

The Influence of the Motives of Entrepreneurial Activity on Economic Growth of Developing Countries in Southeast Europe



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1 Introduction

Economic growth is one of the most extensively studied macroeconomic phenomena in the economic literature. How to stir economic growth and what are the drivers of growth are the issues that a number of economists are trying to answer. In the early twentieth century, it was believed that the key drivers of economic growth are large enterprises, because they took advantage of the effects of economies of scale and scope, so they were very efficient, generating huge profits and employing large numbers of people (Burns 2011, p. 516). Therefore, most developed economies paid great attention to the development of large enterprises, while small and medium-sized enterprises and entrepreneurs were considered remnants of the past which cannot extensively contribute to economic growth.

However, in the 1970s, a number of big companies were affected by serious economic difficulties. With intensified global competition, increasing market fragmentation, technological advances, and other changes that increased market dynamism and uncertainty, large companies faced a number of problems. It turned out that large enterprises were inflexible, slowly adapting to new market conditions. In contrast, small and medium enterprises and entrepreneurs (SMEEs) were much more successful in coping with the new reality (Toma et al. 2014). As a result, an increasing number of scholarly papers appeared, pointing to the importance of SMEEs, and politicians, such as Ronald Reagan in the USA and Margaret Thatcher

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in Great Britain, focused on a policy which strongly encouraged the advancement of small business and entrepreneurship. Consequently, the rapid development of this sector ensued, which stirred the economy and gained increasing share in economic activities (Cornelius et al. 2006).

The increasing contribution of SMEs to employment and gross domestic product in most developed countries of the world has led to a change of economists' perception regarding the drivers of economic growth. They started devoting considerable attention to analyzing the phenomenon of entrepreneurship and its links with economic growth. What is more, there are a number of empirical studies demonstrating the positive impact of entrepreneurship on economic growth (Valliere and Peterson 2009; Van Stel et al. 2005, 2010).

Unlike developed countries where there is strong empirical evidence that the development of entrepreneurial activity has a significant impact on economic growth, in developing countries there are a number of dilemmas regarding the relationship between entrepreneurship and economic growth. Although theorists emphasize that the contribution of entrepreneurship to economic growth in developing countries is also large, there is no empirical evidence to confirm these theoretical assumptions. In other words, Schumpeter's view that entrepreneurship is the main driver of economic growth has not been empirically proven in developing countries. Koster and Kumar Rai (2008, p. 132), therefore, question whether entrepreneurship has such a significant and positive role in developing countries as it does in developed countries. Empirically, the impact of entrepreneurship on the development of low-income countries still remains to be determined (Sautet 2013).

A number of scholars explain different impact of entrepreneurship on economic growth in developed and developing countries by the characteristics of the macroeconomic environment in less developed countries (compared with developed countries), the presence of the gray economy and informal entrepreneurship, etc. (Sabella et al. 2014). Furthermore, some studies suggest that different impact of entrepreneurship on economic growth in developing countries may, to some extent, be caused by the different types of entrepreneurial activity that is present in the above groups of countries (Valliere and Peterson 2009; Wong et al. 2005).

Given these and other unresolved dilemmas, the impact of SME sector on economic growth in developing countries is still not completely clear, and it is the subject of a large number of empirical studies. The subject of this chapter will also be an empirical study of the relationship between the total entrepreneurial activity and economic growth in Southeast Europe, as well as a comparative analysis of the impact of different types of entrepreneurship on economic growth in the abovementioned group of countries (developed and underdeveloped countries). The aim of our study is to identify the types of entrepreneurial activities based on the motives of entrepreneurial activity as well as some elements of the macroeconomic environment and to consider their impact on economic growth in selected developed EU countries and also in underdeveloped countries of Southeast Europe. We perceive economic growth over the gross domestic product rate (GDPR), but also through the unemployment rate (UR), which, we believe, can have a significant impact on the achievement of the objectives of economic growth and development in

developing countries of the SEE region. The SEE region is interesting for the authors of the chapter because it involves the authors' native country Serbia and comprises (with the exception of Slovenia and Greece) underdeveloped countries. It is also the region where most of the countries have passed or are passing through a period of transition from state-planned to market economy.

