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INNOVATIVE ENTREPRENEURSHIP AND ECONOMIC GROWTH IN EMERGING MARKETS

Abstract

The paper analyses the contribution of different types of innovative entrepreneurship: new products entrepreneurship, new technology development entrepreneurship, high growth expectation entrepreneurship and average growth expectation entrepreneurship to economic growth in emerging markets. The aim of paper is to identify types of innovative entrepreneurship which have the greatest contribution to economic growth in emerging markets and propose measures that macroeconomic policy makers could implement to achieve sustainable economic growth. The regression analysis is performed in order to estimate the impact of different types of innovative entrepreneurship on economic growth in 13 emerging markets. The results have shown that a high growth expectation entrepreneurship has the greatest influence on economic growth. Also, results have shown that impact of new products entrepreneurship is bigger than impact of technology development entrepreneurship on economic growth in emerging markets.

Key words: innovative entrepreneurship, economic growth, emerging markets.

JEL classification: M13, O31

ИНОВАТИВНО ПРЕДУЗЕТНИШТВО И ПРИВРЕДНИ РАСТ НА ТРЖИШТИМА У НАСТАЈАЊУ

Апстракт

У раду се анализира допринос различитих врста иновативног предузетништва (понуда нових производа, понуда нових технологија, иновативно брзорастуће предузетништво и иновативно предузетништво са просечним стопама раста), привредном расту на тржиштима у настајању. Циљ рада је да се идентификују врсте иновативног предузетништва које имају највеци допринос привредном расту на тржиштима у настајању и предложе мере чија примена може подстаћи развој тих облика предузетничке активности. Ради испитивања утицаја наведених облика иновативног предузетништва примењена је регресиона анализа на узорку од 13 тржишта у настајању. Резултати су

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показали да највеци утицај на привредни раст имају иновативне, брзорастуће предузетничке организације. Такође, резултати су показали, да значајан утицај на привредни раст имају предузетници који нуде нове производе или нову технологију.

Кључне речи: иновативно предузетништво, привредни раст, тржишта у настајању.

Introduction

Emerging markets have become very serious players on the global market in recent years (Lu et al., 2010). The World Bank predicts that emerging markets will account for half of the world's economic growth by 2025 (Lin, 2011). For that reason, it is very important to analyze the drivers of their economic growth.

According to Schumpeter (1934) a key driver of economic growth is entrepreneurship, because it initiates a process of "creative destruction". Such claims are confirmed by a large number of contemporary empirical researches (Koster et al., 2011; Van Stel et al., 2018). Innovations in the product, organization or process, introduced by entrepreneurs are the basic elements of creative destruction. Accordingly, entrepreneurs can be seen as innovators introducing new products or innovators introducing new technologies. Also, there are differences among innovative entrepreneurs related to the expected growth rate. Some of them offer products or technology that are new to the local or national market and expect average growth rates. The others offer innovative solutions to consumers around the world and expect high growth rates (Janjić & Rađenović, 2019). We assume that the contribution of these forms of entrepreneurship to economic growth is not the same. Therefore, we assume that different forms of innovative entrepreneurship do not have the same contribution to economic growth in emerging markets. This is our starting hypothesis.

Hence, we will examine the impact of the aforementioned forms of entrepreneurial activity (new products entrepreneurship, new technology development entrepreneurship, high growth expectation entrepreneurship, average growth expectation entrepreneurship) on the economic growth in the 13 emerging markets in order to identify the forms of entrepreneurial activity which have the most important role in economic growth. We will use data from the Global Entrepreneurship Index (GEI) Report for the period 2011-2018. The hypotheses will be tested by employing the regression analysis on the panel data.

The paper is structured as follows. First, it gives an overview of literature that links entrepreneurship with economic growth in emerging markets. Then, the next part of the paper presents methodology, followed by the obtained results, and the discussion of results. The final part of the paper presents concluding remarks and recommendations to macroeconomic policy makers.

Literature review

"Emerging markets are societies transitioning from a dictatorship to a free-marketoriented-economy, with increasing economic freedom, gradual integration with the global marketplace and with other members of the GEM (Global Emerging Market), an expanding middle class, improving standards of living, social stability and tolerance, as well as an increase in cooperation with multilateral institutions" (Kvint, 2009). Emerging markets include very diverse countries by country's history, size, economic development paths, etc., but also which are in different geographical areas, such as East Asia, Eastern Europe, and Latin America (Bruton et al., 2008) including former communist and today transition economies that started economic liberalization and implemented free-market principles (increasing transparency, deregulation, privatization, and so on) in order to advance their global competitiveness (Kiss et al., 2012). All of these economics have similar macroeconomic characteristics such as: underdeveloped market-supporting institutions, including weak laws and poor enforcement capacity of the formal legal institutions as well as governmental policies which incentive economic liberalization and free market system (Khanna & Palepu, 2000). For that reason, emerging markets very often are treated as a uniform block which account for about 25% of global GDP, 50% of the world's population and a large share in the consumption of many products (World Bank Report, 2018).

