.5
Av.	5.9	5.2	5.0	6.4	6.8	6.6	7.3	7.6	-0.9	2.6
EU	5.8	5.8	5.3	7.6	7.7	8.0	7.8	8.0	-0.5	2.6

Note: <sup>1</sup>the difference between 2008 and 2010; <sup>2</sup>the difference between 2010 and 2015; \*Estonia \*\*Slovakia was included in the category of the efficiency-driven countries.

Source: authors own elaboration based on data from GEM- Key indicators (2015)

The earliest stage of entrepreneurship is represented by the nascent entrepreneurship so it is important to analyze the *nascent entrepreneurship rate*. According to the definition given by GEM, the indicator expresses the percentage of adults (18-64 years of age), which are actively involved in starting a new business (less than three months old). Nascent entrepreneurship rate reflects the level of start-up of new business activities in the country.

The data in *Table 3* indicates at EU level a rising share of nascent entrepreneurs from 3.2% in 2008 to 5% in 2015. Among the EU countries registering the highest values of nascent entrepreneurship rate, well above the EU average of 4.1 % percent over the period 2008-2014, there stands Estonia (8.3%), Slovakia (7%) and Latvia (6.7%), where, on average, nascent entrepreneurship rate was over 6.5%. At the other extreme, it was located Italy (2.3%), Denmark (2.5%), Germany, Spain and Belgium (2.9%).

	Table 3. Dynamic of Nascent Entrepreneurship Rate EU countries (%)													
	2008	2009	2010	2011	2012	2013	2014	2015	'08-'10 <sup>1</sup>	'10-'15 <sup>2</sup>				
	-	,		Efficie	ency-driv	en Count	ries		•					
BG	-	-	-	-	-	-	-	1.9	-	-				
HR	4.9	3.5	4.1	5.3	6.4	6.3	6.0	5.1	-0.9	1.1				
HU	3.8	5.5	4.9	4.8	5.8	6.0	5.6	5.3	1.1	0.4				
LV	3.9	5.3	5.7	6.8	8.7	8.1	-	8.6	1.8	2.9				
LT	-	-	-	6.4	3.1	6.1	6.1	-	-	-				
PL	-	-	-	6.0	4.8	5.1	5.8	5.7	-	-				
RO	2.5	2.8	3.3	5.6	5.5	6.2	5.3	6.1	0.8	2.8				
Av.	3.8	4.3	4.5	6.3	6.3	6.6	5.7	5.5	0.7	1.0				
	Innovation-driven Countries													

AT	_	-	-	-	6.6	-	5.8		-	-
BE	2.0	2.0	2.6	2.7	3.3	3.1	2.9	4.5	0.5	2
CZ	-	-	-	5.1	-	4.9	-	-	-	-
DK	2.2	1.7	1.8	3.1	3.1	-	3.1	-	-0.4	-
EE	-	-	-	-	9.5*	8.8*	6.3	8.7	-	-
FI	4.1	2.9	2.4	3.0	3.5	2.7	3.4	4.0	-1.7	1.6
FR	3.8	3.1	3.8	4.1	3.7	2.7	3.7	-	0.0	-
DE	2.4	2.2	2.5	3.4	3.5	3.1	3.1	2.8	0.1	0.4
GR	5.3	4.5	2.1	4.4	3.8	3.3	4.6	3.9	-3.1	1.8
IR	3.3	-	4.4	4.3	3.9	5.5	4.4	6.5	1.1	2.1
IT	2.0	1.8	1.3	-	2.5	2.4	3.2	3.2	-0.7	1.9
LU	-	-	-	-	-	6.0	4.9	7.1	-	-
NL	2.1	3.1	4.0	4.3	4.1	4.7	5.2	4.3	1.9	0.3
РТ	-	1	1.9	4.6	4.3	4.2	5.8	5.6	-	3.7
SK	-	-	-	9.2**	6.6	6.1**	6.7	6.5	-	-
SI	4.1	3.2	2.2	1.9	2.9	3.6	3.8	3.2	-1.8	1.0
ES	3.3	2.3	2.2	3.3	3.4	3.1	3.3	2.1	-1.1	-0.1
SE	-	-	2.3	3.5	4.6	5.9	4.9	4.8	-	2.4
UK	3.1	2.7	3.2	4.7	5.3	3.6	6.3	4.0	0.1	0.8
Av.	3.1	2.7	2.6	3.7	4.1	3.9	4.5	4.8	-0.5	2.1
EU	3.2	3.1	3.0	4.6	4.7	4.8	4.8	5.0	-0.2	2.0

*Note:* <sup>1</sup>the difference between 2008 and 2010; <sup>2</sup>the difference between 2010 and 2015; \*Estonia \*\*Slovakia was included in the category efficiency-driven countries.

Source: authors own elaboration based on data from GEM- Key indicators (2015)

In 2010, in the context of sovereign debt crisis, the percentage of nascent entrepreneurs in some European countries has decreased compared to 2008 (*see Table 3*), also in Greece (-3.1%), Slovenia (-1.8%), Finland (-1.7%), Spain (-1.1%), Croatia (-0.9%) and Italy (-0.7%). Instead, the nascent entrepreneurs grew quite low in Netherlands (1.9%), Latvia (1.8%), Ireland (1.1%), Hungary (1.1%), Romania (0.8%), United Kingdom (0.1%) and Germany (0.1%).