In addition to the assumption that entrepreneurial activity affects economic growth and development, in both developed and developing countries, our second starting hypothesis is that the motives of entrepreneurship affect economic growth and development (measured by GDP and UR) in both developed and underdeveloped countries. This starting hypothesis can be divided into two subhypotheses, which aims to demonstrate that (a) the effect of opportunity-driven early-stage entrepreneurship activity (OEA) on GDP is greater than the impact of the necessity-driven early-stage entrepreneurship activity (NEA), both in developed and in developing countries, and (b) the impact of the NEA on UR is greater than the impact of OEA, especially in developing countries. Also, our third assumption was that larger financial incentives from the state aimed at development of the SMEs sector lead to economic growth.

The chapter first gives an overview of literature that links entrepreneurship with economic growth. The second part of the chapter presents the starting hypotheses and describes models and methodology. The third part shows the results obtained and discusses them. The final part of the chapter presents conclusions and recommendations to macroeconomic policy makers.

2 Overview of Literature

Entrepreneurship is considered one of the key drivers of economic growth. It contributes to increasing economic stability and sustainable economic development, by creating new jobs (Belka 1995; Richter and Schaffer 1996; Sexton and Landstrom 2000; Audretsch and Thurik 2000), by contributing to the rise in GDP, i.e., economic growth, poverty reduction, and ensuring the welfare of the whole society in the long term (Wennekers and Thurik 1999; Berkowitz and DeJong 2011; Petković and Tešić 2013; Toma et al. 2014; Smith and Chimucheka 2014; Kritikos 2014; Ateljevic et al. 2016).

In developed countries, a number of studies have been conducted on the relationship between entrepreneurship and economic growth. There are a number of empirical studies demonstrating the positive impact of entrepreneurship on economic growth (Valliere and Peterson 2009; Carree and Thurik 1998). Acs and Varga (2005) find that entrepreneurship has a positive and statistically significant impact on economic growth, due to the effect of knowledge spillover, which is generated during growth. Wong et al. (2005) point to similar conclusions, claiming that business creativity and innovation, characteristics of SMEs, have great significance for economic growth in developed countries. Naude (2013) proves that

entrepreneurship has a positive impact on the economy, because it contributes to increasing employment and intensifying competition.

Although theorists emphasize that the contribution of entrepreneurship to economic growth in developing countries is also large, there is no empirical evidence to confirm these theoretical assumptions. Empirically, the impact of entrepreneurship on the development of low-income countries still remains to be determined (Sautet 2013). The regression analysis by Sabella et al. (2014), conducted in Palestine, confirms that entrepreneurship (measured in their study by the rate of business start-ups), among other things, has a positive effect on the GDP growth rate. However, this correlation is not statistically significant. Furthermore, research conducted by Valliere and Peterson (2009), based on a sample of 20 developing countries, does not confirm that entrepreneurship significantly affects economic growth, and they conclude that developing countries need to reach a certain development threshold so that entrepreneurship could make its full contribution to economic growth. Also, a lot of scholars explain different impact of entrepreneurship on economic growth in developed and developing countries by the characteristics of the macroeconomic environment in less developed countries (compared with developed countries), the presence of the gray economy and informal entrepreneurship, etc. (Sabella et al. 2014).

In addition to the macroeconomic environment, the differences in the contribution of entrepreneurship to economic growth may be affected by different structures of entrepreneurial activity, i.e., different types of entrepreneurship prevailing in some countries. Commonly cited classification of the types of entrepreneurship is the one based on the motives that drive people to start a business. There are mainly two dominant reasons or motives that drive individuals into start-ups, namely: use of the opportunities and necessity. This classification has also been accepted in the GEM research. In this regard, there are two different types of entrepreneurship. Opportunity-driven early-stage entrepreneurship activity (OEA) includes all start-ups and newly established businesses (younger than 42 months), which emerge as a result of perceived business market opportunities. Necessity-driven early-stage entrepreneurship activity (NEA) occurs in a situation where individuals perceive entrepreneurship as a last resort and start a business because they either do not have other employment options or such options are unsatisfactory (Singer et al. 2014).

This distinction between two types of early-stage entrepreneurship activity has been made to explain the paradoxically high levels of entrepreneurship in developing countries, defined under the GEM project. It has been shown that the greater the poverty, the greater the level of necessity-based entrepreneurship. The higher number of entrepreneurs entering into business out of necessity results in high rates of entrepreneurial activity. As the level of development of a country increases, the share of necessity entrepreneurship decreases and opportunity entrepreneurship increases.

