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## **Characteristics of the Entrepreneurial Environment in European Union Countries: a Comparative Analysis**

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**Abstract:** The major importance of entrepreneurship for economic growth, competitiveness, creating jobs and innovation is widely recognized. The objectives of our paper are to realize a comparative analyze of the characteristics of entrepreneurship in the EU countries, as well as to identify the perceptions about it. For our analysis we use the values for the key indicators obtained from data base and reports of Global Entrepreneurship Monitor. Also, in order to realize the comparison we use the classification of EU countries according to their development level. The results obtained show that there are important differences between the EU countries regarding entrepreneurial activity, but also among the countries in the same group. The countries with a higher economic development have a better entrepreneurial environment than those less developed. Regarding the perception about entrepreneurship, our results show that almost half of working age population from EU observe good opportunities in the region for starting a business, but almost as many of them affirm that a big constrain in starting a business would be their fear of failure. Overall, the results of our research allow identifying the measures that would be required to be taken by policy makers to stimulate entrepreneurship in European countries.

**Keywords:** entrepreneurship; entrepreneurial activity; economic development; GEM

**JEL Classification:** L26; J23; O31

### **1. Introduction**

Internationally it is widely recognized the major importance of entrepreneurship for economic growth, competitiveness, creating jobs and innovation. The role of entrepreneurship in achieving economic and social objectives and the need to promote the entrepreneurial spirit is in the spotlight of the decision makers at EU level, being highlighted by the European Commission both through the Lisbon Strategy and the current Europe 2020 strategy. The concern of the European Commission for the promotion of entrepreneurship it is highlighted also by the Small Business Act, adopted in 2008 and which aims to promote and support entrepreneurship and SMEs growth (European Commission, 2008). In the context of reviewing, in April 2011, of the Small Business Act, the European Commission proposed Entrepreneurship 2020 Action Plan (European Commission, 2013), which was adopted in January 2013 as part of Europe 2020 strategy. This plan aims to facilitate the creation of new businesses, but also to create a more favourable environment to entrepreneurs so they can develop, and it is targeting three strategic areas, namely: *developing entrepreneurial education and training* to support the growth

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and creation of enterprises, *creation of a favourable business environment* (through adopting measures for improving the access to finance; supporting entrepreneurs in key steps of the life cycle of the business and supporting their growth, 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 regulations), and *promoting models of entrepreneurs to follow*.

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 highlight the characteristics of entrepreneurship in the EU countries, expressed through key indicators that are measured and monitored by the Global Entrepreneurship Monitor. The rest of our paper is structured as follows: section two realizes a comparative analyze of entrepreneurial activity in EU countries, highlighting some similarities, but also major differences that appear according to the level of economic development; the third section is analyzing the perceptions regarding entrepreneurship in the EU countries. The study ends with conclusions.

## **2. Analysis of the Main Indicators Measuring Entrepreneurial Activity in EU Countries**

For our analysis we consider the countries from the EU28. For each investigated indicator, the number of countries analyzed will vary according to the data available regarding their entrepreneurial activity. The data for the indicators are taken from the Global Entrepreneurship Monitor – Key indicators (2015) which measure the level and nature of entrepreneurial activity around the world. The considered countries are presented in Table 1 classified by their economic development level. We consider this classification important for our survey because we anticipate differences between countries regarding entrepreneurial activity according to the economic development level they are included.

The World Economic Forum is grouping the 144 world states considered for their analysis into 5 levels of economic development, as follows: a) stage 1 – economies focused on the basic requirements; b) transition from stage 1 to stage 2; c) stage 2 – economies focused on efficiency; d) transition from stage 2 to stage 3; and e) stage 3 – innovation-driven economies (Schwab, 2015). In order to allocate the analyzed countries into a stage of development are used two criteria: the first is the level of GDP per capita at market exchange rates; and the second criterion makes the difference between the countries that, based on income, are beyond stage 1, but where prosperity is based on the extraction of resources. This criterion measures the share of exports of mineral goods in total exports. The countries that have more than 70% of their exports made up of mineral products (reported to a five-year average) are considered to be factor driven economies. The countries situated between the main three stages of development are considered to be “in transition.”