In 2015, the percentage of nascent entrepreneurs saw the highest level, well above the EU average (5%), in Estonia (8.7%), Latvia (8.6%) and Luxembourg (7.1%). In comparison, especially Bulgaria (1.9%), Spain (2.1%) and Germany (2.8%) recorded the lowest level of nascent entrepreneurs, respectively, a nascent entrepreneurship rate below 3%.

Similar TEA rate, and in the case of nascent entrepreneurship, was registered a higher efficiency-driven countries rate compared to innovation-driven countries. Amongst efficiency-driven countries, there are Latvia (6.7%) and Poland (5.5%) who registered, on average, the rates higher than the group average (5.4%). Also, we see disparities in innovation-

driven countries. Thus, nascent entrepreneurship rates recorded the lowest level over the period 2008-2015, below the group average (3.7%), in Italy (2.3%), Denmark (2.5%), Germany (2.9%, Spain (2.9%), Belgium (2.9%), Finland (3.3%) and France (3.6%). In comparison, leadership is attributed to Estonia (7.5%) and Slovakia (6.6%).

The next stage of entrepreneurial activity is targeting new business owners. According to GEM methodology, *new business ownership rate* expresses the percentage of adults (18-64 years of age) who are currently a owner-manager of a new business or own and manage a business for more than three months, but less than 42 months (3.5 years).

	2008	2009	2010	2011	2012	wnership 2013	2014	2015	'08-'10 <sup>1</sup>	'10-'15 <sup>2</sup>
	2000		2010					2010		10 10
				Efficie	ency-driv	ven Count	ries			
BG	-	-	-	-	-		-	1.5	-	-
HR	2.8	2.2	1.6	2.1	1.9	2.0	2.0	2.6	-1.1	0.9
HU	2.8	3.7	2.3	1.6	3.6	3.7	3.9	2.7	-0.5	0.4
LV	2.8	5.4	4.1	5.3	4.8	5.3	-	6.0	1.4	1.9
LT	-	-	-	5.0	3.6	6.4	5.3	-	-	-
PL	-	-	-	3.1	4.6	4.3	3.6	3.5	-	-
RO	1.6	2.3	1.1	4.5	3.8	4.2	6.2	5.1	-0.5	4.0
Av.	2.5	3.4	2.3	3.8	3.9	4.3	4.2	3.6	-0.2	1.3
				Innova	tion-dri	ven Count	tries			
AT	-	-	-	-	3.4	-	3.1	-	-	-
BE	0.9	1.6	1.3	3.0	2.0	1.9	2.5	2.0	0.4	0.7
CZ	-	-	-	2.7	-	2.7	-	-	-	-
DK	1.9	2.0	2.2	1.6	2.4	-	2.5	-	0.3	-
EE	-	-	-	-	5.1*	4.5*	3.5	4.7	-	-
FI	3.3	2.3	3.4	3.3	2.7	2.7	2.3	2.7	0.0	-0.6
FR	1.9	1.4	2.1	1.7	1.5	1.8	1.7	-	0.2	-
DE	1.5	2.1	1.8	2.4	2.1	2.0	2.3	1.9	0.3	0.2
GR	4.6	4.7	3.4	3.7	2.8	2.3	3.4	2.8	-1.2	-0.6
IR	4.3	-	2.5	3.1	2.3	3.8	2.5	3.0	-1.8	0.4
IT	2.7	1.9	1.1	-	1.9	1.1	1.3	1.7	-1.6	0.6
LU	-	-	-	-	-	2.8	2.3	3.2	-	-
NL	3.2	4.1	3.4	4.1	6.3	4.8	4.5	3.0	0.2	-0.3
РТ	-	-	2.6	3.0	3.6	4.2	4.4	4.0	-	1.4
SK	-	-		5.3**	3.9	3.6**	4.4	3.4	-	-

Table 4. Dynamic of new business ownership rates in EU countries (%)

SI	2.4	2.1	2.4	1.7	2.5	2.9	2.7	2.8	0.0	0.4
ES	3.9	2.8	2.1	2.5	2.5	2.2	2.2	3.6	-1.8	1.5
SE	-	-	2.5	2.3	1.8	2.5	1.9	2.6	-	0.1
UK	2.9	3.2	3.3	2.6	3.7	3.6	4.5	2.9	0.4	-0.4
Av.	2.8	2.6	2.4	2.7	2.8	2.7	2.9	3.0	-0.4	0.5
EU	2.7	2.8	2.4	3.1	3.2	3.3	3.2	3.1	-0.3	0.7

*Note:* <sup>1</sup>the difference between 2008 and 2010; <sup>2</sup>the difference between 2010 and 2015; \*Estonia \*\*Slovakia was included in the category efficiency-driven countries.

Source: authors own elaboration based on data from GEM- Key indicators (2015)

The data in *Table 4* indicates that there are significant disparities between the two groups of countries, but also within the same group. Over the period 2008-2015, on average, the new business ownership rate was higher in the efficiency-driven countries (3.5%) versus innovation-driven countries (2.7%). The largest new business ownership rates, in the first group of countries, were recorded by Lithuania (5.4%), Latvia (4.8%), Poland (3.8) and Romania (3.6%). In innovation-driven countries, the highest level of new entrepreneurs, well above the group average (2.7%), was recorded in the Netherlands (4.2%), Estonia (4.1%), Slovakia (3.9%), Portugal (3.6%) and Greece (3.5%). In comparison, the lowest level of new business ownership rates, below 2%, has been known for Italy (1.7%), France (1.7%) and Belgium (1.9%).

