Abstract

In Serbia, there are around 3% of fast-growing enterprises that boast a growth potential. The results of research into dynamic entrepreneurship in Serbia have promted a new methodological approach that has confirmed the well-known Birch's rule that at least 85% of economic growth and creation of new jobs in any economy is generated by, at most, 5% of enterprises. Given that in Serbia less than 3% of enterprises generate economic growth, fast-growing enterprises and gazelles present an economic buffer from economic recession. Major research findings are as follows: 2,583 fast-growing enterprises accounted for 90% of the growth of gross value added of Serbia in the period 2006-2010, 114% of the growth of business revenues (they covered 14% of the loss generated by the rest of the economy!); they also contributed to the growth of overall income and the creation of 33,000 new jobs. The rate of growth of value added of 500 dynamic enterprises in manufacturing industry was 100% in 5 years! Employment in 300 Serbian gazelles (most dynamic enterprises) doubled!

Economic recommendations presented in the paper follow two directions: firstly, given that the SME sector is particularly hardly hit by the economic crisis, it is vital to create additional stimulating mechanisms for entrepreneurs so that production could be triggered and employment decline prevented. Secondly, it is necessary to define a set of measures in order to create conditions conducive to a faster growth of dynamic entrepreneurship in Serbia.

**Key words:** dynamic entrepreneurship, economic growth, competitiveness of the SME sector, business environment, risks

Sažetak

U Srbiji postoji oko 3% brzorastućih preduzeća, koja imaju potencijal rasta. Rezultati istraživanja dinamičkog preduzetništva u Srbiji promovisali su nov metodološki pristup koji je potvrdio poznatu Birchovu zakonitost da najmanje 85% privrednog rasta i otvaranja novih radnih mesta u svakoj ekonomiji generiše najviše 5% preduzeća. U Srbiji u kojoj manje od 3% preduzeća obezbeđuje privredni rast, brzo rastuća preduzeća i gazele predstavljaju privrednu branu od ekonomske recesije. Osnovni naići istraživanja: 2.583 brzorastućih preduzeća učestvovalo je sa 90% u rastu novostvorene vrednosti Srbije u periodu od 2006. do 2010. godine, u rastu poslovnog prihoda sa 114% (pokrivali su sa 14% gubitke ostalog dela privrede), u rastu celokupne dobiti i u kreiranju 33.000 novih radnih mesta. Stopa rasta novostvorene vrednosti 500 dinamičkih preduzeća u prerađivačkoj industriji bila je 100% za 5 godina! Zaposlenost u 300 srpskih gazela (najdinamičnijih preduzeća) povećana je dvakruto! Ekonomske poruke u radu usmerene su u dva pravca: prvo, s obzirom na to da je sektor MSP posebno teško pogoden ekonomskom krizom neophodno je kreirati dodatne podsticajne mehanizme namenjene preduzetnicima za pokretanje proizvodnje i sprečavanje pada zaposlenosti, i drugo, potrebno je definisati set mera kako bi se stvorili uslovi za brži rast dinamičkog preduzetništva u Srbiji.

**Ključne reči:** dinamičko preduzetništvo, privredni rast, konkurentnost MSP, poslovni ambijent, rizici
The entrepreneurs provide a magical touch to an organization, whether in public or private or joint sector, in achieving speed, flexibility, innovativeness, and a strong sense of self-determination. They bring a new vision to the forefront of economic growth.

(Vineet Chouhan, 2012)

Introduction

Fast-growing enterprises that boast growth potential (dynamic enterprises and gazelles) present the propeller of development of any economy. Dynamic enterprises make the most efficient use of their resources in the market environment; they manage to continually raise employment, improve their bottom line, respond to market signals fast and, accordingly, make business decisions swiftly. The key distinguishing features of dynamic entrepreneurs include creativity and originality, long-term orientation to the market and buyers, morality and business culture, ambition of achieving long-lasting success and capital profit, ability to predict risk and adjust, and pronounced problem-solving orientation.

During the transition period the sector of small and medium-sized enterprises and entrepreneurs has evolved into a relevant segment of an economy. Although the sector of SME accounts for only 1/3 of Serbia's GDP, other key parameters indicate an ever-larger share of the SME sector in the economy: in 2011 the entrepreneurial sector accounted for 99.8% of the total number of enterprises and entrepreneurs, which was around 320,000; the entrepreneurial sector also accounted for 2/3 of turnover and employment, 55% of the value added and investments in economy. Foreign trade imbalance affects the SME sector as well: it accounts for 48.5% of total exports and 55.8% of total imports. It should be noted that the recession tide has hit the entrepreneurial sector particularly hard, not only in Serbia, but also in the entire area of SEE.

Stimulating the development of dynamic entrepreneurship is a development opportunity for Serbia. Primary tasks are to continually strive to create a stimulating environment as well as to address key development problems of enterprises in the stage of growth and development.

The research presented in this paper is centered on development and contribution to growth of the dynamic entrepreneurship in Serbia. The objective of the research into dynamic entrepreneurship is to test the primary hypothesis that less than 5% of all businesses generate at least 85% of economic growth, revenues, and new jobs [3],[4] in the case of the Serbian economy. Apart from this, the research points to the development degree of the entrepreneurial sector in Serbia, extent of delay in entrepreneurship development relative to other transition countries, major obstacles to creating a stimulating entrepreneurial environment, and directions of activity of economic policy creators.