“The theory of necessity” can explain the high levels of entrepreneurship in developing countries. The basic idea is that people from the poorest developing countries, driven by poverty, survival, and lack of business choices, are forced to start their businesses. In contrast, in developed countries, individuals have much more alternatives to provide a source of income, so that they are not forced to start a

business at any cost and enter entrepreneurial ventures only if they recognize market opportunities or have new original ideas and concepts (Serwanga and Rooks 2013).

If one starts from the assumption that entrepreneurship contributes to economic development (as is the case in developed countries) and bears in mind a large number of new businesses in developing countries, it is logical to conclude that entrepreneurial activity has a significant impact on the GDP growth rate. However, this has not been proven yet. This can be explained by the fact that necessity entrepreneurship has a much lower contribution to economic growth, compared to other forms of entrepreneurship, as proven by numerous studies (Poschke 2013; Acs and Varga 2005; Fritsch 2007). First of all, necessity entrepreneurship is largely present among self-employed people (defined as those who work for themselves), which increases the probability that the firm has no employees. Even if the self-employed have other employees, their number is, in case of necessity entrepreneurship, by about 3.2 times lower than the average number of employees in entrepreneurial organizations (9.6 employees). It is economically very important, because it affects the employment rate and value added (Poschke 2013). Furthermore, one research shows that necessity entrepreneurship does not create knowledge that leads to the development of the business, so that it has a much lower contribution to economic growth, compared to other types of entrepreneurship (Acs and Varga 2005). Moreover, Acs et al. (2008) conclude that higher levels of necessity entrepreneurship may have a negative effect on economic growth of the country, while opportunity entrepreneurship has a significant, positive effect on economic performance.

The relationship between the total early-stage entrepreneurial activity (TEA) rate in certain countries and their national per capita income usually appears as a curve in the shape of the letter U. The countries with low income per capita have high total early-stage entrepreneurial activity rate, as well as countries with high income per capita, whereas countries between them have lower total early-stage entrepreneurial activity rate (Carree et al. 2007). What is more, in less developed countries, the contribution of entrepreneurship to economic growth significantly differs, compared to the contribution of entrepreneurship to economic growth in countries with higher levels of development (Valliere and Peterson 2009). Developing countries are characterized by the dominance of entrepreneurship in low-productive activities, so that it does not produce adequate returns, commensurate with those achieved in developed countries (Acs et al. 2008). This, on the one hand, results in lower contribution to economic growth, while at the same time discourages potential entrepreneurs to start their own business. In addition, Acs (2006, p. 102) stressed that if entrepreneurship is identified with self-employment, it will not lead to economic development. He pointed out that the data in his study showed that the ratio of opportunity-to-necessity entrepreneurship is a key indicator of economic development. As more and more people leave necessity entrepreneurship (i.e., self-employment), and get more involved in opportunity-driven entrepreneurship, the level of economic development of a country is going to rise in prospect of time.

Despite the fact that a number of papers and empirical studies point to this conclusion, it faces a certain amount of criticism. First of all, one of the limitations of GEM research is that it does not take into account other ways of entering into a

entrepreneurial career. In addition to start-ups, there are other ways to get into the business world, like buying a firm, inheriting family business, or becoming a franchisee (Stefanović and Ivanović-Djukić 2015). Van Teeffelen (2012) distinguishes two types of entrepreneurs, namely, starters who are starting their own business and acquirers who are taking over existing firms, and the latter comprise of family successors, management buy-ins, and management buy-outs. These two types of entrepreneurs differ by factors of human capital and motives to enter into a business, as well as by personality traits and competences and, also, by prediction of turnover as a business performance. When it comes to differences in motives to enter into a business, there is a significantly large difference between starters and acquirers in one of them: dissatisfaction with their job (Van Teeffelen 2012, p. 34). So, Van Teeffelen concludes that some of the entrepreneurs who start up their own business opt for entrepreneurship out of necessity. On the other hand, the study did not show a large difference between starters and acquirers where market opportunities as a motive are concerned. Although the study showed that there are differences between start-ups and acquirers in turnovers, these differences seem to be “not always significant enough to predict business results” (ibid., p. 37). But, other authors consider the difference in performance of new entrants in relation to the existing ones. In developed countries, as GDP per capita increases, established firms can satisfy increasing demand of growing market, due to the exploitation of economies of scale and new technologies’ implementation, and have a relatively greater impact on economic development (Acs 2006, p. 104). Further increases in GDP per capita may contribute to the increased strength of new businesses, as more and more individuals have the resources to start up their own businesses in order to exploit the opportunities in the growing market.