The World Bank predicts that they will have increasing participation in world's economic growth in the future (Lin, 2011). In other words, the group of emerging markets has become a very serious player on the global market. A major challenge for the scientists has become analyzing the drivers of their economic growth.

Previous research conducted in developed countries shows that entrepreneurship has an extremely important role in their economic growth. Scientists have explained that the introduction of innovations leads to the supply of a greater variety of products, which results in a more efficient use of resources because the market confirms what is technically viable and what consumers prefer (Van Stel et al., 2005; Rusu & Dornean, 2019). Innovations and business creativity (which are involved in entrepreneurial activity) enable knowledge spillovers and stimulate economic growth (Acs & Varga, 2005).

However, Baumol (1990) pointed out that entrepreneurship does not always have a positive effect on economic growth ("productive"). It can be sometimes "unproductive", and even "destructive", because some forms of entrepreneurial activities may have insignificant or even negative impact on economic growth. A number of empirical studies confirmed claims that the different forms of entrepreneurship do not have the same contribution to economic growth (Valliere & Peterson, 2009). Previous research shows that the innovative entrepreneurship is one of the most "productive" form of entrepreneurship in developed countries (Salango-Banda, 2007).

As regards emerging markets, previous meta-analysis conducted in these markets, showed that the number of papers exploring the importance of entrepreneurship for economic growth were limited. For example, Bruton et al. (2008) investigated papers which addressed entrepreneurship in emerging markets. They found that there were only 43 articles on that topic (out of 7,482) published in leading journals during the period 1990-2008. Recent meta-analyses show that research on entrepreneurship in emerging markets has grown significantly in the last several years. For example, Kiss et al. (2012) presented comprehensive and detailed investigation of entrepreneurship in emerging markets. They found that these studies were methodologically and topically very diverse, geographically focused, and fragmented. Hence, their conclusion was that further integrative studies were needed to get a better understanding of entrepreneurship

and its role in economic growth in emerging markets. Zolfaghari et al. (2013) came to a similar conclusion in their meta-analysis. They suggested that many more studies in field of entrepreneurship in emerging markets should be conducted in the future analyses due to the fact that it is still an under-studied subject. For that reason, we will investigate impact of innovative entrepreneurship on economic growth.

There are different forms of entrepreneurship in line with different forms of innovation. Forms of innovative entrepreneurship can be formed based on the elements of innovation. For example, the Global Entrepreneurship and Development Institute explains and monitors two forms of innovative entrepreneurship: new products entrepreneurship and new technology development entrepreneurship (Acs et al., 2018). New products entrepreneurship implies product innovation. The result of this process is the supply of new or modified products/ services. New product entrepreneurs are innovators who state their products or services are new to all or some customers and for which there are no or few competitors (Bosma & Kelley, 2019). The second form of innovative entrepreneurship implies process innovation. New technology development entrepreneurship is the process of new venture creation by developing novel digital technologies and/or usage of such technologies.

Also, Global Entrepreneurship Monitor differentiates entrepreneurs based on growth (job creation) expectations. All entrepreneurs are divided into three groups: entrepreneurs with low, medium, and high growth expectations, according to the number of employees that entrepreneurs plan to hire in the next five years. Those anticipating six or more hires can be seen as medium growth-oriented entrepreneurs, entrepreneurs anticipating to hire up to six employees are low growth-oriented entrepreneurs, and high growth-oriented are entrepreneurs who expect to employ at least 20 employees in 5 next years (Bosma & Kelley, 2019).

Previous research, conducted in developed countries, show that all forms of entrepreneurial activity do not have a same impact on economic growth (Valliere & Peterson, 2009; Van Stel et al., 2018; Ivanović-Đukić et al., 2019). Also, studies examining the link between different forms of innovation and economic development indicate significant differences (Prabhu & Jain, 2015). Accordingly, we assume that the contribution of different forms of innovative entrepreneurship to economic growth in emerging markets is not the same. Our hypothesis is:

H1: Different forms of innovative entrepreneurship do not have the same contribution to economic growth in emerging markets.

A large number of scientific papers explain that entrepreneurs who offer new products have a great importance for economic development, given the fact that new products can improve the living standards and national competitiveness. For example, Du and O'Connor (2018) show that new product entrepreneurship significantly contributes to improving efficiency at the national level (Du & O'Connor, 2018). Also, Van Stel and Koster (2011) in their study demonstrate that innovative entrepreneurs offering new product initiate a process of "creative destruction" in Netherlands, which was elaborated by Schumpeter. The emergence of new innovative firms, with new products and services that compete with existing businesses, contributes to survival and growth of the most competitive companies only, thus leading to regional economic development (Van Stel & Koster, 2011).

