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**INTRODUCING OPPORTUNITY-BASED ENTREPRENEURSHIP
IN A TRANSITION ECONOMY**

By Zoran Perunović*

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* Zoran Perunović is a Research at the Technical University of Denmark, and a free-lance consultant in innovation, both on the micro and macro levels.

Abstract

This paper confronts necessity-based and opportunity-based entrepreneurial concepts in the transition of developing economies. The author constructs a research model and conducts field research (using Serbia as a case study) to explore how different personal and regional characteristics can favour either a necessity- or opportunity-based entrepreneurial environment. The concluding remarks emphasize the need for careful introduction of opportunity-based entrepreneurship together with recommendations for how that may be accomplished across different regions. Results suggest that there are four possible entrepreneurial settings for a selected town or region, and four strategies for introducing the opportunity-based entrepreneurship are given. In the most general sense, this paper strives to encourage discussion about national systems of innovation as a complementary and/or dominant catch-up strategy for transition and developing economies.

1. Introduction

Entrepreneurial endeavours have been evolving throughout human history: from the ancient Egypt and Far East civilisations to globally scattered empires to small and large nations of medieval Europe. The “entrepreneurial revolution” corresponded with the Industrial revolution, where ideas and creativity bore inventions and innovations, making many Europeans, known as opportunity entrepreneurs, and Europe, prosperous. On the other side of the coin were nations that had stumbled in their economic development for various reasons. Business initiatives were mostly driven by the survival of their creators and were primarily in agriculture and crafts. Those were the necessity entrepreneurs, and their countries have had slower economic development and have been dependent on trade with developed countries and direct investments from foreign countries. The economic ideal was to catch-up (and who knows, even overrun) the developed economies. This story can also be told for different regions within a country.

In most cases the recovery of a nation’s economy is based on the catch-up strategy of attracting direct foreign investments, which supports the neo-classical theory of capital accumulation. But what happened to the original engines of economic development – innovation and entrepreneurship? Can national systems of innovation answer the challenge?

Without the ability to develop factors that support the development of innovation in technology, countries or regions are likely to fall behind rather than catch up. This paper strives to spark discussion on the theory that national systems of innovation are a complementary, or even the dominant, catch-up strategy. If transition and developing economies want to speed up the process of catching-up and to develop unique national competitive advantages (knowledge instead of relatively cheap labour force), they certainly need to introduce opportunity-based entrepreneurship as a pre-requisite. Innovative products and services can be created in both existing (large or small) companies and start-ups. The focus of this paper is potential innovations (opportunity-based entrepreneurship) around start-up companies. By exploring the basics of national systems of innovation and entrepreneurship theories, the author develops a research framework that investigates the potential for opportunity-based entrepreneurship to work in selected regions of Serbia. The paper concludes with a definition of four different regions and recommendations for making them conducive to opportunity-entrepreneurship.

2. National Systems of Innovation, Entrepreneurship and Opportunity

The concept of national systems of innovation (NSI) has been evolving in the last twenty years. However, its origins can be traced back to the middle of the XIX century to the economically faltering Germany (Johnson et al., 2003). Economist Friedrich List opposed Adam Smith's theory of the free trade, emphasising the importance to build the national production systems that would spur economic development, instead of waiting for the invisible hand. These early debates continued, and two major theories explaining the different results in national catching-up strategies emerged, one of them being built on the traditional neo-classical theory (accumulation of capital), and the other based on innovation and diffusion of technology (Fagerberg & Verspagen, 2003).