Thus, Kritikos (2014, p. 4) states that even though overall employment may decline, because existing firms fail to compete on market and lay off their staff or go out of business, newly established businesses can foster productivity in the medium term. Although there is an evidence that failure rates are high within the first 5 years of starting a business (around 40–50%), with the highest failure rate in the first year (Kritikos 2014, p. 6), Audretsch and Thurik (2000, p. 28) cite some research, based on longitudinal data sets, that wages and productivity of new firms increase as the firm ages. They highlight the evidence that there is a positive relationship between firm age and the likelihood of survival, and also between firm size and the likelihood of survival. Many start-up firms enter upon a business to “experiment with new ideas,” and although many of these new firms fail, “some succeed, resulting in low survival rates but high growth rates of the successful new start-ups” (ibid.).

Some authors suggest that the view presented above is too simplistic (Rosa et al. 2006), because there are a variety of motives that drive individuals to start a business, i.e., necessity and opportunities are only part of a broader debate about what motivates business start-ups. Furthermore, GEM notes some other classifications of entrepreneurial activity as well. Thus, for example, there is the classification of entrepreneurial activity on the basis of growth expectations, and all entrepreneurs are divided into three groups: entrepreneurs with low, medium, and high growth expectations (Singer et al. 2014). Previous research suggests that fast-growing

companies (established by entrepreneurs with high growth expectations) make the greatest contribution to economic growth in developed countries (Autio 2005).

However, consideration of entrepreneurial motives in terms of the level of economic development is twofold. There is a reasonable assumption that different motives of entrepreneurial activities have different effects on the economic development of individual countries. The causal connection is bidirectional, so there is an assumption that the higher stages of economic development create the appropriate environment for development of opportunity-driven entrepreneurship (Leković 2015). In addition, Leković cited Deli (2011), who has in her research analyzed the impact of the unemployment rate on necessity/opportunity-driven entrepreneurs' inclination and transition to self-employment. The results of conducted study have shown a high positive correlation between the observed phenomena, unemployment rates, and the transition to self-employment for necessity-driven entrepreneurs. Leković found that a positive correlation between a high level of economic development and opportunity-driven entrepreneurship, with a higher degree of achieved economic development, presented in the nominal amount of GDP per capita, leads to a higher percentage of opportunity-driven entrepreneurial ventures within the total early-stage entrepreneurial activity. On the other hand, he has calculated that a strong negative correlation between the level of achieved economic development and entrepreneurship out of necessity, with a higher degree of achieved economic development, which is presented in nominal amount of GDP per capita, means a lower percentage of necessity-motivated entrepreneurial ventures within the total early-stage entrepreneurial activity.

However, the aim of the chapter is to prove the opposite effect, i.e., the impact of necessity/opportunity-driven early-stage entrepreneurial activity, within total early-stage entrepreneurial activity, on economic growth and development in both developed and developing countries. At the same time, we analyze economic growth by looking at the gross domestic product rate (GDPR), but also through the unemployment rate (UR), which we believe can have a significant impact on the achievement of the objectives of economic growth and development in developing countries.

3 Model, Hypotheses, and Methodology of Research

Previous research suggests that entrepreneurial activity can have different effects on economic growth in developed and developing countries. The reason for this lies in the fact that economic growth can be driven by varying factors in developing and developed countries and that it may be affected by the conditions that impact the development of entrepreneurial activity at the national and regional level. In addition, the number and economic role of different types of entrepreneurs may vary in different countries and have different effects on economic growth in both developed and developing countries. For example, necessity entrepreneurship in developing countries can be primarily manifested in self-employment as the form of basic

subsistence activities (nonmarket agriculture, individual job replacement, “mom and pop” firms, etc.), while in developed countries, entrepreneurship activity can predominantly occur in the form of individual self-actualization, i.e., self-employment in order to achieve personal noneconomic objectives (Valliere and Peterson 2009). In the countries of Southeast Europe (as well as in developing countries in general), entrepreneurs largely depend on the financial incentives from the government, as well as from the development-oriented international financial institutions, which provide them with legitimacy in the international market and risk-sharing, although this dependence carries the risk of excessive bureaucracy and political interference (Bartlett and Bukvic 2001).