New technology development entrepreneurship, also, has great importance for economic growth. New technologies can revolutionize the world, while the entrepreneurs who create them make a huge contribution to economic development. A study conducted by Cenamor (2019) discovers that entrepreneurs offering new technologies improve their performance and national competitiveness.

Hence, it can be expected that both groups of innovative entrepreneurship have a positive impact on economic growth in emerging markets, but the question is whether this impact is the same? Given the fact that in the most emerging markets product innovation index is larger than process innovation index (Acs et al., 2018), it can be expected that the contribution of entrepreneurs offering new products is greater than the contribution of innovative entrepreneurs offering new technology. Hence, our next hypothesis is:

H2: The impact of new products entrepreneurship on economic growth is higher than the impact of new technology development entrepreneurship in emerging markets.

Further, there are differences among innovative entrepreneurs related to the expected growth rate. A lot of them offer products or technologies that are new only on the local (national) market. The entry of such new firms into the market stimulates existing firms to do business better and have a significant impact on economic growth. However, they can expect average growth rates, because they are primarily oriented on the national market, which is limited. On the other hand, high growth-oriented entrepreneurs, can have extremely important roles in economic growth (Steve & Dorf, 2018). The enormous global market allows to these entrepreneurs the extremely high income and growth rates in a very short time (Ries, 2018). At the same time, they employ a huge number of new workers and create enormous value added. Thus, our last hypothesis is:

H3: *High growth expectation entrepreneurship makes the greatest contribution to economic growth in emerging markets.*

Methodology

The universal qualification of emerging markets does not exist. For example, Morgan Stanley Capital International Emerging Market Index lists 24 developing countries which qualify as emerging markets (MSCI, 2019). The International Monetary Fund (IMF) classifies 23 countries as emerging markets, Standard and Poor's (S&P) classifies 23, Russell classifies 19 countries as emerging markets, while Dow Jones classifies 22 countries as emerging markets.

In our sample we chose those countries which were included in the list of emerging markets by at least 6 out of possible 9 classifications that can be found. Additional criteria for the country selection were data available in the GEI reports. List of countries is presented in Table 1.

Country	GNIPC in US\$
Argentina	11,200
Brazil	9,130
Chile	15,010
China	10,410
Croatia	14,910
Estonia	23,220
Hungary	16,140
Latvia	17,730
Poland	23,080
Russia	11,260
Slovakia	19,320
Slovenia	25,750
Uruguay	16,230

Table 1 Countries included in the study and GNIPC in 2019

Source: World Bank (https://data.worldbank.org/indicator/NY.GNP.PCAP.CD? name_desc=false)

Results

Regression analysis was performed in order to estimate the influence of different types of innovative entrepreneurship on economic growth in 13 emerging markets. An average annual growth rate of GDP is selected as dependent variable. All models control for capital and labor, and following variables are used as proxies: GDP per capita (PPP 2011 \$) (an explanatory variable to limit the potential impact of reversed causality), inbound foreign direct investment per capita and population. Data are used from World Bank Development Indicators. We employed different forms of innovative entrepreneurship as independent variables: new products entrepreneurship, new technology development entrepreneurship, high growth expectation entrepreneurship, and average growth expectation entrepreneurship. All of them are lagged by one year. Data are used from the GEI.

Two regression models were created in order to test the validity of the hypotheses. Since we have a panel data, diagnostic checking is performed to determine the appropriate model (pooled regression model (Pooled), fixed effect model (FEM) or random effect model (REM). Therefore, several tests were performed. According to the obtained test results, the Pooled model was chosen. The regression analysis results are presented in Table 2.

Variable	Model 1	Model 2
Constant	65.02	38.76
GDP per capita	-0.0003	-0.00009
Inbound foreign direct investment per capita	-0.00008	-0.00008
Population	3.29e-09	-1.99e-04

Table 2 Regression results

New products entrepreneurship	3.79*	
New technology entrepreneurship	1.76*	
High growth expectation entrepreneurship		4.26**
Average growth expectation entrepreneurship		0.22
R ²	0.34	0.37
Adjusted R ²	0.29	0.30
Note: All independent variables are measured with a	a one-year lag.	
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* Significant at 0.05 level

** Significant at 0.10 level

Results show that all forms of innovative entrepreneurship have positive impact on economic growth in 13 emerging markets, but their contribution to economic growth is not the same (our first hypothesis is confirmed). Model one shows that new products entrepreneurship had higher impact on economic growth (3.79) in emerging markets, compared to the new technology entrepreneurship (1.76) (hypothesis H2 is confirmed). This model explains 34% variability in GDP growth ($R^2 = 0.34$).