Theoretical foundation of dynamic entrepreneurship

The systemic research into dynamic entrepreneurship has primarily been driven by the research done by Edith Penrose dealing with the theory of enterprise growth [14], later named theory of resources (resource-based view of the firm) [36]. The theory of resources was rediscovered at the start of the last decade of the 20th century [27]. The core of the resource theory lies in the claim that a competitive advantage is acquired through resources that are valuable and scarce but that are hard to imitate and substitute. “Just like management tries to make best use of available resources, a real dynamic and interactive process happens as continuous growth is stimulated but at the same time is limited” [25, p. 5]. According to the theory of resources, a critical role is played by managers and entrepreneurial management teams, while key growth factors are:

1. Interaction with company's resources1,
2. Subjective consideration and creation of new "benefits for resources", and
3. Direction in which a company grows and strategic experimenting develops.

The resource theory groups resources of companies in several ways - there are resources that depend on people ("skills"), knowledge ("know-how"), on the ability to learn, and resources that do not hinge on people ("property"). Resources can also be divided into physical, human, and organizational. From the aspect of a sustainable competitive advantage, there is a division of resources into physical, intellectual, and cultural property. A special accent is placed on non-material resources that are deemed to be highly important sources of a competitive advantage.
Resource management is the catalyst of growth of dynamic entrepreneurship [22]. Resources are cognitive growth drivers [15]. Factors of dynamic entrepreneurship are “intimate and silent insights into resources of a company, its ability, organizational structure, standard operational procedures, historical background, and staff specificities” [37]. The analysis of dynamic entrepreneurship should show whether “there is something inherent in a business itself that limits its growth rate” [25, ch. 11].

Nonaka [24] and Sveiby [31] upgraded the resource theory with the proposed dynamic theory of organizational knowledge about creation through interactions of individuals. “Dynamic characteristics of knowledge are pivotal to managers” [31, p. 344].

All researches into dynamic entrepreneurship show a high degree of correlation between growth factors and overall economic growth. A usual division of growth factors to external (ecological) and internal growth factors has been supplemented by numerous new aspects of dynamic entrepreneurship. Some authors stress that growth of a company depends on three major factors: (1) build-up of motivation, (2) abilities, and (3) opportunities [30], while others suggest that growth of a company is primarily influenced by the following factors: (1) company’s exterior and interior setting, (2) the entrepreneur or the entrepreneurial team itself, (3) innovativeness and realization of changes, (4) growth and the strategic access, (5) the business model and the management system, (6) human resources, and (7) growth of financing [29].

Factors that have a crucial impact on the development of entrepreneurship can be covered by the term entrepreneurial-stimulating environment; the term refers both to factors in a broad sense of the word (socio-economic order that fosters or prohibits profit motives, cultural and religious aspects of a society and a general attitude to work, knowledge etc.) and individual elements which determine the behavior and conduct of an entrepreneur and a company in an environment.

Entrepreneurial growth is influenced by many other factors in a specific social-economic system, such as the health care system, pensions, labour legislation, protection of knowledge and industrial property, the degree of professional attainment and the access to knowledge, protection of buyers and providers, regulation of the capital market, management of public companies, etc.

Over the past few decades some business researchers have devoted ever more time to the study of ecological factors that impact on the development of entrepreneurship and growth of companies and vice versa (the impact of a company’s growth on living environment). Gabe [8] has developed an empirical model that measures effects of an active environment policy on the growth of companies.

What is also interesting are research results of Zahra [39] who, by analyzing the relation between the environment and companies, pinpointed four crucial factors for a company’s growth: (1) dynamic growth in the environment, (2) unfriendly and rival environment, (3) friendly and production-driven environment, and (4) statistical and impoverished environment. She managed to prove that the first and the third environment are conducive to dynamic growth. Dynamic growth in an environment is a very important factor of dynamic entrepreneurship, and so is demand for products, while production-driven environment is essential for providing opportunities for innovative companies that are oriented towards buyers’ needs.

Numerous European researches have proved the link between the success of European gazelles and economic development by studying a set of stimulating measures: financial, fiscal, legal and other incentives for starting a business, attitude to entrepreneurship, tolerance of business failure, readiness to take a risk, an overall entrepreneurial climate, and favourable legislation for companies’ growth.

Over the last decade the European Commission has repeatedly stressed that the business environment is no longer conducive to entrepreneurship development. The latest comprehensive analysis [6] has shown that 85% of new jobs can be attributed to the growth of micro, small and medium-sized enterprises, while the rate of employment growth in these enterprises is twice as high as in large enterprises.

The most comprehensive analysis of the entrepreneurial environment has been done by the international research project Global Entrepreneurship Monitor (2008, 2009, 2010, and 2011) which lists nine major conditions for a dynamic and stimulating entrepreneurial environment:
1. Government’s support and policy, and stimulating tax legislation,
2. Developed state-funded programmes that endorse entrepreneurial initiatives,
3. Availability of financial resources,
4. Developed commercial and professional infrastructure,
5. Developed education and training systems,
6. Connection of research and development with a company,
7. Openness of an internal market,
8. Availability of physical infrastructure, and
9. Developed entrepreneurial culture and social norms.

In Serbia no major research into dynamic entrepreneurship has been done so far (this particularly refers to the impact of specific factors, such as the impact of the living environment on growth of companies, production gazelles, etc.). Systemic research into dynamic entrepreneurship in Serbia and its results were presented and disseminated to the public by the Republic Development Bureau in 2003 and 2008 [17]. The methodological framework for differentiating fast-growing enterprises and gazelles was based on modified criteria “Europe’s 500” and “Europe Innove”, and the well-known Birch’s indicator. In methodological terms, this paper promotes a new concept of studying the dynamic entrepreneurship.