**Table 1. The EU28 countries considered in the analysis, grouped by their Economic Development Level**

Factor-driven	Efficiency-driven	Innovation-driven
-	Bulgaria, Croatia, Hungary, Latvia, Lithuania, Poland, Romania	Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany Greece, Ireland, Italy, Luxemburg, Malta, Portugal, Slovakia Slovenia, Spain, Sweden Netherlands, United Kingdom

*Source: Processed by the authors after Kelley et al., 2016, p. 11.*

As we can observe from Table 1, in the European Union we do not have countries included in the factor-driven category. Also, only seven countries are included in the second category (efficiency-driven), the rest being considered developed countries, and included in the innovation-driven category.

Following we will analyze each key indicator of the entrepreneurship, realizing a comparison between the considered countries. By analyzing these indicators we want to identify the impact of the entrepreneurship on the society but also to what extent the society sustains entrepreneurial activity. The most important indicators measuring the entrepreneurial activity are: total early-stage entrepreneurial activity (TEA), motivational index, established business ownership rate, business discontinuation rate and entrepreneurial employee activity.

*Total Entrepreneurial Activity* (TEA) is considered by Global Entrepreneurship Monitor (GEM) as the most known indicator to reflect the entrepreneurial phenomenon within an economy. It measures the percentage of working population who are either already running a business or is in the process of starting a new business. At macroeconomic level, from this group of entrepreneurs it is expected to bring the most dynamism, job creation and innovation in the economy. TEA rates are decreasing when the countries have higher levels of economic development. We also observe important variation among economies at the same development level, particularly in the efficiency-driven group. As we can observe from Figure 1, the efficiency-driven economies show varying TEA rates, starting from 4.40% in Bulgaria to 13.30% in Latvia. Also, we observe substantial variation of TEA rates among the innovation-driven economies. The countries with the smallest TEA rates are Italia, Germany, Belgium, Spain and Finland with less than 6% of the adult working-age population starting or running new businesses. On the other hand, the countries with the biggest rates are Slovakia and United Kingdom where more than 10% of the adult population was starting or running a new business. From the countries included in the efficiency-driven group there are three countries (Latvia, Romania and Lithuania) which have the value of TEA rates higher than the European Union average. The same number of countries can be selected from the innovation-driven group (Slovakia, United Kingdom and Portugal). All the other analyzed countries have values of TEA below the EU average.

Similar patterns in entrepreneurial activity can be explained by the economic development levels of the countries and also by the regional location, but the variations that we observe among our sample of countries show that are also other factors with an important impact on entrepreneurial activity, respectively supporting access to finance for entrepreneurs, the support and government policies, regulatory environments, entrepreneurship education, market conditions, but also cultural and social norms about entrepreneurship (Amorós & Bosma, 2014).

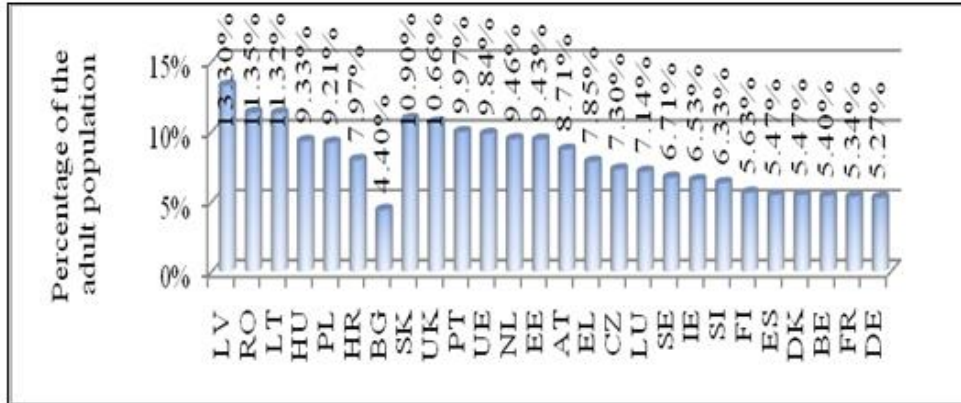


Figure 1. Total entrepreneurial activity in 25 EU countries, 2014.

Source: Processed by the authors after data from GEM- Key indicators, 2015.

Another important indicator in measuring entrepreneurial activity is *Established Business Ownership*, which represents the percentage of the population between 18 and 64 years who are currently owner and manager of an established business. This indicator helps examining the level of mature business activity relative to start-ups. To realize this analysis in Figure 2 we test the relationship between the established business ownership rate, which represents the percentage of working-age population who are currently owner or manager of an established business, and new business ownership rate, which represents the percentage of working-age population who are currently owner or manager of a new business.