However, despite all the problems that the small and medium enterprises and entrepreneurship sector in Southeast Europe faces, a significant share of SMEEs in total economic activity points to the fact that this sector positively affects economic growth in this group of countries as well as in developed countries. Our second starting hypothesis is that the motives of entrepreneurship affect economic growth and development (measured by GDPR and UR) in both developed and underdeveloped countries. Also, our third assumption was that larger financial incentives aimed at development of new entrepreneurial ventures lead to economic growth.

So, hypotheses, i.e., basic assumptions, in the chapter are:

H1 The development of SMEEs sector has a positive effect on economic growth and development (measured by GDPR and UR) in both developed and underdeveloped countries.

H2 Motives for entrepreneurship activity affect the economic growth and development (measured by GDPR and UR) in both developed and underdeveloped countries.

In order to operationalize the proof of the hypothesis **H2**, it has been decomposed into the following subhypotheses (H2a and H2b):

H2a Opportunity-driven entrepreneurship (OEA) has a greater impact on economic growth, as measured by GDPR, but entrepreneurship out of necessity (NEA), both in developed and in underdeveloped countries.

H2b Entrepreneurship out of necessity (NEA) has a greater impact on reducing unemployment rates than opportunity-driven entrepreneurship (OEA) in developed but especially in underdeveloped countries.

H3 State measures in the form of financial incentives for the development of SMEE sector have a significant impact on the growth of entrepreneurial activity, and consequently on economic growth, where the influence is greater in underdeveloped countries.

So, in the chapter dependent variables are GDP rate (GDPR) and unemployment rate (UR), and independent variables are total early-stage entrepreneurial activity (TEA), opportunity-driven early-stage entrepreneurial activity (OEA), and necessity-driven early-stage entrepreneurial activity (NEA). However, aware of the great influence of other primarily macroeconomic variables to economic growth, as

well as the significant role of the state, which with primarily financial incentives affect the development of SMEs and economic activity in a country, we also introduce a control variable, namely, financial incentives of the state for small and medium enterprises and entrepreneurship sector development (F for E). The values of key macroeconomic indicators that were used in the analysis—GDPR and UR—are downloaded from the World Bank website, while the values for the NEA, OEA, and TEA were downloaded from the GEM ([Global Entrepreneurship Monitor](#)) database. The analysis covered 21 countries over a period of 9 years, of which 15 countries are categorized as developed countries, while 6 countries of Southeast Europe belong to the group of developing countries. Missing values for some of the indicators were assessed based on the value of these indicators in recent years or have been estimated based on the value of a given indicator for similar countries in the region.

The GEM data is observed especially in respect of developing countries, belonging to the region of Southeast Europe (a total of six countries with a GDP per capita of less than US\$20,000, making all the countries in the SEE region, with the exception of Greece and Slovenia, as their GDP is greater than US\$20,000, which puts them in the group of developed countries). Out of the group of SEE countries, the research does not take into consideration Montenegro, Albania, and Bulgaria, since GEM does not contain data on these countries). At the same time, 15 developed EU countries are observed as well (with GDP per capita greater than US\$20,000). Data for all countries is analyzed for the period 2007–2015. Countries involved in the research are presented in Table 1.

In the research we used correlation analysis and multiply regression. The methods of correlation analysis are used to examine whether there is a statistically significant correlation between entrepreneurial activity and economic growth and unemployment rate in those two groups of countries. Also, hierarchical regression models are developed, in trying to predict the GDP growth rate and the unemployment rate. List of indicators included in the study is presented in Table 2.

4 Results and Discussion of Obtained Results

The correlation between independent variables and UR as well as GDPR (considered with a 2-year lag effect) in developed as well as in underdeveloped countries of SEE is presented in tables that follow (Tables 3 and 4):

By analyzing the interdependence of selected variables, we found that between GDPR and other independent variables, in developed countries, correlation is not expressed with respect to the fact that the value of the Pearson correlation coefficient is less than 0.30 (as defined by Cohen 1988).