Development and competitiveness of entrepreneurship in Serbia

Development of the SME sector and the impact of recession
The entrepreneurial sector in Serbia accounts for 99.8% of the number of enterprises, in the structure of economy employs 2/3 of the employed, generates 2/3 of turnover and 55% of the gross value added; it accounts for 49% of exports and 1/3 of GDP (see Table 1). However, in comparison with large enterprises the entrepreneurial sector is less productive and less profitable.

In the structure of the entrepreneurial sector micro enterprises are most numerous, while small and medium-sized enterprises dominate all the indicators of reference. Medium-sized enterprises export 47.2% and have the best export/import ratio, micro enterprises employ 45.6%, while the balance of goods is the highest in small enterprises.

The level of competitiveness of the SME sector of Serbia significantly lags behind the European average and most transition economies (see Table 2). Qualitative indicators of the development level of the entrepreneurial sector are lower in comparison with the EU average and the majority of analyzed countries (employment per enterprise, turnover, GVA, and profit per employee). The rate of profitability is above the average, a consequence of a low starting basis and not the expansion or a higher level of this sector’s internationalization.

Before the outburst of the global economic crisis the SME sector had been the most vital segment of the economy and a major source of new jobs. Due to general deterioration of business conditions, there was a considerable decrease in the volume of employed labour and, consequently, a comparative improvement of business performances relative to the number of employees.

The recession tide (decline in external and internal demand, investments, higher risks and costs of investment, as well as a fear of failure) hit the entrepreneurial sector in Serbia particularly hard. Robust entrepreneurial dynamics of the previous period has been undermined (slower

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of enterprises</td>
<td>99.8</td>
<td>99.8</td>
<td>99.8</td>
</tr>
<tr>
<td>No of employees</td>
<td>66.7</td>
<td>66.4</td>
<td>65.3</td>
</tr>
<tr>
<td>Turnover</td>
<td>67.8</td>
<td>65.3</td>
<td>65.5</td>
</tr>
<tr>
<td>GVA</td>
<td>57.1</td>
<td>55.9</td>
<td>55.2</td>
</tr>
<tr>
<td>Exports</td>
<td>50.5</td>
<td>46.4</td>
<td>48.5</td>
</tr>
<tr>
<td>Imports</td>
<td>60.9</td>
<td>54.3</td>
<td>55.8</td>
</tr>
<tr>
<td>Balance of goods</td>
<td>72.8</td>
<td>65.4</td>
<td>66.7</td>
</tr>
<tr>
<td>Investments</td>
<td>52.6</td>
<td>52.1</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: RSO
establishment, growth, and development of new enterprises, and faster closing), and so the number of shops fell and the number of enterprises is stagnating. Research done on the basis of the GEDI index and its sub-indexes relating to key dimensions of entrepreneurial activity in the period 2008-2010 points to strong negative effects of the crisis on the entrepreneurial climate in Serbia: deteriorated business conditions led to a decrease in perceived opportunities for starting a new business, expansion of the fear of failure (induced by higher investment risks), and a decline in social support for entrepreneurial activities, coupled with more intensity of the market competition. At the same time, the share of new companies in the sector of medium- and high technology is heavily decreasing, and chances for a company to apply new technologies and innovations in implementing business strategies that ensure faster growth are slimmer. The degree of orientation of new companies to an external market is in ever greater decline, and so is their readiness to employ venture capital.

Due to deteriorated business climate, the number of start-ups as well as new entrepreneurs is decreasing, which heavily restricts opportunities for the creation of new jobs and productivity growth. For example, in the course of 2011 each month around 3,400 individuals established new business entities, much less than 5,000 individuals (an average number of people that set up businesses each month in 2007).

The entrepreneurial environment in Serbia has deteriorated since the outbreak of the economic crisis. Consumer demand has been decreasing and the loss of business trust has made an adverse impact on the availability of financial support; therefore the opening of new and development of existing enterprises and shops has been seriously limited. The rate of the setting up of new enterprises has slowed down substantially. Namely, in 2007 per each 6 newly established enterprises one was closed down, and per three newly opened shops two were closed. In 2011, per 6 newly established companies 10 were closed, and the number of established shops was by about 10% lower than the number of closed ones. Prospects of newly established companies to survive on the market diminished, and so the share of companies that outlast the first two years of operating went down from 92.0% (2007) to 87.6% (2011), while the rate of survival of shops fell from 66.2% to 55.4%. At the same time, unemployment increased a lot, which leads to continued forced emigration, particularly of the young and the educated. The global economic crisis has made an adverse impact both on economic entities in the early stage of operating and on already established companies – there are fewer business opportunities and it is more difficult to start a business.

Worsening of business conditions in the entrepreneurial sector had a particularly severe effect on employment, and so the number of employees in 2009-2011 in this sector decreased by 153,286, which accounts for 79.2% of the employment decrease in the corporate sector. The trend of rapid opening of new jobs of the period 2004-2008 was interrupted. In this period, owing to an improved business climate and incentives, the number of employees in the SME sector increased by about 187,000, which neutralized a decrease in the number of jobs in large enterprises that was down to the restructuring process (-164,000 employees).

The quality of entrepreneurship

Measuring the quality of entrepreneurship entails a study of various dimensions of entrepreneurial development by states, the focus being on measuring the

<table>
<thead>
<tr>
<th>Table 2: Comparative indicators of entrepreneurship development in 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No of companies (in 000)</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>20,989.9</td>
</tr>
<tr>
<td><strong>No of employees (in 000)</strong></td>
</tr>
<tr>
<td>41.8</td>
</tr>
<tr>
<td><strong>No of SME per 1,000 citizens</strong></td>
</tr>
<tr>
<td><strong>Turnover per employee (in EUR 000)</strong></td>
</tr>
<tr>
<td><strong>GVA per employee (in EUR 000)</strong></td>
</tr>
<tr>
<td><strong>Profit per employee (in EUR 000)</strong></td>
</tr>
<tr>
<td><strong>Profitability rate</strong></td>
</tr>
</tbody>
</table>

Source: EUROSTAT, DG Enterprise and Industry and RSO
impact of innovations, the quality of technology, education of labour, and availability of the venture capital.