At EU level, the share of new entrepreneurs evolved from 2.7% in 2008, 2.4% in 2010 (the lowest) to 3.1% in 2015. The data in *Table 4* shows the decline of new business ownership rate by 0.3% in 2010 compared to 2008 and the increase by 0.7% in 2015, compared to 2010. Among the European countries that registered over the period 2008-2015, a new business ownership rates, well above the EU average (3%), we remark especially Lithuania (5.1%), Latvia (4.8%), Estonia (4.5%), Netherlands (4.2%) and Slovakia (4.1%). In comparison, the lowest level of new entrepreneurs, under 2%, was recorded in Italy (1.7%), France (1.7%) and Belgium (1.9%). With reference to 2015, we find a new business ownership rates than the EU average (3.1%) in eight countries, namely Latvia (6%), Romania (5.1%), Estonia (4.7%), Portugal (4%), Spain (3.6%), Poland (3.5%), Slovakia (3.4%) and Luxembourg (3.2%). At the other extreme, three countries lay, namely Bulgaria (1.5%), Italy (1.7%) and Belgium (2%), where new entrepreneurs share was well below the EU average.

Evaluating the two types of entrepreneurs, respectively nascent entrepreneurs and new entrepreneurs, there is interest in any economy to highlight the development of early-stage entrepreneurial activity, which is desirable to turn into established businesses.

Differences between countries on the level of early-stage entrepreneurial activity can be better understood in terms that take into account the motivations of starting businesses. According to literature (Robichaud *et al.*, 2010; Stephan *et al.*, 2015) entrepreneurial motivations are varied, including the desire for independence, financial motivations, factors related to family and work-related factors. Overall, the main motivations of those involved in earlystage entrepreneurial activity are related to the opportunities or necessity. Thus, the Global Entrepreneurship Monitor (GEM) distinguishes two types of entrepreneurs, namely: on the one hand necessity-driven entrepreneurs who are the people involved in early-stage entrepreneurial activity because they have no other option for work and need a source of income; on the other, the improvement-driven opportunity entrepreneurs, those people who begin businesses in order to raise revenue or to be independent in their work. The reasons for which a person is involved in starting a business has an important impact on quality of business. The GEM reports show that improvement-driven opportunity entrepreneurs contribute more to the economy than those who starts a business for reasons of necessity.

To better understand the entrepreneurial capacity of a country, it was created by GEM the Motivational Index, which is calculated as the ratio between improvement-driven opportunity and necessity-driven entrepreneurs (Singer *et al.*, 2015, p. 43).

According to GEM reports, increasing the level of economic development of a country, necessity-driven entrepreneurship is reduced, while driven entrepreneurship by improvement opportunity increase.

The data in *Table 5* shows that the ratio of improvement-driven opportunity and necessity-driven entrepreneurs (motivational index value) is much lower in efficiency-driven countries compared with innovation-driven countries. For the first group of countries, the largest share of necessity-entrepreneurship was registered in 2013 in Poland, which was also the lowest motivational index.

This means that a large portion of early-stage entrepreneurs are motivated by necessity. In comparison, among countries that had, on average, more than two times more entrepreneurs driven by improvement opportunity compared with the necessity-driven entrepreneurs stands especially Latvia and Lithuania. For countries in the second group, there are extremely important differences between countries. Thus, Denmark, Luxembourg, Netherlands and Sweden had, on average, over five times more entrepreneurs-driven by improvement opportunity than entrepreneurs necessity-driven. At the other extreme, there is Greece, with an average of 1.4 of motivational index, showing that in the business start grounds of necessity are more important than in other countries.

In 2015, at EU level, there were two times more entrepreneurs-driven by improvement opportunity than entrepreneurs-driven by necessity. Among the countries with the highest proportion of entrepreneurs-driven by improvement opportunity (over three times compared entrepreneurs-driven by necessity) saw Sweden, Luxembourg, Netherlands, Estonia, Finland and Germany. Instead, the biggest proportion of entrepreneurs who are driven by necessity reasons, respectively the lowest value of motivational index, was registered in Bulgaria, Croatia and Romania.

		2008			2010			2013			2015	
	ND	IDO	MI	ND	IDO	MI	ND	IDO	MI	ND	IDO	MI
					Effi	ciency	-driven (	Countries				
BG	-	-	-	-	-	-	-	-	-	32.4	29.0	0.9
HR	28.4	56.9	2.0	32.3	48.8	1.5	37.4	29.8	0.8	40.1	40.9	1.0
HU	28.3	48.6	1.7	19.6	42.9	2.2	28.0	38.7	1.4	23.2	50.5	2.2
LV	20.7	54.0	2.6	26.8	50.8	1.9	21.2	52.7	2.5	17.1	51.4	3.0
LT	-	-	-	-	-	-	23.3	55.2	2.4	-	-	-
PL	-	-	-	-	-	-	47.4	32.7	0.7	28.1	46.4	1.7
RO	34.3	34.1	1.0	31.1	47.2	1.5	31.6	31.6	1	27.5	33.2	1.2
Av.	27.9	48.4	1.7	27.5	47.4	1.7	33.7	41.4	1.2	28.1	41.9	1.5