Schumpeter (1934) described entrepreneurship as a creative destruction and argued that unique innovation is central to vibrant entrepreneurship. Since Schumpeter's work, entrepreneurship and innovation have worked hand-in-hand for more than 70 years. The new innovative (true entrepreneurial) companies seem to be the core engine of national economic growth (Figure 1; Acs et. al., 2005)

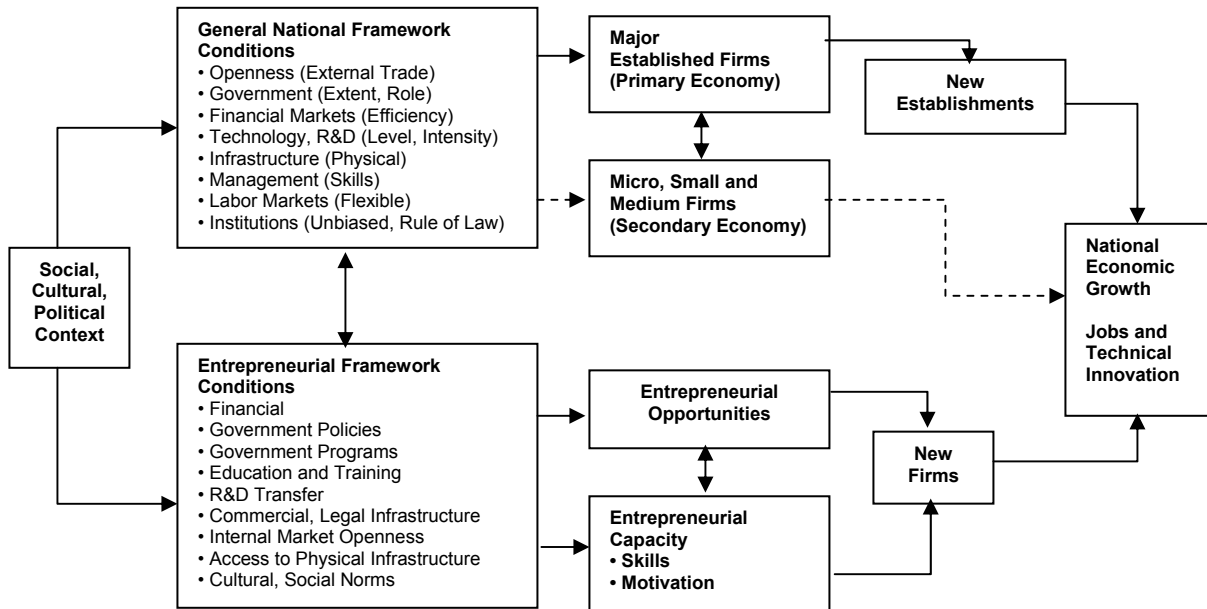


Figure 1 - GEM conceptual model

Business fomenting is influenced by entrepreneurial opportunities and entrepreneurial capacity. Opportunities and capacity depend on the entrepreneurial framework conditions and that framework is dependent on the social, cultural and political context. The key to catalysing a national economy is actually the entrepreneur himself, an individual who decides to start its business. Therefore, perception of entrepreneurial opportunities offered by that country, as well as the entrepreneur's personal predispositions, determine the rate of new firm development. In principal, there are two major motives for starting a business. The first is necessity such as providing essential needs for oneself and one's family. The second is innovating and is based on recognizing opportunities in the market and deploying knowledge in order to create an innovative product or service. High-income countries have more opportunity-based entrepreneurs, while necessity-based entrepreneurs prevail in the countries with mid and low incomes.

3. Research Framework and Methodology

One can distinguish between several explanations of entrepreneurship. The first group of theories emphasises individual predispositions for being an entrepreneur (McClelland, 1961; Schere, 1982; Greenberg & Sexton, 1988). The second group embeds personal characteristics into the national economic environment (Tropman & Morningstar, 1989). Besides the overall national social, cultural, political and economic context, a potential entrepreneur is also influenced by the regional culture (Brons, 2000) (See Figure 2).

The opportunity-based entrepreneurial thinking has to be nurtured in an opportunity-stimulating environment. This is true at both a national and regional level. In real life this is not always the case, especially in transition economies and developing countries. Discrepancies between regions can vary significantly, and policy makers should take these differences into account when creating and implementing policies intended to narrow these gaps. As it has already been stated, it is important to shift a necessity-based region into an opportunity-stimulating region.