One of the most representative composite indicators for measuring the quality of entrepreneurship is \textit{GEDI} - \textit{Global Entrepreneurship Development Index}. In particular, GEDI examines effects of entrepreneurship and innovations that are caused by individual and institutional factors.

The value of GEDI for Serbia (see Figure 1) is at the same level in 2012 as in 2011, and equals 0.18 (the rank being 63), which is three times lower than in Denmark (0.55), or much lower than for countries in the region: Austria (0.46), Slovenia (0.42), Hungary and Croatia (0.29), Romania and Macedonia (0.23), while only Bosnia and Herzegovina has a lower value of the indicator (0.16). In the group of countries whose development is driven by efficiency, Serbia is at the bottom of the list – the highest ranked country is Columbia (0.27), and the lowest value of GEDI is that of Ecuador (0.15). In relation to the attained level of economic development, the level of GEDI and all three sub-indicators (ATT, ACT, and ASP) in Serbia is low (see Figure 2).

Sub-indicators of the dimension \textit{Entrepreneurial attitude} show that deterioration of business conditions in Serbia has led to reduction of perceived opportunities for starting new business, expansion of the fear of failure (related to amplification of investment risks), and a decline in social support for entrepreneurial activities. In

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{gedi_index}
\caption{GEDI index}
\end{figure}

\textsuperscript{2} GEDI comprises three different entrepreneurship dimensions \cite{32}: \textit{The entrepreneurial attitude} (ATT); \textit{The entrepreneurial activity} (ACT); \textit{The entrepreneurial aspiration} (ASP).

\textsuperscript{3} Average of the group “Stage 2 – Efficiency-driven Economies” \cite{33}.

\begin{equation}
y = -0.00x^2 + 0.00x + 0.08 \\
R^2 = 0.77
\end{equation}
comparison with adjacent countries and the EU average, a lower value of the sub-index Entrepreneurial attitude (0.29) is registered only in BiH (0.21) and Romania (0.22).

The trend of some sub-indexes of Entrepreneurial activity is extreme decline: the share of new companies in the sector of medium and high technology is heavily decreasing and opportunities of businesses to apply new technology are tighter. Serbia and BiH have the lowest values of this sub-index (0.14 each), while an above average value is that of Slovenia (0.46 vs. 0.44 of the EU). As for the segment of Entrepreneurial aspiration, the degree of state-of-the-art technology and innovation application is in decline, and so are entrepreneurs’ chances to apply business strategies that provide faster growth, the level of openness of new companies to the international market, as well as the degree of venture capital usage. For example, the sub-indicator of the internationalization degree of the SME sector in Serbia is only by 0.10 and 5-6 times lower than that of Romania (0.65), Croatia (0.60), Macedonia (0.50), and Hungary (0.46).

Policy of entrepreneurship development – SBA

The official framework for the policy of entrepreneurship development in the European Union is based on the Small Business Act – SBA. Guidelines for the creation and implementation of policies at the level of the EU and SBA member states are defined in the form of 10 principles: creation of a stimulating environment that appreciates entrepreneurship and family business; providing opportunities for the “second chance” for honourable entrepreneurs that went bankrupt; defining rules and regulations in line with the principle “think small first”; building up of public administration that is more responsive to needs of SMEs; facilitating participation of SME in public procurement and better making use of state aid; facilitating the access of SME to sources of funding and creating conditions for due payment of debts; assistance for SMEs so that they could take full advantage of the common market; improvement of skills and knowledge; innovations; eco-innovations, and SME’s penetration of emerging markets (especially those of China and India).

Source: GEDI 2012
All the principles are backed by elaborate proposals for concrete actions and activities, classified as commitments of the European Commission and recommendations for member states. Since 2009 the SBA has been the reference framework for policies of support for SME and Western Balkans countries.

SBA is translated into practice through the monitoring of the SME Policy Index which has been developed by most eminent global institutions such as the OECD, European Commission, EBRD, and ETF (European Training Fund). On the basis of the latest Report and the Index results, the rate of reforms has slowed down (see Figure 3):

- Various levels of economic development and the fact that some countries have made greater progress in the process of EU accession have impacted on opportunities for development and an effective implementation of SME policies in a consistent and harmonized way.
- The global financial crisis diverted the attention of governments from structural reforms of SME policies to short-term measures of support.