Table 5. Motivation for early-stage entrepreneurial activity in EU countries

					Inno	vation	-driven (	Countries	5			
AT	-	-	-	-	-	-	-	-	-	-	-	-
BE	9.0	46.4	5.2	9.9	51.8	5.2	29.0	43.9	1.5	27.5	44.3	1.6
CZ	-	-	-	-	-	-	-	60.3	2.7	-	-	-
DK	5.2	60.2	11.6	8.0	53.8	6.7	-	-	-	-	-	-
EE	-	-	-	-	-	-	14.8*	50.1*	3.4*	13.7	57.0	4.2
FI	12.8	63.0	4.9	18.1	54.3	3.0	17.9	66.0	3.7	15.0	63.0	4.2
FR	10.2	62.3	6.1	25.2	56.0	2.2	15.7	60.9	3.9			
DE	26.4	49.4	1.9	25.7	48.5	1.9	18.7	55.7	3	17.1	64.2	3.7
GR	30.9	39.3	1.3	27.8	38.6	1.4	23.5	35.8	1.5	22.3	34.4	1.5
IR	18.1	45.4	2.5	30.8	33.2	1.1	18.0	43.9	2.4	19.3	38.5	2.0
IT	14.3	60.4	4.2	13.4	54.6	4.1	18.7	18.4	1.0	18.7	30.0	1.6
LU	-	-	-	-	-	-	5.6	56.6	10	9.3	52.2	5.6
NL	8.9	70.6	7.9	8.4	63.9	7.6	8.0	67.1	8.4	14.7	65.3	4.5
PT	-	-	-	21.8	51.9	2.4	21.4	50.7	2.4	24.5	35.9	1.5
SK	-	-	-	-	-	-	40.2**	40.2**	1.0*	31.1	51.3	1.7
SI	12.1	68.2	5.6	16.2	53.8	3.3	24.1	53.4	2.2	23.7	44.9	1.9
ES	14.8	48.5	3.3	25.4	42.0	1.7	29.2	33.2	1.1	24.8	44.5	1.8
SE	-	-	-	13.4	71.6	5.4	9.7	58.4	6	9.2	52.6	5.7
UK	14.0	48.5	3.5	10.6	43.1	4.1	16.1	45.2	2.8	23.9	51.2	2.1
Av.	14.7	55.2	3.7	18.2	51.2	2.8	18.6	50.0	2.7	19.7	48.6	2.5
EU	17.3	53.3	3.1	19.5	50.5	2.6	22.7	47.0	2.1	22.1	46.7	2.1

*Note:* ND- Necessity-driven (% of TEA); IDO- Improvement-driven opportunity (% of TEA); MI- Motivational index; \*Estonia and \*\*Slovakia was included in the category efficiency-driven countries.

Source: authors own elaboration based on data from GEM- Key indicators (2015)

Another stage of entrepreneurship process is represented by the *owner-managers of* established businesses who are adults (18-64 years of age) who own and manage a business, which is over 42 months old.

Compared with early-stage entrepreneurs, generating dynamism and innovation in the economy, established businesses can ensure an important stability of the private sector. This because of owner-managers of established businesses provide stable employment and use knowledge gained from past experiences (Amorós and Bosma, 2014, p. 34).

According to research by GEM, high rates of established business ownership may indicate increased stability and sustainability of the business. On the other hand, they may signal a low level of business dynamism, especially if TEA rates are low (Kelley, Bosma and Amorós, 2011, p. 36). The data in Table 6 highlights the significant differences between countries, also between countries in the same phase of economic development, especially in the conditions of comparison of established business ownership rates with TEA rates.

On average, over the period 2008-2015, established business ownership rate was higher in the innovation-driven countries (6.6%) compared to the efficiency-driven countries (5.7%), as expected. In the first group of countries, the largest established business ownership rate, well above the average, were recorded by Greece, Netherlands, Austria, Finland, Ireland and Spain (over 8%). At the other extreme, there are France, Belgium and Luxembourg. If we consider the efficiency-driven countries, the highest rates were in Lithuania, Latvia, Hungary and Poland (over 6%).

At EU level, established business ownership rate grew from 5.9% in 2008 to 6.5% in 2015 (see *Table 6*). On average, over the period 2008-2015, the highest established business ownership rates, of over 8% (compared to the EU average of 6.4%) were registered in Greece, Netherlands, Austria, Finland, Ireland, Spain, Lithuania and Latvia. In comparison, the lowest rates were registered in France, Luxembourg, Croatia, Belgium, Denmark, Italy and Romania (5%, those less than 3 out of 100 individuals were established business owners).

For a more pertinent analyse, a comparison between the established business ownership rates (see *Table 6*) with TEA rates (see *Table 2*) is needed. Reports by GEM reveal major differences among countries, especially where these rates are compared with TEA rates (Kelley *et al.*, 2011; Bosma et al., 2012; Xavier et al., 2013; Amorós and Bosma 2014; Singer *et al.*, 2015). Thus, the results show that TEA rates are higher compared to established business ownership rates in less developed countries, and the gap between the two rates decreases with increasing the level of economic development. Thus, the innovation-driven economies are dominated by the opposite pattern as in the countries of this group there are several alternative employment, and businesses are supported by favourables conditions, such as access to finance, skilled workforce etc.