In underdeveloped countries of SEE, there is a moderate correlation between a dependent variable GDPR and independent variables F for E and TEA (Pearson correlation coefficient larger than 0.30), but not between GDPR and opportunity-driven entrepreneurship (OEA), and entrepreneurship out of necessity (NEA) as a

Table 1 Countries included in the study

Category	Country
Underdeveloped countries of Southeast Europe	Bosnia and Herzegovina
	Croatia
	Macedonia
	Romania
	Serbia
	Turkey
Developed countries	Belgium
	Denmark
	Finland
	France
	Germany
	Greece
	Iceland
	Ireland
	Italy
	Netherlands
	Norway
	Portugal
	Slovenia
	Spain
Sweden	

Source: Authors

Table 2 List of used variables

Variable	Variable type	Model
Lagged 2-year GDPR	Dependent	M1, M3
UR	Dependent	M2, M4
F for E	Control	All
Total early-stage entrepreneurial activity (TEA)	Predictor	All
Opportunity-driven entrepreneurship activity (OEA)	Predictor	All
Necessity-driven entrepreneurship activity (NEA)	Predictor	All

Source: Authors

part of the total early-stage entrepreneurial activity (TEA), which means that the motives of entrepreneurship are not correlated with economic growth, measured by GDPR.

There is a statistically significant correlation, measured by Pearson’s coefficients, between the unemployment rate and independent variables in developed EU countries. This connection is in the case of OEA and F for E the inverse, meaning that an increase in entrepreneurship activity in order to use the opportunities and also an increase in the financial allocation of resources for the development of SMEE sector by the state lead to a decrease in the unemployment rate, which is logical.

Table 3 Correlation for UR

	Developed countries					Underdeveloped countries of Southeast Europe				
	UR	F for E	TEA	OEA	NEA	UR	F for E	TEA	OEA	NEA
UR	1.000					1.000				
F for E	-0.447 (0.000)	1.000				-0.425 (0.001)	1.000			
TEA	0.284 (0.000)	-0.142 (0.051)	1.000			0.155 (0.132)	0.042 (0.381)	1.000		
OEA	-0.477 (0.000)	0.338 (0.000)	-0.116 (0.091)	1.000		-0.689 (0.000)	0.174 (0.104)	-0.153 (0.134)	1.000	
NEA	0.444 (0.000)	-0.313 (0.000)	0.044 (0.307)	-0.685 (0.000)	1.000	0.832 (0.000)	-0.380 (0.000)	0.018 (0.448)	-0.663 (0.000)	1.000

Source: Authors

Table 4 Correlation for GDPR

	Developed countries					Underdeveloped countries of Southeast Europe				
	GDPR	F for E	TEA	OEA	NEA	GDPR	F for E	TEA	OEA	NEA
GDPR	1.000					1.000				
F for E	-0.114 (0.144)	1.000				0.326 (0.018)	1.000			
TEA	0.089 (0.125)	-0.215 (0.014)	1.000			0.345 (0.013)	0.004 (0.090)	1.000		
OEA	0.157 (0.081)	0.391 (0.000)	-0.035 (0.363)	1.000		0.035 (0.013)	0.179 (0.029)	-0.299 (0.027)	1.000	
NEA	-0.122 (0.896)	-0.391 (0.000)	0.027 (0.393)	-0.673 (0.000)	1.000	0.199 (0.093)	0.386 (0.006)	0.191 (0.013)	-0.639 (0.000)	1.000

Source: Authors

However, entrepreneurship out of necessity and total early entrepreneurial activity, on the one hand, and the unemployment rate, on the other hand, just stand in proportion, which is an illogical result. It turns out that the higher the entrepreneurial activity out of necessity and the total entrepreneurial activity, the higher the unemployment rate in developed countries, and vice versa. A possible explanation is that the total early-stage entrepreneurial activity, especially those motivated by necessity, in developed countries does not lead to reduction in the unemployment rate, because it is determined by other factors, such as employment in large companies, as well as a number of other variables, i.e., macroeconomic factors.