Serbia is given the following recommendations (see Figure 4):

- Working environment should be improved and targeted measures of support for most dynamic enterprises designed and implemented. For example, while the system of business registration is largely efficient, it can be additionally improved by adjusting the company’s registration number and expanding the online registration service that at the moment is available only to entrepreneurs.
- Bankruptcy procedures should be made more efficient. The new Bankruptcy Law that entered into force in 2010 launches an automatic bankruptcy procedure when the company’s accounts have been blocked for more than three years. This has led to significant accumulation of bankruptcy cases as courts are still not efficient enough.
- The existing network of incubators should be reinforced and support for them increased. Incubators need to be more oriented towards science-based companies, i.e. high-quality services that provide greater value and support for innovations.
- The promotion of green economy could generate new opportunities for the SME sector, both in the country and on export markets. Eco-efficiency and eco-innovations should be underlined as priorities in the following SME strategies and linked to clear goals and measures.
- In the area of development of human capital, the

---

**Figure 3: SME Policy Index in 2012**

Source: OECD
The research of company’s growth is based on various methodological concepts, which include most representative indicators, such as: increase in total or business income, added value, number of employees, market value of a company, market shares, value of brands, company’s assets, etc. The paper promotes an entirely new methodological concept of measuring the dynamic entrepreneurship in Serbia. Criteria and indicators result from a continual research into dynamic entrepreneurship in Serbia [17]. The research is based on the quantitative analysis of growth of all the companies in Serbia during the period 2005-2010. The methodological framework for studying the dynamic entrepreneurship in 2005-2010 has been based on the following criteria that had to be met by fast-growing companies:

- They had more than 2 employees in 2010 or more than one employee (this criterion refers to entrepreneurs);
- Their business income was higher than EUR 65,000 in 2010 (average business income in economy represents the threshold value);
- Their GVA per employee in 2010 on 2006 was larger than EUR 13,000 (an average GVA per employee in economy represents the threshold value);
- Their enterprise worked continuously over the analyzed period of 5 years;
- Their enterprise had at least the same number of employees in 2010 and higher GVA in 2010 compared to 2006;
- They created at least twice as high average growth of business income than created in the economy (2 * 9.5%) over the period 2006-2010;
- The minimal cumulative profit was registered over the period 2006-2010;
- The state doesn’t hold majority ownership of enterprises (over 50%) on December 31 2010;
- Enterprises dealing with the following activities have been excluded: L – Real estate; O – Public administration and defense, compulsory social insurance; S – Other services; T – Household activities with employers; various goods; U – extra-territorial organizations and institutions.

The listed criteria were met by 2,583 enterprises in Serbia in 2010, which equaled 2.84% of the total number of enterprises in Serbia.

Figure 4: Index of SME policy by areas in 2012

Source: OECD
The methodological process of ascertaining gazelles in Serbia was based on the well-known Birch’s indicator\(^4\), which analyzes changes to the number of the employed, GVA, or their combination. The application of the Birch’s indicator has helped differentiate 300 gazelles in Serbia, which is slightly more than 10% of dynamic enterprises.

Less than 3% of companies generate the entire economic growth in Serbia. Dynamic enterprises are present in all economies, both in the period of growth and in the period of recession. Their maximum number is up to 5% of all the enterprises, they report an above average increase in revenues and employment, and they drive innovation and sustainable development. Each economy should place its focus on these enterprises, encourage them, and continually create conditions for their growth. According to research done over the past ten years, dynamic enterprises have propelled economic growth of Serbia.

During the period 2006-2010 in Serbia 2,583 dynamic enterprises did business, of which 300 were gazelles (most dynamic enterprises) that during the period of a major global recession (since Great Depression in 1929) in 2009 presented an economic buffer zone against the collapse of the economic system; they generated overall economic growth. The potential for growth of dynamic enterprises is above average.

In the period 2006-2010 in Serbia 2,583 fast-growing enterprises: participated in the increase in business income of Serbia with 114.14%, which means that these enterprises covered 14.14% of the loss of the remaining segment of the economy; generated 90% of the increase in value added in Serbia; generated all the profit in the economy; created 33,000 new jobs in the economy (7.45% of overall employment in the corporate sector), while in the corporate sector employment went down -108,000 (see Figure 5).

Almost entire economic growth in 2006-2010 was generated by 2,583 dynamic enterprises, i.e. 2.8% of all

\[ m = (X_{i,t} - X_{i,t0}) \times \left( \frac{X_{i,t}}{X_{i,t0}} \right) \]

where \(X_{i,t}\) and \(X_{i,t0}\) present the number of employees at the end and at the beginning of the period of reference.

---

\(^4\) The Birch’s indicator aims to reduce the impact of a company’s size on the growth indicator, and presents a combination of the proportional and absolute rise in employment:

\[ m = (X_{i,t} - X_{i,t0}) \times \left( \frac{X_{i,t}}{X_{i,t0}} \right) \]

where \(X_{i,t}\) and \(X_{i,t0}\) present the number of employees at the end and at the beginning of the period of reference.

---

**Figure 5: Growth indicators for gazelles, dynamic enterprises and the corporate sector**

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
<th>Business income</th>
<th>GVA</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>73,5</td>
<td>56,4</td>
<td>60,7</td>
<td>-19,6</td>
</tr>
<tr>
<td>2007</td>
<td>73,5</td>
<td>56,4</td>
<td>60,7</td>
<td>-19,6</td>
</tr>
<tr>
<td>2008</td>
<td>73,5</td>
<td>56,4</td>
<td>60,7</td>
<td>-19,6</td>
</tr>
<tr>
<td>2009</td>
<td>73,5</td>
<td>56,4</td>
<td>60,7</td>
<td>-19,6</td>
</tr>
<tr>
<td>2010</td>
<td>73,5</td>
<td>56,4</td>
<td>60,7</td>
<td>-19,6</td>
</tr>
</tbody>
</table>

Source: author’s calculations
the enterprises. This serves to confirm the well-known Birch’s rule that at least 85% of economic growth and job creation in any economy is generated by 5% of enterprises at the most.

Structural and regional characteristics of dynamic enterprises

Dynamic enterprises increased their contribution to economic growth in all dimensions of research. According to all the relevant economic indicators, the impact of 2,583 dynamic enterprises over the period of five years has doubled despite recession tendencies (Figure 6):

- The share of employment rose from 3.9% to 7.5% (from 44,983 employees to 78,025);
- The share of business income rose from 9.7% to 18.7%;
- The share of the gross value added rose from 8.7% to 17.1%;
- Profit increased from 12.2% to 24.5%.