Thus, in all countries of the efficiency-driven group, over the period 2008-2015, the average TEA rate was much higher than established business ownership rate, which indicates a low level of business survival. In the case of innovation-driven countries, finds that established business ownership rate was higher than the TEA rates in seven countries (Greece, Spain, Finland, Netherlands, Italy, Ireland and Germany). This may reflect, as mentioned, a certain stability of business in those countries. In the aforementioned countries, established business ownership rate was much higher than the TEA rates in Greece (13.6% vs. 7.3%), Spain (8% vs. 5.5%) and Finland (8.4% vs. 6%). At EU level, in the period 2008-2015, the difference between the two rates was quite low, reflecting the relative stability of European affairs.

	2008	2009	2010	2011	2012	2013	2014	2015	'08-'10 <sup>1</sup>	'10-'15 <sup>2</sup>				
	Efficiency-driven Countries													
BG	-	-	-	-	-	-	-	5.4	-	-				
HR	4.8	4.8	2.9	4.2	3.1	3.3	3.6	2.8	-1.9	-2.0				
HU	5.3	6.7	5.4	2.0	8.1	7.2	7.9	6.5	0.1	1.1				
LV	3.0	9.0	7.6	5.7	7.9	8.8	-	9.6	4.7	6.6				
LT	-	-	-	6.3	8.2	8.3	7.8	-	_	_				
PL	-	-	-	5.0	5.8	6.5	7.3	5.9	-	-				

Table 6. Dynamic of established business ownership rates in the EU countries (%)

RO	2.1	3.4	2.1	4.6	3.9	5.3	7.6	7.5	0.0	5.4
Av.	3.8	6.0	4.5	5.3	6.3	6.2	6.9	6.3	0.7	2.5
				Innova	tion-dri	ven Count	tries			
AT	-	-	-	-	7.6	-	9.9	-	-	-
BE	2.6	2.5	2.7	6.8	5.1	5.9	3.5	3.8	0.1	1.1
CZ	-	-	-	5.2	-	5.3	-	-	-	-
DK	3.3	4.7	5.6	4.9	3.4	-	5.1	-	2.2	-
EE	-	-	-	-	7.2*	5.0*	5.7	7.7	-	-
FI	9.2	8.5	9.4	8.8	8.0	6.6	6.6	10.2	0.3	0.8
FR	2.8	3.2	2.4	2.4	3.2	4.1	2.9	-	-0.4	-
DE	4.0	5.2	5.7	5.6	5.0	5.1	5.2	4.8	1.7	-0.9
GR	12.6	15.1	14.8	15.8	12.3	12.6	12.8	13.1	2.2	-1.7
IR	9.0	-	8.6	8.0	8.3	7.5	9.9	5.6	-0.5	-3.0
IT	6.5	5.8	3.7	-	3.3	3.7	4.3	4.5	-2.8	0.8
LU	-	-	-	-	-	2.4	3.7	3.3	-	-
NL	7.2	8.1	9.0	8.7	9.5	8.7	9.6	9.9	1.9	0.8
РТ	-	-	5.4	5.7	6.2	7.7	7.6	7.0	-	1.6
SK	-	-	-	9.6**	6.4	5.4**	7.8	5.7	-	-
SI	5.6	5.7	4.9	4.8	5.8	5.7	4.8	4.2	-0.6	-0.7
ES	9.1	6.4	7.7	8.9	8.7	8.4	7.0	7.7	-1.3	0.0
SE	-	-	6.4	7.0	5.2	6.0	6.5	5.2	-	-1.2
UK	6.0	6.1	6.4	7.2	6.2	6.6	6.5	5.3	0.3	-1.1
Av.	6.5	6.5	6.6	7.1	6.5	6.4	6.6	6.5	0.1	-0.1
EU	5.9	6.4	6.4	6.6	6.6	6.4	6.7	6.5	0.5	0.1

*Note:* <sup>1</sup>the difference between 2008 and 2010; <sup>2</sup>the difference between 2010 and 2015; \*Estonia \*\*Slovakia was included in the category efficiency-driven countries.

Source: authors own elaboration based on data from GEM- Key indicators (2015)

Another indicator of interest to assess the dynamism and the entrepreneurship sustainability in the economy is the rate of business discontinuation. According with the GEM definition, this indicator measures the percentage of adults (18-64 years of age) who, in the past year, have suspended a business, for various reasons.

Typically, the rates of business discontinuation is higher in less developed economies and decreases when the level of economic development increases (Kelley *et al.*, 2011; Xavier *et al.*, 2013; Amorós and Bosma, 2014; Singer *et al.*, 2015).

The data in *Table 7* shows a higher rate of business discontinuation of efficiencydriven countries compared to innovation-driven countries. Within the EU, on average, over the period 2008-2015, the highest level of business discontinuation rate was recorded in Slovakia, Poland, Croatia, Greece, Romania, Latvia and Luxembourg, where more than 3% of entrepreneurs have discontinued business last year. A level of output was registered in countries that have high TEA rates such as Latvia, Slovakia, Poland and Luxembourg.