From Figure 2 we observe that for the countries in the efficiency-driven group there are between 12 to 20 established enterprises reported to 10 new businesses, all below the UE average of 23 established enterprises reported to 10 new ones. The countries with less than 16 established enterprises reported to 10 new ones are Romania, Latvia and Lithuania. In the innovation driven group the results vary significantly, for example for UK there are only 14 established business owners for every 10 new entrepreneurs, and for Ireland there are 40 established business owners for every 10 new entrepreneurs. The countries situated above the EU average regarding this indicator are: Ireland, Greece, Sweden, Italy, Austria, Spain and Finland. This results show that, in the developed economies there are fewer people that are starting a new business, but, there are proportionately more that have made it to the mature business phase. And, also the fact that in the efficiency-driven economies there are fewer established businesses.

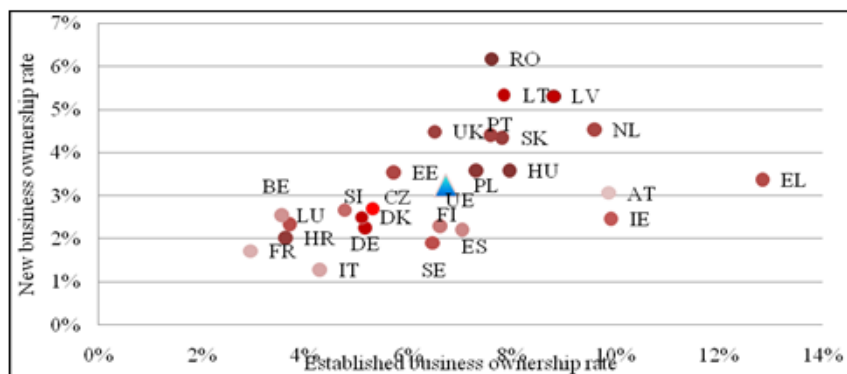
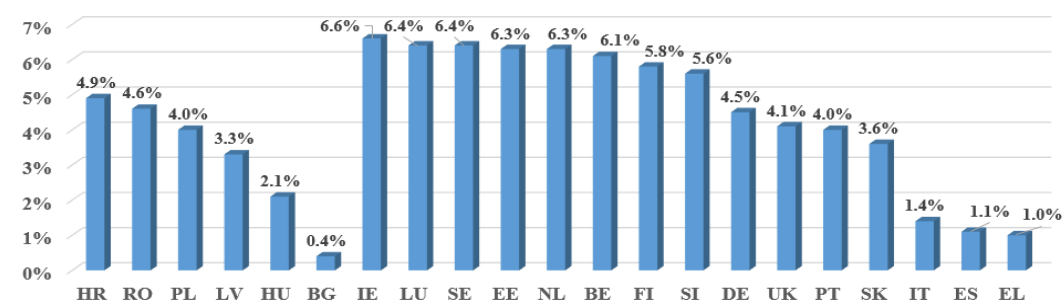


Figure 2. The relationship between established business ownership rates and new business ownership rates, in 25 EU countries, 2014

Source: Processed by the authors after GEM- Key indicators, 2015.

*Entrepreneurial Employee Activity (EEA)* is another important indicator measuring entrepreneurial activity, which is used by GEM from 2011 in order to highlight more accurately the entrepreneurial phenomenon across the economies. EEA is a special type of entrepreneurship that can substitute independent entrepreneurship or can complement entrepreneurial activity focused on starting a new business. According to GEM Reports (Bosma et al., 2012; Singer et al., 2015), this indicator measures the proportion of the working-age population which in the last three years had an important role in the development of new activities for an employer, for example developing or launching new goods or services, or setting up a new business unit, a new establishment or subsidiary. In accordance with the analysis realized by GEM, Entrepreneurial Employee Activity (EEA) has smaller values in the efficiency-driven economies, as Figure 3 shows. On the other hand it accounts for a substantial portion of entrepreneurial activity in the innovation-driven group, reaching in some countries values close to the level of TEA. Across our sample, EEA is lowest (under 2%) in one country from the efficiency-driven group (Bulgaria), and three economies from the innovation-driven group (Italia, Spain and Greece). Less than 20 percentage of the adult population is starting a business for their employer in these economies. On the other end of the scale, Ireland shows an EEA rate of nearly 7%. Luxembourg, Sweden, Estonia, Netherlands and Belgium are also among those with high EEA rates higher than 6%). High values of EEA confirm the presence of more entrepreneurial proactive and innovative culture in the business sector of the countries.