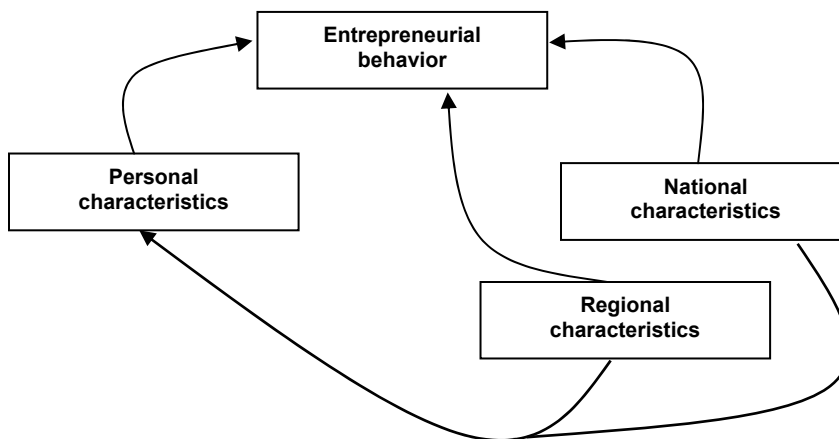


Figure 2- Influences on entrepreneurial behaviour

The research question we raise here is: *Which different entrepreneurial settings can personal and regional characteristics create?*

To explore that question we use the case of Serbia and analyse the life goals of potential entrepreneurs (students of management) from seven different towns with different business characteristics, development and heritage (Figure 3)

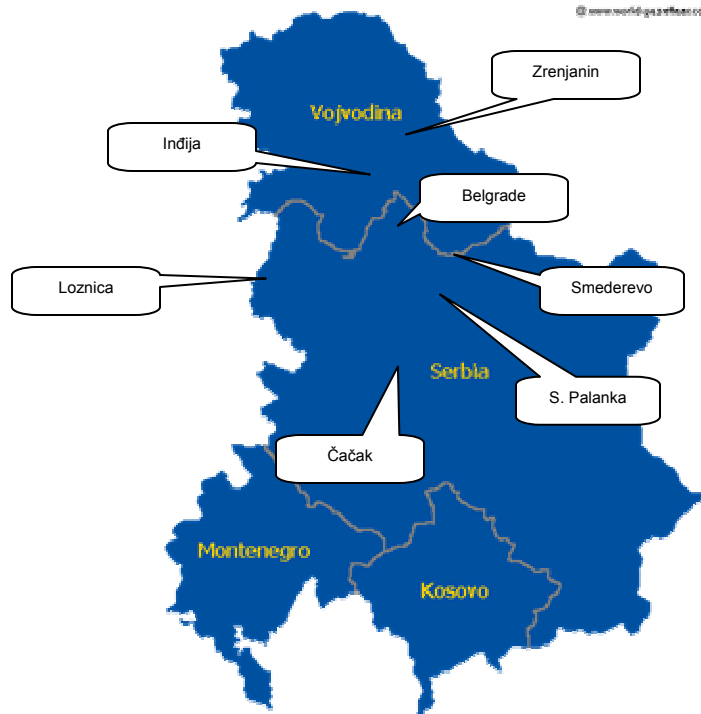


Figure 3 - Participating towns

In the period from 1999 to 2001 more than 600 students participated in the Entrepreneurship course within The University of Applied Sciences and ranked their life goals (Sense of responsibility, Solidarity, Expertise, Wealth, Independence, Leadership, Creativity, Prestige, Love, Stability, and Pleasure) in order of importance for entrepreneurial achievement. Rankings ranged from 1 (the most desirable) to 11 (the least desirable). From the available list of life goals we could associate two life goals (*expertise and creativity*) with the opportunity-based entrepreneurial personal characteristics, while creating *wealth* explains necessity-based entrepreneurial behaviour. *Independence* is considered to be a general characteristic of students, and therefore has been excluded from further investigations.

4. Potentials for Opportunity-based Entrepreneurship in Serbia

During very turbulent periods in Serbia's recent history, life goals have changed, dramatically or less-rapidly, both in complimentary and competing directions. Dynamics varied across towns, pushing the population of potential entrepreneurs towards either opportunity-, or necessity-based entrepreneurial motives.