	2008	2009	2010	2011	2012	2013	2014	2015	'08-'10 <sup>1</sup>	'10-'15 <sup>2</sup>	
Efficiency-driven Countries											
BG	-	-	-	-	-	-	-	1.4	-	-	
HR	2.9	3.9	4.5	3.6	4.2	4.5	3.8	2.9	1.6	-1.6	
HU	1.1	3.2	2.9	2.3	3.7	2.9	3.1	2.8	1.8	-0.1	
LV	1.7	3.3	4.2	3.0	3.4	3.5	-	3.4	2.5	-0.8	
LT	-	-	-	2.9	2.2	3.5	2.9	-	-	-	
PL	-	-	-	4.2	3.9	4.0	4.2	2.7	-	-	
RO	2.2	3.6	2.6	3.9	3.8	4.3	3.2	3.3	0.4	0.7	
Av.	2.0	3.5	3.6	3.8	3.6	3.6	3.5	2.8	1.6	-0.8	
Innovation-driven Countries											
AT	-	_	-	4.3	3.6	-	2.7	_	-	-	
BE	1.5	1.3	2.0	1.4	2.4	1.9	2.3	1.9	0.5	-0.1	
CZ	-	-	-	2.7	-	3.4	-	-	-	-	
DK	1.9	1.1	1.7	2.3	1.4	-	2.2	-	-0.2	-	
EE	-	-	-	-	4.0*	2.1*	2.0	2.0	-	-	
FI	2.1	2.1	1.8	2.0	1.9	2.0	2.3	2.7	-0.3	0.9	
FR	2.2	1.9	2.5	2.2	2.0	1.9	1.7	-	0.3	-	
DE	1.8	1.8	1.5	1.8	2.0	1.5	1.7	1.8	-0.3	0.3	
GR	2.9	2.6	3.4	3.0	4.5	5.0	2.8	3.4	0.5	0.0	
IR	3.6		2.3	3.4	1.7	2.5	1.9	3.1	-1.3	0.8	
IT	1.8	1.1	1.6	-	2.4	1.9	2.1	1.9	-0.2	0.3	
LU	-	-	-	-	-	2.8	2.6	4.2	-	-	
NL	1.6	2.5	1.4	2.0	2.2	2.1	1.8	2.1	-0.2	0.7	
РТ	-	-	2.6	2.9	3.0	2.8	3.0	3.2	-	0.6	
SK	-	-		7.0**	4.7	4.3**	5.2	5.4	-	-	
SI	1.3	1.3	1.6	1.5	1.6	2.6	1.5	1.8	0.3	0.2	
ES	1.3	2.0	1.9	2.2	2.1	1.9	1.9	1.6	0.6	-0.3	
SE	-	-	2.9	3.2	1.9	2.4	2.1	2.7	-	-0.2	
UK	2.1	2.1	1.8	2.0	1.7	1.9	1.9	2.3	-0.3	0.5	

Table 7. Evolution of business discontinuation rates in EU countries (%)

Г

Av.	2.0	1.8	2.1	2.5	2.4	2.4	2.3	2.7	0.1	0.6
EU	1.9	2.1	2.3	2.9	2.7	2.9	2.6	2.7	0.3	0.4

*Note:* <sup>1</sup>the difference between 2008 and 2010; <sup>2</sup>the difference between 2010 and 2015; \*Estonia \*\*Slovakia Slovakia was included in the category efficiency-driven countries.

*Source:* authors own elaboration based on data from GEM Global Report 2008-2015, and Fitzsimons, O'Gorman (2013) for the data from 2012.

The business exits may be caused by variety of reasons. The data in *Table 8* shows the reasons for exiting businesses in the two groups of countries, but also in the European Union. Thus, it is found in all the three years analysed, the lack of profitability is the main reason for entrepreneurial exits, both at EU level and in the efficiency-driven economies and innovation-driven economies.

In 2008 and 2015, more than half of entrepreneurs in the EU, but also in innovationdriven economies mentioned as main reasons for business closure: lack of profitability, "personal reasons" and "another job or business opportunity". In comparison, for efficiency-driven economies, dominant reasons for business discontinuation were the lack of profitability, financing difficulties in procuring resources and "personal reasons". In 2010, in the context of the international financial crisis, the difficulties in procuring financial resources is one of the main reasons for the interruptions of business, especially in the efficiency-driven economies, where almost a third part of business exits were determined by the "problems getting finance". It is also noteworthy, the increasing in the share of entrepreneurs who have indicated that access to finance as important reason for business discontinuation in all three groups of countries analysed.

Reasons	Efficiency driven Countries			Innovation-driven Countries			EU		
	2008	2010	2015	2008	2010	2015	2008	2010	2015
Business not profitable	36.3	34.0	35.4	25.3	31.6	36.8	27.5	32.1	36.4
Personal reasons	11.3	9.3	14.1	18.1	14.9	20.0	16.7	13.9	18.3
Another job or business opportunity	11.3	3.3	9.9	14.1	10.4	12.4	13.5	9.1	11.7
Problems getting finance	29.0	32.0	12.2	6.8	10.8	8.4	11.2	14.5	9.5
Other	0.0	14.7	15.4	8.0	12.4	6.2	6.4	12.8	8.8
Retirement	1.0	2.7	4.1	12.0	7.2	6.0	9.8	6.4	5.5
Exit was planned in advance	8.3	0.3	3.4	4.6	5.5	4.8	5.3	4.6	4.4
Opportunity to sell	2.7	1.7	3.3	6.7	4.9	3.5	5.9	4.4	3.4
An incident	0.0	2.0	2.3	4.5	2.4	2.0	3.6	2.3	2.1

Table 8. Reasons for Business Exits in EU countries (?	%	)
--	---	---

Source: authors own elaboration based on data from Fitzsimons and O'Gorman, 2009, 2011; Kelley et al., 2016

Knowing the reasons leading business interruption is of interest to policymakers to adopt appropriate measures, which ensure entrepreneurial sustainability.