**Figure 3. The Entrepreneurial Employee Activity in 21 EU countries, 2015.**

Source: Processed by the authors after Kelley et al., 2016.

To observe the proportion between the improvement-driven opportunity entrepreneurs and those motivated by necessity, Global Entrepreneurship Monitor has created the *Motivational Index*. Some people may be determined to start a business because they have no other work options and need a source of income, this are the necessity driven entrepreneurs. Also, other people become an entrepreneur to pursue an opportunity, this are opportunity driven entrepreneurs. This index helps us to better understand the entrepreneurial capacity of a country.

The results obtained for this index show that there are twice as many entrepreneurs driven by improvement opportunity than necessity-driven ones, on average, in the efficiency-driven economies, and in the innovation-driven economies, there are three times as many entrepreneurs driven by improvement opportunity as necessity-motivated entrepreneurs. The countries where a big part of the entrepreneurs have started their business out of necessity are: Bulgaria, Croatia and Romania. Also, if we analyze the countries from the innovation-driven group we observe large difference between the economies, so, Sweden and Luxembourg have over five times as many IDO entrepreneurs as those motivated by necessity. On the other end of the scale, are situated two European economies Greece and Portugal, where a big part of the early stage entrepreneurs started their business out of necessity.

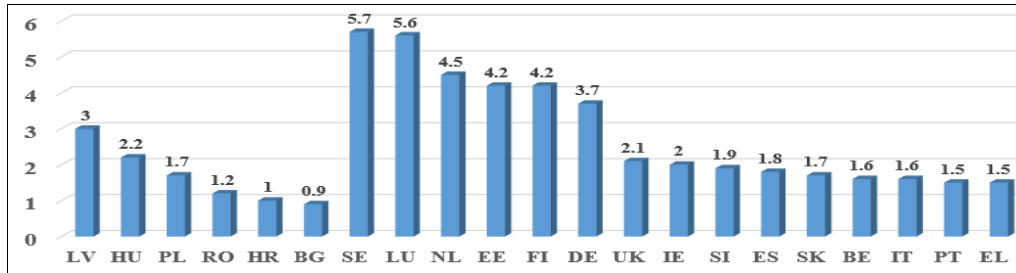


Figure 4. The value of the motivational Index in 21 EU countries, 2015.

Source: Processed by the authors after Kelley et al., 2016.

Moreover, if we take into account the countries that have participated in the GEM survey in the last three years, we observe that Poland, Slovakia and Spain have registered an increase in their motivational index from one year to another (Amorós & Bosma, 2014; Singer et al., 2015; Kelley et al., 2016). These improvements show that more people are seeking to improve their lives through entrepreneurship but fewer are driven to start a business out of necessity.

*Business discontinuation rate* is another important indicator for entrepreneurial activity, which is measuring the business exits, respectively the percent of the population with the age between 18 and 64 that in the last 12 months have interrupted a business, either by selling, shutting down or otherwise discontinuing an owner/management relationship with the business (Kelley et al., 2011, p. 64). According GEM (Singer et al., 2015) a too high intensity of discontinuations might be due starting a business that was not well prepared or a bad management of the venture. On the contrary, a too low intensity of business discontinuation could indicate a low dynamic of the economic system that maintains inefficient business structures.