There is a statistically significant correlation (except for TEA) between independent variables and the unemployment rate in selected countries of Southeast Europe. This connection is in the case of F for E and OEA inverse, meaning that an increase in the financial allocation of resources for entrepreneurship as well as an increase in opportunity-driven entrepreneurship leads to a decrease in the unemployment rate in the countries of Southeast Europe, and vice versa. However, this correlation in the case of TEA and NEA stands in proportion, which means that growth of total early entrepreneurial activity and increase of entrepreneurship out of necessity lead to an increase in the unemployment rate, and vice versa, which are illogical results. Possible explanation is that both entrepreneurship out of necessity and total early entrepreneurial activity barely affect the general reduction of unemployment because they lead to self-employment, i.e., they contribute to resolution of the problem of layoff in big companies, but not to employing new workers to reduce unemployment in the country. Just entrepreneurship motivated by using the opportunities at the market leads to further economic growth and development and generate new employment.

The results of the regression models are presented in Table 5.

Determined regression model, which describes the correlation between GDPR and other variables (2-year lag effect), in the case of selected developed countries explains only 14.5% of the total variability. We were unable to prove a simple statistical significant contribution of any independent variable on the variability of GDPR in selected developed countries of EU.

In the case of the underdeveloped countries of Southeast Europe by selected regression model, we were able to explain 25.5% of the variability in GDPR (2-year lag effect) by the changes in the independent variable, during the time period we have analyzed. The largest effect is due to the TEA and indicates that with the increase of TEA of 1%, there is an increase in GDPR of 0.49%. The OEA variable has small but a statistically significant contribution to explaining the total variability of dependent variable. The increase of the OEA variable by 1% leads to an increase of GDPR of 0.068%. Also, a great impact on GDPR (significant at the level of 0.1) has a control variable F for E, but these variables stand in inverse proportion. The increase in variable F for E of 1% leads to a decrease of 3.6% in GDPR. Entrepreneurship out of necessity (NEA) has no statistically significant contribution to changes in GDPR.

By observing the relationship of given variables and UR, we can conclude that in the case of developed countries observed selected regression model explains 37.8%

Table 5 Estimation results of models over period 2007–2015^a

	Developed countries		Underdeveloped countries of Southeast Europe	
	Lagged 2-year GDPR	UR	Lagged 2-year GDPR	UR
	(Model 1)	(Model 2)	(Model 3)	Model (4)
Constant	0.520 (0.152)	21.426** (5.746)	0.936 (0.136)	12.063 (1.185)
F for E	-0.348 (-0.427)	-3.552** (-3.775)	-3.613* (-1.968)	-5.611** (-2.031)
TEA	0.017 (0.109)	0.014** (2.994)	0.494** (2.576)	0.428 (1.582)
OEA	0.010 (0.293)	-0.094** (-2.324)	0.068** (2.239)	-0.189** (-2.486)
NEA	-0.022 (-0.391)	0.128** (2.012)	0.052 (2.805)	0.548** (6.064)
R ²	0.145	0.378	0.255	0.758
Adjusted R ²	0.139	0.359	0.174	0.738

Source: Authors

^at-values are between brackets

* Significant at 0.10 level

** Significant at 0.05 level

of the total variability in UR. The largest contribution to the change in the unemployment rate in the given developed countries is given by F for E, while the influence of other variables is slightly smaller and relatively uniform. The influence of these variables on the UR is statistically significant at the 0.05 level. Changes in F for E and OEA, in terms of their increase, lead to reduction of UR and vice versa, meaning that the growth of financial incentives as well as entrepreneurship based on the opportunities leads to the reduction of unemployment in developed countries, and vice versa. On the other hand, the increase in TEA and NEA leads to an increase in UR, and vice versa, so regardless of their statistical significance we cannot conclude that the hypothesis H1 and H2b has been proven.

In the case of the selected countries of Southeast Europe regression model we developed, 75.8% of variability in UR is explained by changes in selected independent variables. In underdeveloped countries of Southeast Europe, the largest contribution to the change of UR, in addition to financial incentives of the state, is given by the NEA. If the NEA increased by 1%, the UR will increase to 0.548, and vice versa. Since the impact of the change of NEA on UR change is statistically significant, but variables stand in proportion, we cannot say that we have proved our hypothesis H2b. The impact of changes in the OEA is statistically significant, but inverse, meaning that a 1% increase in the OEA impacts the reduction of the unemployment rate for 0.189. In this model, only the TEA is not a statistically significant variable, and therefore, the hypothesis H1 cannot be proved in the case of underdeveloped countries of Southeast Europe.