## Conclusions

Our paper investigates the characteristics of entrepreneurship in EU countries using the key indicators promoted by the Global Entrepreneurship Monitor (GEM) through Adult Population Survey (APS). Using the annual data provided by GEM, our investigation is made at the level of 26 EU member states for the period 2008-2015, due to the lack of data for Cyprus and Malta, and for Bulgaria (only for the 2015). The research is conducted in accordance with the classification give in 2008 by the World Economic Forum's Global Competitiveness Report: factor-driven economies, efficiency-driven economies and innovation-driven economies. Starting a business by the entrepreneurs can have three reasons: opportunity, necessity and motivation. From this point of view, our paper is based on the GEM indicators, which reflect these three dimensions of the entrepreneurship: opportunity-driven entrepreneurship, necessity-driven entrepreneurship and motivational entrepreneurship.

The literature concerning the entrepreneurship, the implications, effects and results in national economies is rich. An empirical analysis realized by Kim et al. (2010) shows that the government expenditure on economic and education have a major role in order to sustain and promote the entrepreneurship, to stimulate the starts-up and to increase the level of entrepreneurial activity. Another study conducted by Bosma and Schutjens (2011) on the national and regional conditions on entrepreneurial attitude across to 17 European countries, for the period 2001-2006, indicates the importance of certain economic and institutional factors, demographic characteristics of variations at regional entrepreneurial activity. The legal framework and its influences on entrepreneurial activity is presented.

In our study, according to the GEM methodology, we consider the following indicators: total early-stage entrepreneurial activity (TEA), motivational index, established business ownership rate and business discontinuation rate, in order to measure the entrepreneurial activity at the level of 26 EU Member States. Our findings show that are signifiant differences between the efficiency-driven countries, where the TEA rate is higher, than the innovationdriven countries, where the TEA rate is lowest, reflecting the necessity to sustain the entrepreneurship to create new jobs through young companies. Also, our results reflect a decline at the level of analysed countries, of new business ownership rate in 2010 compared to 2008, and an increase in 2015 compared to 2010. Our analyse shows that, based on the motivational index value, in 2015, at EU level, were two times more entrepreneurs-driven by improvement opportunity than entrepreneurs-driven by necessity (the lowest level of motivational index registered in Bulgaria, Croatia and Romania, the higher level remarked in Sweden, Luxembourg, Netherlands, Estonia, Finland and Germany). In all countries of the efficiency-driven group, where the TEA rate was much higher than established business ownership rate, indicates a low level of business survival. In the case of innovation-driven countries as Greece, Spain, Finland, Netherlands, Italy, Ireland and Germany, the established business ownership rate was higher than TEA rates, reflecting the stability of businesses. The business discontinuation indicator reflects the dynamics and sustainability of the economy. Our findings reflect that the efficiency-driven countries have a higher rate of business discontinuation (Slovakia, Poland, Croatia, Greece, Romania, Latvia and Luxembourg) due to the world economic crises. The business exits may be caused by the difficulties in procuring financial resources (efficiency-driven countries) and lack of profitability (innovation-driven countries).

Our study has some limitations due to the lack of data for all the EU Member States. For a better understanding of dynamics of entrepreneurial activity at the EU level, we consider that an extended study to the years before the economic crises will increase the knowledge in the field, but we think that our findings are important for scientists in the field.