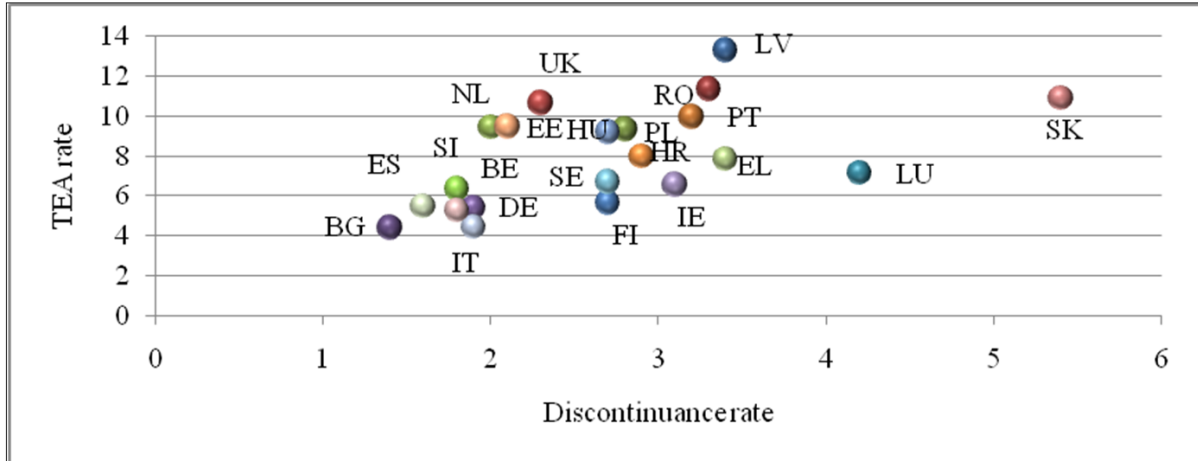


Figure 5. The relationship between discontinuance (% of adult population) and TEA rates, in 21 EU countries, 2015.

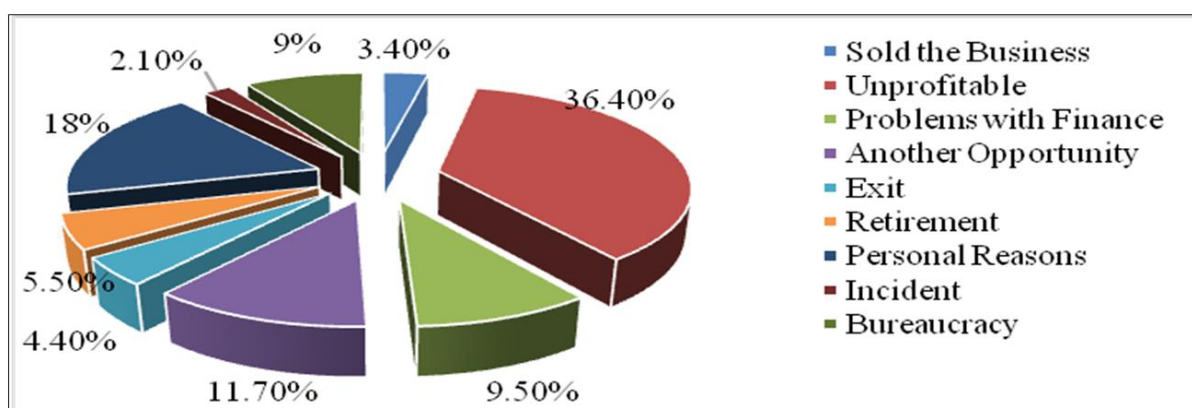
Source: Processed by the authors after Kelley et al., 2016.

Usually, the rate of business discontinuation is higher in less developed economies and it declines as economic development increases (Xavier et al., 2013; Amorós & Bosma, 2014; Singer et al., 2015). As Figure 5 shows, a high rate of entrepreneurship is predictive of a high discontinuance rate. Low rates of discontinuance (less than 2% of the working-age population) are reported in six European countries: Bulgaria, Italia, Belgium, Germany, Slovenia, and Spain). These countries also register low TEA rates.

High value for the discontinuance rate, above 3% of the working population, show that more than three-tenths of working age adults have discontinued a business in the past year. These high values are registered in the countries where are also registered high TEA rates (like Latvia and Romania from the efficiency driven group and Slovakia, Luxembourg, Greece, Portugal and Ireland from the innovation-driven group).

In the case of some countries, the level of business exits is very high in relation to the number of start-up efforts. For example, in Slovakia, Luxembourg, Portugal, Croatia, Finland and Sweden the value of discontinuance rate is higher than the new business opportunity rate, this high level of business exits shows that entrepreneurs are not starting viable ventures, or that they do not have the ability or inclination to create longer term sustainability for their businesses.

The business exits can be caused by a variety of reasons. Figure 6 shows the reasons for exiting businesses in the European Union countries. The lack of profitability appears to be the major reason mentioned for business discontinuation in the European Union. More than one-third of business exits are due to this cause, on average. Also, the lack of finance is the fourth major reason for leaving a business. Together, the lack of profits and problems obtaining finance explains almost half of the exits in the European Union countries. Between the countries where the lack of finance has influenced in a big proportion the business exits are: Croatia, Italy, Slovenia and Bulgaria.