Young people from Belgrade, Indija, and Smederevska Palanka are becoming more materialistic. Wealth acquisition is becoming a more and more important life goal, while expertise and creativity are losing their position. This creates a force that may lead to necessity-based entrepreneurship. For example, the situation in Loznica indicates that potential entrepreneurs are moving towards apathy, which may result in a lack of initiative for starting businesses. We can assume that necessity-seeking personal characteristics would push the youth from those four

towns to create their own businesses (See the right-hand column in Figure 4). In contrast to these individuals, students from Čačak, Zrenjanin and Smederevo have a higher potential for opportunity-based entrepreneurship (See the left-hand column in Figure 4), strongly emphasizing creativity in Čačak, and expertise in Zrenjanin and Smederevo.

We shall now examine the characteristics of the aforementioned regions that make them conducive to opportunity vs. necessity-based entrepreneurship. They all demonstrate different innovation support infrastructure, educational level, industrial and entrepreneurial heritage, social norms, etc. These differences place them in the upper or lower row of the matrix in Figure 4.

Common characteristics of the opportunity stimulating towns:

- Presence of universities, technical faculties or research institutes;
- Positive entrepreneurial climate and heritage;
- Solid industrial infrastructure;
- High visibility of SMEs;
- Presence of any form of the innovation support infrastructure;
- Higher than average education rate.

One of the towns (Indija) has no innovation support infrastructure and the number of people with at least 12 years of education is significantly below the Serbian average. However, it has an impressive number of self-employed entrepreneurs (42% of the total employment) and a rising number of investments in the area. Its strong entrepreneurial heritage is a significant indicator of an opportunity-stimulating environment.

The remaining three towns belong to the group of necessity-enforcing entrepreneurial characteristics. Their most influential commonalities:

- Economic collapse of single, large, mass-employing, industrial complex;
- Absence of high-education institutions;
- Absence of innovation support infrastructure;
- Monthly salary is below the national average.

Serbian regions may differ significantly, even though they may be geographically and ideologically close. Figure 4 shows the position of towns in the opportunity-based entrepreneurship matrix. In order to create a proper entrepreneurship-based development, personality and environment have to match. In terms of opportunity-based entrepreneurship and innovation, the matching criteria are even more astringent. If a certain town has a number of potential opportunity seeking inhabitants, and has an opportunity-providing infrastructure, the chances for that region to become a region of growth, based on innovation, are pretty fair.