Development of the share of 300 Serbian gazelles within the corporate sector is faster than that of the share of dynamic enterprises – the largest contribution is that of lower unemployment and diminishment of social tensions (300 gazelles in 2006 employed 20,784 people, and in 2010 they had 41,037 employees).

The section structure shows that dynamic enterprises are concentrated in sectors of Trade (1,035 enterprises or 40%) and Manufacturing industry (499 enterprises, i.e. 20%). Negative developments in the sector of manufacturing industry are illustrated by all the indicators: shares in the number of employees, business income, and value added are down. Industrial dynamic entrepreneurs and industrial gazelles are to face even larger challenges than over the five years of reference.

Regional distribution of dynamic enterprises and gazelles is in the shade of economic concentration in the City of Belgrade and South Backa area: of 2,583 dynamic enterprises, 1,584 or 61.3% are concentrated in these two areas. The trend of ever faster economic concentration is registered by all the other indicators of dynamic

Figure 6: Shares of dynamic enterprises and gazelles in the corporate sector

<table>
<thead>
<tr>
<th></th>
<th>DE 2583</th>
<th>Gazelles 300</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>3.90</td>
<td>1.80</td>
</tr>
<tr>
<td>2010</td>
<td>7.45</td>
<td>3.92</td>
</tr>
<tr>
<td>2006</td>
<td>9.65</td>
<td>4.31</td>
</tr>
<tr>
<td>2010</td>
<td>8.71</td>
<td>8.66</td>
</tr>
<tr>
<td>2006</td>
<td>8.65</td>
<td>4.96</td>
</tr>
<tr>
<td>2010</td>
<td>12.24</td>
<td>5.48</td>
</tr>
<tr>
<td>2006</td>
<td>10.60</td>
<td>10.60</td>
</tr>
<tr>
<td>2010</td>
<td>24.50</td>
<td>24.50</td>
</tr>
</tbody>
</table>

Source: author’s calculations
enterprises, and so in 2010 65% of the employed, 72% of business income, 71% of GVA, and 69% of the total profit was accounted for by the City of Belgrade and South Backa areas. In addition, 2/3 of Serbian gazelles operate in these two areas.

Risks

National Competitiveness Decline Trend

Before the outbreak of the economic crisis, economic growth in Serbia had been increasing by 23% per year (IMF) and getting closer to the SEE average. GDP per capita decreased in 2009 and 2010 (on average by 11%) but in 2011 Serbia again saw growth, of 11%, which was not sufficient to get to the level before the start of the crisis (of all the adjacent countries Macedonia and Montenegro managed to achieve this). It should be noted that GDP per capita of Serbia is among the lowest in Europe and almost 6 times lower than the average of the European Union.

The global barometer of competitiveness [35], which includes 114 countries, ranks Serbia 95th, and by GDP per capita of USD 6,081 places it at the foot of the group of 33 countries (Stage 2 – Efficiency-driven economies) that through improvement of efficiency aim for economic growth and an improved competitiveness position overall. Almost all of the countries in the region are in the second stage of development except for Hungary (60) and Croatia (81) that are moving to the group of most robust economies that already includes Slovenia (56) with GDP per capita of USD 24,533. In 2012, Serbia was still one of the least competitive countries in Europe – only Greece is worse ranked than Serbia, while BiH overtook Serbia and currently is at 88th position.

The competitiveness of the Serbian economy has been stagnating for years and structural changes have been delayed, which is why the country fails to reach higher ranks in the global rankings that other SEE countries have. In this stage of development Serbia should strive to develop its own production processes and upgrade the quality of its products through constant enhancement of higher education, professional training of labour, and the ability to use available technologies so that eventually the price of work and the standard of living would go up. However, the prerequisite for boosting efficiency and transiting to innovative development in order to generate high productivity are solid institutions (pillar 1) and competent pursuit of macroeconomic policy (pillar 3), and with respect to these Serbia lags behind other countries a lot. These two pillars, apart from innovations (pillar 12), have registered the steepest drop in rankings compared to the year before.

Table 3: Indicators of Serbia’s international competitiveness

<table>
<thead>
<tr>
<th>Competitiveness pillars</th>
<th>Rank</th>
<th>Value</th>
<th>Index of value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012/2007</td>
<td>EU-27=100</td>
<td>Region=100</td>
</tr>
<tr>
<td>GCI</td>
<td>95</td>
<td>3.87</td>
<td>102.3</td>
</tr>
<tr>
<td>Sub-index A: BASIC REQUIREMENTS</td>
<td>95</td>
<td>4.15</td>
<td>99.1</td>
</tr>
<tr>
<td>1st pillar: Institutions</td>
<td>130</td>
<td>3.16</td>
<td>93.7</td>
</tr>
<tr>
<td>2nd pillar: Infrastructure</td>
<td>77</td>
<td>3.78</td>
<td>139.2</td>
</tr>
<tr>
<td>3rd pillar: Macroeconomic stability</td>
<td>115</td>
<td>3.91</td>
<td>84.9</td>
</tr>
<tr>
<td>4th pillar: Health and primary education</td>
<td>66</td>
<td>5.73</td>
<td>94.9</td>
</tr>
<tr>
<td>Sub-index B: EFFICIENCY ENHANCERS</td>
<td>88</td>
<td>3.83</td>
<td>107.7</td>
</tr>
<tr>
<td>5th pillar: Higher education and training</td>
<td>85</td>
<td>3.97</td>
<td>108.8</td>
</tr>
<tr>
<td>6th pillar: Goods market efficiency</td>
<td>136</td>
<td>3.57</td>
<td>101.1</td>
</tr>
<tr>
<td>7th pillar: Labour market efficiency</td>
<td>100</td>
<td>4.04</td>
<td>104.6</td>
</tr>
<tr>
<td>8th pillar: Financial market development</td>
<td>100</td>
<td>3.68</td>
<td>98.5</td>
</tr>
<tr>
<td>9th pillar: Technological readiness</td>
<td>58</td>
<td>4.10</td>
<td>122.8</td>
</tr>
<tr>
<td>10th pillar: Market size</td>
<td>67</td>
<td>3.64</td>
<td>112.4</td>
</tr>
<tr>
<td>Sub-index C: INNOVATION FACTORS</td>
<td>124</td>
<td>2.96</td>
<td>89.6</td>
</tr>
<tr>
<td>11th pillar: Business sophistication</td>
<td>132</td>
<td>3.11</td>
<td>88.3</td>
</tr>
<tr>
<td>12th pillar: Innovation</td>
<td>111</td>
<td>2.81</td>
<td>91.1</td>
</tr>
</tbody>
</table>