**Figure 6. Business exit reasons for EU countries, 2015.**

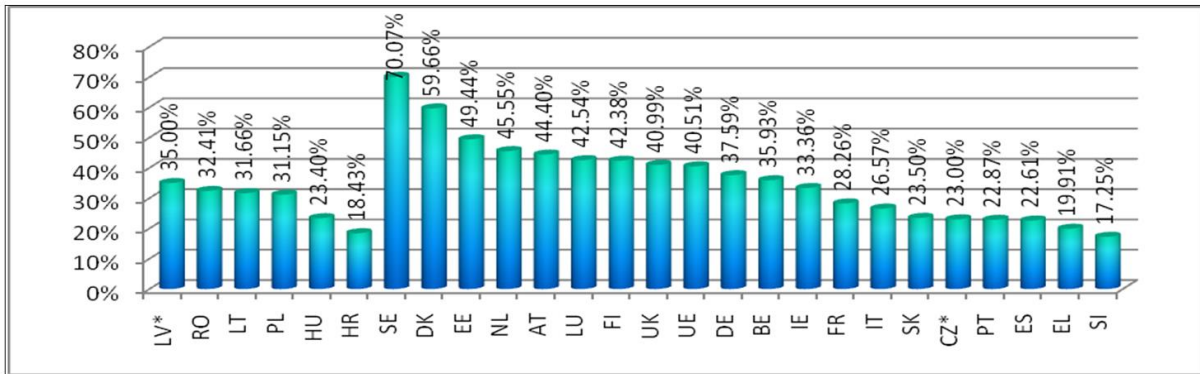
Source: Processed by the authors after Kelley et al., 2016.

Besides personal reasons (which represent 18% of the reasons), another opportunity and bureaucracy are important factors influencing discontinuance rate, as economies develop and institutionalize, bureaucracy arises as a big problem which can lead to fewer start-ups and more informal, unregistered firms. Exits due to sale, retirement or incident, being included in the category resulting from the choice of entrepreneur, account for fewer than 6% of the reasons mentioned by the EU countries.

### 3. Analysis of the Perceptions Regarding Entrepreneurship

For evaluating the perception regarding entrepreneurship in the EU countries we take into account three indicators: *Perceived opportunities*, which is measuring the percentage of working age population who see good opportunities to start a firm in the area they live; *Perceived capabilities*, which represents the percentage of working age population who believe that they have the required skills and knowledge to start a business; *Fear of failure*, represented by the percentage of working age population who say that fear of failure would prevent them for setting up a business.

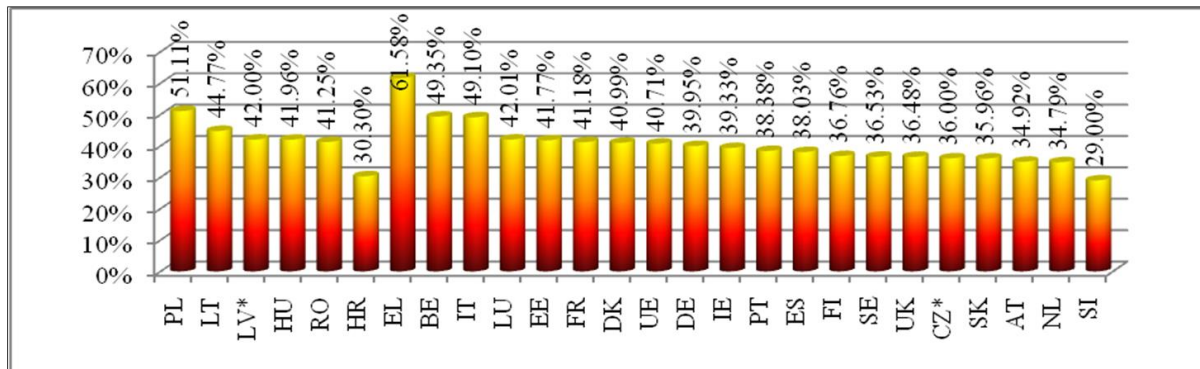
From Figure 7 we observe that for all the countries from the efficiency-driven group the population who see good opportunities to start a firm has a smaller percent than the average of the European Union. On the other hand, in the innovation-driven group of countries we have some really high values: 70% of the working population in Sweden sees good opportunities to start a firm in their country, and almost 60% of the working population in Denmark has the same opinion. Small values, fewer than 20%, for this indicator are obtained in Croatia, Greece and Slovenia.