## References

- Audretsch, D.B., Carree, M.A., & Thurik, A.R., (2001), "Does entrepreneurship reduce unemployment?". *Tinbergen Institute Discussion Paper* TI01-074/3, Rotterdam: Erasmus University.
- Amorós, J.E., Bosma, N., (2014), "Global Entrepreneurship Monitor. 2013 Global Report". Retrieved from http://www.gemconsortium.org/report
- Bosma, N., Levie, J., (2010), "Global Entrepreneurship Monitor. 2009 Executive Report".
- Bosma, N. and Schutjens, V. (2011) "Understanding regional variation in entrepreneurial activity and entrepreneurial attitude in Europe", The Annals of Regional Science, Vol. 47, No. 3, pp. 711-742.
- Bosma, N., Wennekkers, S., Amorós, J.E., (2012), "Global Entrepreneurship Monitor. 2011 Extended Report: Entrepreneurs and Entrepreneurial Employees Across The Globe". Retrieved from http://www.gemconsortium.org/report
- Busenitz, L.W., Gomez, C., Spencer, J.W., (2000), "Country institutional profiles: unlocking entrepreneurial phenomena". Academy of Management Journal 43 (5), 994-1003.
- Carree, M.A. & Thurik, A.R., (2003), "The impact of entrepreneurship on economic growth". In D.B. Audretsch & Z.J. Acs (eds.), Handbook of Entrepreneurship Research, pp. 437–471. Boston/Dordrecht: Kluwer Academic Publishers.
- European Commission (2013). "Entrepreneurship 2020 Action Plan. Reigniting the entrepreneurial spirit in Europe". COM (2012) 795 final, Brussels.
- European Commission (2008). "Think small first: A Small Business Act for Europe". COM (2008) 394 final, Brussels.
- Fitzsimons, P., O'Gorman, C., (2013), "Entrepreneurship in Ireland 2012. The Annual Report". Retrieved from http://gemconsortium.org/country-profile/72
- Fitzsimons, P., O'Gorman, C., (2009), "Entrepreneurship in Ireland 2008. The Annual Report". Retrieved from http://gemconsortium.org/country-profile/72
- Fitzsimons, P., O'Gorman, C., (2011), "Entrepreneurship in Ireland 2010. The Annual Report". Retrieved from http://gemconsortium.org/country-profile/72
- Grilo, I., Thurik, R., (2005), "Determinants of Entrepreneurship in Europe". The Papers on Entrepreneurship, Growth and Public Policy, edited by the Group Entrepreneurship, Growth and Public Policy, MPI Jena.
- Hébert, R.F. and Link, A.N., (1989), "In search of the meaning of entrepreneurship". Small Business Economics 1 (1), 39-49.
- Hofstede, G., Noorderhaven, N.G., Thurik, A.R., Uhlaner, L., Wennekers, A.R.M., Wildeman, R.E., (2004), "Culture's role in entrepreneurship: self-employment out of dissatisfaction". In: J. Ulijn and T. Brown (eds), Innovation, Entrepreneurship and Culture: The Interaction between Technology, Progress and Economic Growth, Cheltenham, UK and Brookfield, US: Edward Elgar, 162-203.
- Ilmakunnas, P., Kanniainen, V. Lammi, U., (1999), "Entrepreneurship, economic risks, and risk-insurance in the welfare state". *Discussion paper* No. 453, Department of Economics, University of Helsinki.
- Kelley, D.J, Bosma, N., Amorós, J.E. (2011). "Global Entrepreneurship Monitor. 2010 Global Report" Retrieved from http://www.gemconsortium.org/report
- Kelley, D., Singer, S., Herrington, M., (2016), "Global Entrepreneurship Monitor. 2015/2016 Global Report". Retrieved from <u>http://gemconsortium.org/report</u>
- Kim, Y., Kim, W. and Yang, T. (2010) "The Effect of Public Policy on Entrepreneurial Activity: Evidence from OECD Countries", ICSB World Conference Proceedings, 01, USA.
- Noorderhaven, N., Thurik, R., Wennekers, S., van Stel, A., (2004), "The Role of Dissatisfaction and per Capita Income in Explaining Self- Employment across 15 European Countries". *Entrepreneurship Theory and Practice* 8, 447-466, Baylor University,.
- Noorderhaven, N.G., Wennekers, A.R.M., Hofstede, G., Thurik, A.R, Wildeman, R.E., (1999), "Selfemployment out of dissatisfaction". *Tinbergen discussion paper* TI 99-089/3, Erasmus University Rotterdam.
- Robichaud, Y., LeBrasseur, R. and Nagarajan, K.V., (2010), "Necessity and Opportunity-driven Entrepreneurs in Canada: An Investigation into their Characteristics and an Appraisal of the Role of Gender", Journal of Applied Business and Economics, vol. 11, no.1, pp. 59-79.
- Reynolds, P.D, Hay, M., Camp, S.M. (1999), "Global Entrepreneurship Monitor, 1999 Executive Report". Retrieved from <a href="http://www.gemconsortium.org/report">http://www.gemconsortium.org/report</a>
- Schwab, K. (ed.) (2012), "The Global Competitiveness Report 2012–2013", Geneva: World Economic Forum.

Schumpeter, J., (1934), "The Theory of Economic Development". Harvard University Press, Cambridge, Mass.

Singer, S., Amoró, J. E., Arreola, D. M., (2015), "Global Entrepreneurship Monitor. 2014 Global Report", Retrieved from http://www.gemconsortium.org/report, date: 02.11.2016. Stephan, U., Mark Hart, M., Mickiewicz, T., Cord-Christian Drews, C.C., (2012), "Understanding Motivations for Entrepreneurship", BIS Research Paper, no. 212.

- Stevenson, Lundström, l., (2001), "Patterns and trends in entrepreneurship/SME policy and practice in ten economies". *Entrepreneurship Policy for the Future Series*, Vol. 3, Swedish Foundation for Small Business Research.
- Xavier, S.R., Kelley, D., Kew, J., Herrington, M. & Vorderwülbecke, A. (2013). "Global Entrepreneurship Monitor. 2012 Global Report". Retrieved from http://www.gemconsortium.org/report
- Wennekers , A. R. M., (2006), "Entrepreneurship at the Country Level: Economic and Non-economic Determinants". RSM Erasmus University/Erasmus School of Economics Erasmus University Rotterdam.
- Wennekers, S., van Stel, A., Thurik, R., Reynolds, P., (2005), "Nascent Entrepreneurship and the Level of Economic Development". *Small Business Economics* 24: 293–309.