Note: Value – the index maximum is 7; Region – an average of values for Albania, Bosnia and Herzegovina, Macedonia, Croatia, Montenegro, and Serbia

Source: [35]
Serbia is in a very adverse competitive position as according to most indicators it is below the average of countries that belong to the second development stage, which means it is far from the average of EU member states. Unless there is modernization of production capacities, and constant investment in education and promotion of the expertise, Serbia cannot improve its efficiency in some other economic spheres nor can it reach a higher development degree. Human capital and technology are two key factors that in the long run determine sustainable economic growth and a competitive position of an open market economy.

Some of the 13 most critical areas for raising competitiveness are (see Table 4): protection of small shareholders, scale of market domination, brain drain, efficiency of legal procedures, and efficiency of the anti-monopoly policy.

Table 4: Serbia’s most critical competitive fields

<table>
<thead>
<tr>
<th>Competitive fields</th>
<th>Global rank out of 144 countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection of small shareholders’ interests</td>
<td>140</td>
</tr>
<tr>
<td>Law efficiency in legal procedures</td>
<td>137</td>
</tr>
<tr>
<td>Efficiency of state corporations</td>
<td>136</td>
</tr>
<tr>
<td>Burden of government regulation</td>
<td>134</td>
</tr>
<tr>
<td>Extent of market domination</td>
<td>139</td>
</tr>
<tr>
<td>Efficiency of anti-monopoly policy</td>
<td>137</td>
</tr>
<tr>
<td>Strength of local competition</td>
<td>136</td>
</tr>
<tr>
<td>Purchaser sophistication</td>
<td>136</td>
</tr>
<tr>
<td>Brain drain</td>
<td>139</td>
</tr>
<tr>
<td>Worker-employer working relation</td>
<td>136</td>
</tr>
<tr>
<td>New technology in a company</td>
<td>136</td>
</tr>
<tr>
<td>Quality of competitive advantage</td>
<td>136</td>
</tr>
<tr>
<td>Readiness to delegate powers</td>
<td>136</td>
</tr>
</tbody>
</table>

Source: [35]

Sluggish improvement of the business environment

In terms of conditions for doing business, Serbia is ranked 86th in the rankings of 185 countries [35]. Of all the European countries, Serbia is better positioned only than Ukraine (137), BiH (126), Russia (112), and Malta (102). Although in 2011 Serbia made some positive reform steps (it promoted conditions for doing business in segments of starting a business, enforcing contracts, and resolving insolvency), Serbia has not seen a marked improvement in the business environment whereas some countries managed to promote operations and alleviate effects of the global economic crisis through faster structural reforms (see Table 5).

The lowest rank and 179th position Serbia occupies with respect to the process of obtaining licences and various permits (for construction, electricity access, telephone, permits from various inspectorates, etc.). Although it improved its performances in this area (the number of procedures went down by 2, the number of days by 10, and costs by 11%), other countries are developing much faster with respect to creating conditions for attracting potential investors, and thus the low rank is further lowered. A very low rank of Serbia is induced by high costs of issuing construction permits although they have a declining trend, viewed by years. While in the EU on average it takes 99% of GNI per capita (most in Ireland, 626%, and least in Hungary, 6%), in Serbia entrepreneurs should pay a 14 times higher value than the value of GNI/capita or 1,427% (only in 11 countries located out of Europe they face higher costs), while in countries located out of the EU costs stand at: in Montenegro 1,170%, in Bosnia 1,102%, in Croatia 573%, and in Macedonia 518% of GNI per capita.

Table 5: Poorer conditions for doing business

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS CONDITIONS, rank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dealing with construction permits, rank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedures (number)</td>
<td>18</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Time (days)</td>
<td>279</td>
<td>269</td>
<td>1</td>
</tr>
<tr>
<td>Cost (% of income per capita)</td>
<td>1,603.80</td>
<td>1,427.20</td>
<td>4</td>
</tr>
<tr>
<td>Paying taxes, rank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments (number)</td>
<td>145</td>
<td>149</td>
<td>4</td>
</tr>
<tr>
<td>Time (hour)</td>
<td>279</td>
<td>279</td>
<td>0</td>
</tr>
<tr>
<td>Income tax (%)</td>
<td>..</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td>Taxes and contributions for employees (%)</td>
<td>..</td>
<td>20.2</td>
<td></td>
</tr>
<tr>
<td>Other taxes (%)</td>
<td>..</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>Total tax rate (% profit)</td>
<td>34</td>
<td>34</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: [35]
Systemic problems of entrepreneurship development in Serbia