**Figure 7. Perceived opportunities of entrepreneurial environment, in 25 EU countries, 2014** (\* data available only for 2013).

Source: Processed by the authors after GEM- Key indicators, 2015.

This indicator appears in contrast with the fear of failure. Almost all the countries from the efficiency driven group (except Croatia) have a fear of failure bigger than the EU average (see Figure 8). In the innovation driven group we have different results, for example in Greece, where perceived opportunities was among the lowest one from EU, the fear of failure is the highest.

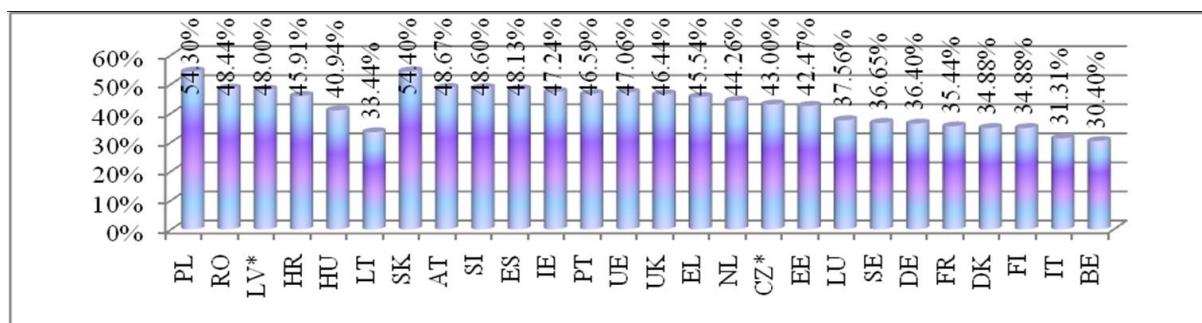


**Figure 8. Fear of failure, in 25 EU countries, 2014** (\* data available only for 2013).

Source: Processed by the authors after GEM- Key indicators, 2015.

A special situation appears for Slovenia, where perceived opportunities are the lowest but the fear of failure is also the lowest, fact that shows us that in this country the way of perceiving entrepreneurship is not due to the fear of failure, but due to other factors.





**Figure 9. Perceived capabilities, in 25 EU countries, 2014** (\* data available only for 2013).

Source: Processed by the authors after GEM- Key indicators, 2015.

The results obtained for the perceived capabilities indicator show that at the European Union level 47% of the working age people consider that they have the skills and knowledge necessary to start a business. Analyzing the countries (see Figure 9.) we observe interesting distinctions between the southern and northern regions, for example Denmark, Estonia, Finland and Sweden have registered beliefs about capabilities lower than average, and, other countries: Slovakia, Slovenia, Ireland, Portugal and Spain have above average views about entrepreneurial capabilities. Moreover, on average perceived capabilities for efficiency driven group of countries are higher than the average perceived capabilities for the innovation driven group.

#### 4. Conclusions

The results of our study show that average TEA rates tend to be higher in the efficiency-driven group, but are decreasing when the level of economic development is increasing. Established business ownership is also higher for the efficiency-driven countries compared to innovation-driven ones, although the proportion of established business owners relative to TEA is smaller than in the innovation-driven economies. Entrepreneurial Employee Activity (EEA) is highest in the innovation-driven economies and is decreasing at the same time with the decrease of the economic development level. Ireland, Luxembourg, Sweden, Estonia, Netherlands and Belgium have the highest EEA rates, more than 6% of their adult populations.

The rate of business discontinuation declines as economic development increases. So, discontinuance is highest in the efficiency-driven countries. The lack of profits or problems with finance explains almost half of business exits. Another opportunity or bureaucracy also represent an important factor influencing business exits.

Focusing on the motivation of entrepreneurship, from our results, we observe that there are twice as many entrepreneurs driven by improvement opportunity then necessity-driven ones, on average, in the efficiency-driven economies, and in the innovation-driven economies, there are three times as many entrepreneurs driven by improvement opportunity as necessity-motivated entrepreneurs.

Regarding the perception about entrepreneurship, the results of our study show that, on average, 40% of working age adults from the European Union economies observe good opportunities in the region for starting a business, but almost as many of them affirm that a big constrain in starting a business would be their fear of failure. However, on average, almost half of the population between 18 and 64 feel they have the ability to start a new business. Overall, the results of our research allow identifying the measures that would be required to be taken by policy makers in order to stimulate entrepreneurship in European countries.

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