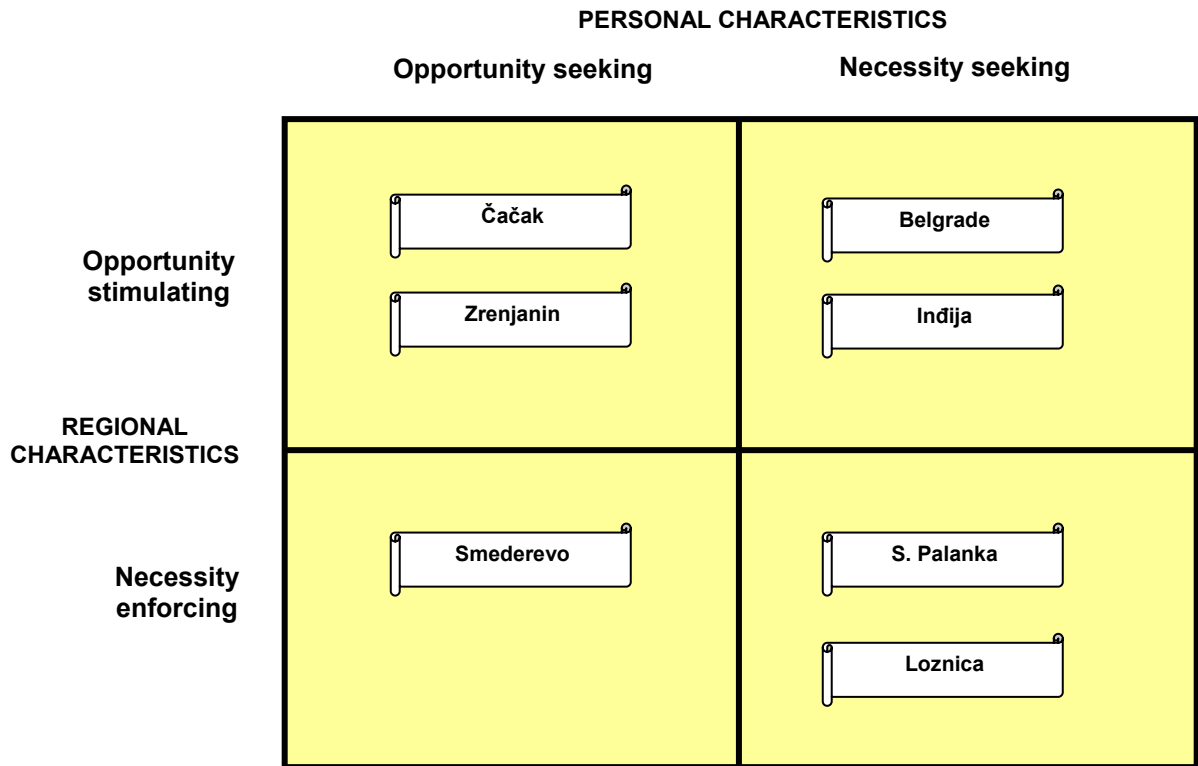


Figure 4 - Potentials for Opportunity-based Entrepreneurship in Serbia

By cross-examining personal and regional characteristics we can position selected administrative units into one of the cells of entrepreneurial behaviour (Figure 4). Smederevska Palanka and Loznica are the examples of towns (regions) in the most critical condition. Tendency towards necessity-based entrepreneurship in combination with uninviting regional characteristics indicates that those regions are far from being ready for innovation-based growth. Smederevo has descent industrial facilities heritage, but in combination with other infrastructural support, it lacks an innovation-stimulating environment. However, young people are more optimistic and to some extent nurture opportunity-based entrepreneurial characteristics. Unbalanced importance of expertise and creativity (expertise is gaining in importance) suggests that proving their abilities in an existing company first and then utilising their expertise in an innovative start-up is ideal.

It is surprising that Belgrade, as a capital with its entire opportunity-stimulating infrastructure could not evoke the innovative spirits of future entrepreneurs. Although we have seen several innovative businesses in Indija flourishing in the last few decades, youngsters there prefer to copy existing ideas, thus modestly diminishing entrepreneurial creativity. Indija doesn't have innovation support infrastructure, but it is an opportunity-stimulating town because it is a huge "demonstrating polygon" for entrepreneurship. Čačak and Zrenjanin have all the characteristics requisite for attracting innovating businesses. They have modest but existing infrastructure; more importantly, they have potential opportunity-based thinking entrepreneurs. However, this potential is not yet realized, and there is a need to match innovators with the complimentary infrastructure.

5. How to Handle the Matrix?

What does it take to introduce opportunity-based entrepreneurship to the unequally developed regions of a transition economy? Regions and communities are very sensitive to changes and require special care. Governments should be careful not to fall into the trap of developing the same innovation and entrepreneurship support infrastructure all over the country as different regions may require different solutions. In addition, national and local governments should be aware of the dangers of un-coordinated international support and consultancy (Bruun & Perunovic, 2004). Each region, each town, requires a uniquely tailored opportunity-based entrepreneurial development programme.