Model two shows that high growth expectation entrepreneurship has the highest impact on economic growth (4.26) in emerging markets, while the influence of average growth entrepreneurship is smaller and insignificant (hypothesis H3 is confirmed). This model explains 37% variability in GDP growth in emerging markets.

Discussion

Our paper has shown that all forms of innovative entrepreneurship contribute to economic growth in emerging markets, thus suggesting that innovative entrepreneurship should be stimulated. This is in line with a number of previous theoretical studies which explain that development of entrepreneurship in emerging markets contributes to job creation and poverty reduction, intensifies competition, introduces innovation, and increases productivity.

The results of empirical study conducted on a sample of 13 selected emerging markets have shown that largest and statistically significant contribution to economic growth has a high growth expectation entrepreneurship. This is in accordance with the result of studies conducted in developed countries, but different compared to results obtained by prior research in emerging markets. For example, Valerie and Peterson (2009) concluded that impact of high growth expectation entrepreneurship on economic growth is insignificant in emerging markets. This can be explained by the fact that the economic environment has been improved in emerging markets in recent years, which has become stimulating for high growth-oriented entrepreneurs. Number of these entrepreneurs is increasing rapidly, they are creating great added value and employing a huge number of workers, thus contributing to an increase in economic growth. Average growth expectation entrepreneurship has also had a positive impact on economic growth in emerging markets, but its influence is insignificant.

Also, results show that innovative entrepreneurship offering new products has a bigger impact on economic growth, compared to the innovative entrepreneurship offering new technologies. In the most emerging markets, there are several problems that slow down the development of entrepreneurship offering new technologies, such as: small technology absorption capacity, lack of capital for R&D, etc. For this reason, innovative

entrepreneurs offering new products are more numerous than innovative entrepreneurs offering new technologies and have a greater contribution to economic growth.

Conclusion and recommendations to policy makers

Over the past decade, many studies in entrepreneurship have tended to assume that entrepreneurship is extremely important for economic growth. For that reason, academics and policy makers have demonstrated renewed interest in entrepreneurship as an engine for economic growth.

But entrepreneurs generally act differently depending on their institutional settings, and their contribution to economic growth is not the same. Previous researches have shown that entrepreneurship is one of the main drivers of economic growth in developed countries because innovation offered by entrepreneurs constitutes better ways to meet existing demands. However, entrepreneurship does not always have a positive effect on economic growth. Some forms of entrepreneurial activity can be "unproductive", and even "destructive". Prior research suggests that in developed countries only innovative and high-growth entrepreneurship (not new firms in general) have significant contribution to GDP growth and represent productive forms of entrepreneurship.

However, emerging markets represent specific and scarcely studied institutional context. Besides, although the emerging markets hold a billion people, the potential impact of entrepreneurship on the subsistence of their economy has largely been ignored. On the other hand, macroeconomic characteristics in emerging markets create a specific framework for the development of entrepreneurship, while "rules of the game" in the economy are completely different compared to developed countries. Therefore, it is uncertain whether in emerging markets the same forms of entrepreneurship are "productive" as in developed countries. The research papers on this topic in emerging markets has grown significantly in the last several years. But empirical studies examined this relationship are very rare. Therefore, recent meta-analysis on this topic and further integrative studies are needed to get a better overview of relationship between entrepreneurship and economic growth in emerging markets (Kiss et al., 2012).

This paper investigated impact of four types of innovative entrepreneurship on GDP growth in emerging markets in order to identify the form of entrepreneurship which has the greatest contribution to economic growth. Regression models were developed with purpose to investigate the effect of different types of innovative entrepreneurship on economic growth in 13 selected emerging markets on panel data for period 2011-2018. We found that all forms of innovative entrepreneurship contribute to economic growth. The largest and significant influence on economic growth has high growth expectation entrepreneurship. Also, results shown that impact of new products entrepreneurship was bigger than impact of new technology development entrepreneurship on economic growth, it is necessary to implement a lot of different measures and involve a lot of stakeholders: government and policy makers, corporate sector, knowledge institutions, media, and civil institutions.

In order to stimulate the development of innovative entrepreneurship government can create startup ecosystems. Start-up ecosystem encourages the creation and development of high growth expectation entrepreneurship thanks to different forms of support such as: mentoring, consulting services, contacts with investors, etc. Also, a lot of high growthoriented entrepreneurs included in entrepreneurial ecosystem create a pool of welltrained and like-minded entrepreneurs. It enables exchange of knowledge and experience and creates culture that encourages innovation and new businesses. The link of capital, technology and know-how within the supportive entrepreneurial ecosystem, enables the speeding up of the business creation process and limits the probability of failure.

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