In conclusion, if we consider the hypotheses H1 and H2 (as well as subhypotheses H2a and H2b), we could not prove these hypotheses by presented regression model in the case of selected developed countries. As for the developing countries of Southeast Europe, we were able to prove that total early entrepreneurial activity (TEA) affects growth of GDP (with a lag of 2 years), so we confirmed the hypothesis H1, but also we confirmed that opportunity-driven entrepreneurship has a positive effect on increase of GDP, although this impact is not large. Bearing in mind that the NEA's impact on the unemployment rate is higher than the OEA, but stands in proportion, we cannot conclude that the hypothesis H2b has been proved in the case of underdeveloped countries of Southeast Europe. Also, in the case of underdeveloped countries of Southeast Europe, hypothesis H3 was indirectly proved, i.e., that larger financial incentives aimed at development of SMEs sector lead (by increasing of total entrepreneurial activity—TEA) to economic growth measured by the decrease in unemployment rate.

5 Conclusion

It can be concluded that entrepreneurship is very important for economic development, but its contribution to economic development is significantly different in the countries at different levels of economic development. Also, the contribution of certain types of entrepreneurship to economic development is significantly different. Previous research has shown that opportunity-driven entrepreneurship activity has had greater contribution to economic growth in developed countries, while the contribution of necessity-driven entrepreneurship activity is much smaller.

Our research has showed that the relationship between the total early-stage entrepreneurship activity and economic growth measured by GDP growth rate is not very strong in developing countries of Southeast Europe. This may be explained by the fact that in these countries a large share in total early-stage entrepreneurship activity goes to necessity-driven early-stage entrepreneurship activity, the contribution of which to the GDP growth rate is significantly lower than the contribution of opportunity-driven early-stage entrepreneurship activity. This points to the fact that these countries should work on encouraging opportunity-driven early-stage entrepreneurship activity. This is supported by the fact that correlation between unemployment rate and opportunity-driven early-stage entrepreneurship activity is very strong in the developing countries of Southeast Europe. Also, contribution of this type of entrepreneurship has significant contributions to increasing employment.

Increase in entrepreneurial activity generally should not be regarded as a universal solution to solve the problem of economic development in the developing countries of Southeast Europe. Instead, these countries should primarily focus their policies of economic development on the increase of the share of OEA in the formal economy. At the same time, it is necessary to substantially improve macroeconomic environment in these countries as it largely affects the development of the most productive types of entrepreneurship. As we noticed above, one of the

limitations of GEM research is that it does not take into account other ways of entering into business. In addition to start-ups, there are other ways to enter into a business, like buying a firm, inheriting family business, or becoming a franchisee. It is important because often businesses that were transferred to another entrepreneur outperform start-ups in survival rate, growth in terms of wages and productivity (due to exploiting economies of scale), and new job creation (because of more intensive investment). But new start-ups, although characterized by low survival rates, often achieve high growth rates. This is especially true for innovative start-ups, established to exploit the new ideas and opportunities in the market. As more and more people leave necessity entrepreneurship (i.e., self-employment) and get more involved in opportunity driven entrepreneurship, the country prospers in economic development. So, one of the goals of policy creators should be to reduce the number of self-employed and strengthen the existing small and medium enterprises and entrepreneurs. Financial incentives from the state should be assigned not only for new start-ups but also for growing established businesses. Also, measures aimed to attract foreign direct investment may contribute to employment of people leaving self-employment businesses as well as people who were laid off in large companies. In addition, it is necessary to provide more financial incentives from the state to start new innovative businesses because our research has shown that this factor is noticeably important for entrepreneurial activity and economic development in developing as well as in developed countries.

Theoretical knowledge and the best entrepreneurial practice should be, to a greater extent, included in general education programs of schools and universities in the abovementioned countries, and greater transfer of ideas and knowledge obtained by scientific research should be also transferred to SMEs, because this can contribute to easier identification of market opportunities and their exploitation in order to start up new innovative businesses. This is important because it has been shown that those with less education, management, and entrepreneurship knowledge in developing countries usually end up in necessity entrepreneurship that contributes much less to economic development in developing countries as well as in developed countries.

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