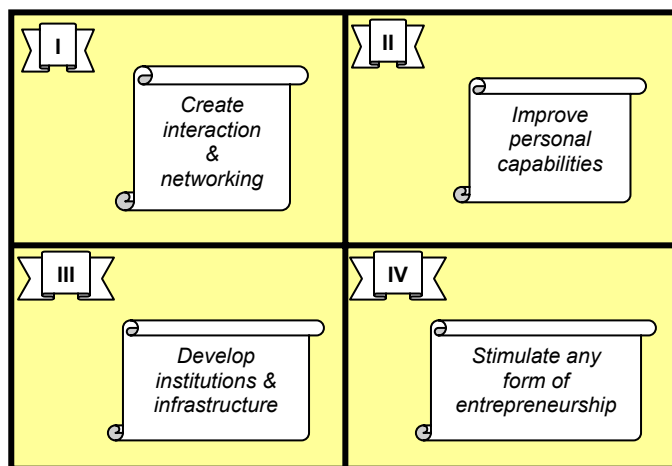


Figure 5 - Introducing Opportunity-based Entrepreneurship to a transition economy

Without an intention to overlook the value of current regional innovation policy frameworks, the author suggests several methods for introducing opportunity-based entrepreneurship to a specific region. These recommendations are based on the author's and Serbian broad experiences. Like in medicine, "the innovation doctors" have to conduct more thorough research and write detailed prescriptions (Figure 5).

I - This paper determines which characteristics are particularly conducive to opportunity-based entrepreneurship, and concludes that some Serbian regions do not possess these characteristics while others do. Due to the lack of a national system of innovation setting, towns without these characteristics still need significant support. This support should consist of encouraging interaction among potential entrepreneurs, universities and scientific institutes, existing industrial firms and SMEs, technology-transfer institutions, and innovation support infrastructure. Regions could capitalize on getting these parties together, and educating them about the benefits of mutual cooperation.

II - Towns and regions belonging to this quadrant need information and encouragement. There should be intensive programmes on entrepreneurship and innovation in order to motivate people to start their own innovative business. For instance, each higher education

institution should have an entrepreneurship course, at least as an elective, and secondary schools (especially vocational) should include entrepreneurship and innovation courses. Recently, there was a burst of initiative and several secondary students designed start-ups. Employees at universities, research institutes, and existing industrial facilities should always be thinking of innovative spin-off possibilities. To support this process, patent offices should make a concerted effort to be more visible.

III - In order to shift towns from the third into the first quadrant, we must capitalize on the presence of opportunity-seeking entrepreneurs. It is very important to help these enthusiasts to consider an entrepreneurial endeavour. The Serbian SMEs development agency has opened branch offices across the country, but somehow they do not operate in the towns in the third quadrant, and therefore these regions might miss the opportunity provided by young entrepreneurs migrating to opportunity-stimulating environments. Business incubators should also be present in these regions.

IV - The situation in the fourth cell is a bit dramatic, and it does not demand innovation specifically, but rather entrepreneurship in any form. People can no longer rely on large industrial complexes for entrepreneurship. They need to figure out employment alternatives. Therefore, local authorities and other contributors (everyone is welcome) should stimulate start-ups of any kind. Governments tend to make the mistake of looking to industries that were once successful in the region. They believe these industries still have a supreme know-how, and therefore are trying to stimulate entrepreneurial activities within that industry. However, this usually does not work, and therefore competitiveness and entrepreneurship should be sought outside of these industries.

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ABOUT THE AUTHOR

ZORAN PERUNOVIĆ is a Research Fellow in innovation at the Centre for Technology, Economics and Management (TEM) at the Technical University of Denmark, and a free-lance consultant in innovation, both on the micro and macro levels. He holds BSc and MSc in Management from the University of Belgrade. Before joining TEM Zoran Perunović has been an Expert Research Associate in the Institute of transportation, and afterwards a lecturer in *Entrepreneurship* at the University of Applied Sciences in Belgrade, and a consultant to Serbian SMEs Development Agency. He has been involved in various projects such as: the development of the national innovation support infrastructure, analysis of the innovative performance of manufacturing companies, modularisation of R&D processes, case study development, etc. Zoran is the developer and instructor of *The Global Entrepreneurship* university course for the Global Institute for Leadership and Civic Development, and a reviewer for The International Journal of Technology Management. Currently, Zoran is obtaining a PhD degree by exploring the innovative utilisation of IT technologies in outsourcing.