- **Incomplete institutional setting and regulations** – major problems lie in the domain of high total fiscal liabilities; unfair treatment in public procurement processes; a failure to address the issue of monopoly; problematic claiming of liabilities; red tape and an inadequate taxation system; complicated and costly administrative procedures, particularly when it comes to the issuing of licences; resolving property and legal issues, etc. An important step taken in this direction is cancellation of a large number of parafiscal taxes;

- **Inadequate knowledge and skills of entrepreneurs and their employees** – a dearth of staff with specific skills as well as insufficient expert training of the management to resolve strategic and/or operative problems with the view to maintaining continuity of operations;

- **Unfavourable conditions for funding and inadequate forms and the volume of financial support** – banks that offer expensive loans and short terms of loan repayment are dominant. There is a lack of developed micro-credit institutions on the national and regional level, but also of other financial instruments designed to suit true financial needs of SMEs and their economic strength;

- **Undeveloped programme-based access to funds** – cooperation with private investors such as business angels; programmes of loans or loan guarantees; mezzanine loans to provide capital for innovative SMEs; capitalization of the funds of venture capital; tax incentives, etc.;

- **Poor liaison with large enterprises**, and, consequently, an untapped chance for dynamic development of the SME sector as a partner (supplier, subcontractor) of large business systems, i.e. insufficient exploitation of advantages offered by the SME sector in relation to large enterprises in some production segments that require flexibility and a speedy technical and technological/market adjustment;

- **Inadequate incentives for introducing modern technologies, innovations, standards, quality control, etc.**;

- **Insufficient stimulus for internationalization and a lack of information on markets**;

- **Poor promotion of development of skills in enterprises** – management skills, research and development skills and skills related to realizing exports by providing relevant trainings (by granting funds for private services and/or by directly providing trainings by means of training centres and other infrastructure).

**Conclusion**

*Entrepreneurship is a force that exploits other resources to satisfy market demand, an ability to create and build up something practically out of nothing. (Chouhan, 2012)*

Changes to the economic structure will be increasingly dynamic and competitive, new companies will be set up ever faster, while the impact of old ones will diminish, and terms of entrepreneurship and innovations will be redefined. Sustainable development will be faced with the following trends in the next decade:

- Speed and uncertainty will be dominant;
- Technology will make the greatest impact on the market game;
- Demography will set the pace of business processes;
- Loyalty will erode;
- Work will be done at any place and at any time;
- Employment in the usual sense of the word will disappear.

Growth factors of dynamic enterprises will ever more depend on the strategy for developing knowledge systems or knowledge spirals, whereby learning happens within the company’s structure. Entrepreneurs are not gamblers and they strive to reduce the risk to a minimum. In order to raise productivity, an entrepreneur must combine resources skillfully, which requires continuous intensive learning (including collective learning, [10]). Start-up companies must learn and minimize the risk. A structured access to knowledge management and a strategic access to knowledge design through initiatives based on the mapping of critical knowledge will be increasingly needed [38].

The main tenet of dynamic entrepreneurship relates to proper matching of resources and abilities with
possibilities [21]. A subjectivist theory of entrepreneurship will be ever more cited – it focuses on individuals, their knowledge, resources, and skills, as well as processes of discovery and creativity, the heart of entrepreneurship. A fundamental importance for development of dynamic entrepreneurship is recognized in creativity, perception of entrepreneurs, and personal knowledge. The need for a specific entrepreneurial knowledge should be differed from general knowledge [12]. A pragmatic access to the theory of learning shows that the content of knowledge and the process of studying (i.e. acquiring knowledge) are inextricably linked [22].

Given their development potential of job creation, dynamic enterprises draw attention not only of economic scholars but also of economic policy creators who have understood their role in diminishing the rate of unemployment, and boosting economic growth and development. Small and medium-sized enterprises are most propulsive enterprises [29, p. 53], and over the last five years of the 20th century in the EU they created more jobs than the largest ones lost, whereby they saw the largest increase in income and profit.

Research results show that acceleration of economic growth in Serbia can be achieved through stimulation of dynamic entrepreneurship. It is necessary to double the number of dynamic entrepreneurs that boast growth potential, to at least 5,000, i.e. to 5% of all the enterprises in Serbia. It is necessary to create a stimulating environment for growth and development of dynamic entrepreneurship (excessive administration, fiscal burdens) and internationalization. It is also of vital importance to promote trust in entrepreneurship and institutions that would facilitate investment to potential entrepreneurs.

Economic growth of any economy is based on the growth of dynamic enterprises and gazelles; economic policy fosters their growth and creates conditions for their growth. Studies show that over the past decade dynamic enterprises and gazelles have been the backbone of growth and development. Research results show that:

- Dynamic enterprises boast an above average growth.
- Dynamic enterprises report above average financial indicators.
- Dynamic enterprises report above average employment.
- Dynamic enterprises are innovative and sustainable.

Research into dynamic entrepreneurship in Serbia has shown how much these enterprises have contributed to economic growth of Serbia: almost entire economic growth in 2006-2010 was generated by 2,583 dynamic enterprises, i.e. 2.8% of all the enterprises. These enterprises generated 90% of the increase in value added in Serbia, all the income in economy, and created 33,000 new jobs in the corporate sector.

Fast-growing enterprises will be raising employment in Serbia in the years to come too. In the structure of dynamic enterprises medium-sized enterprises (259) raised employment 2.2 times, large enterprises (41) 1.9 times, and small enterprises 1.6 times. In the period of reference, dynamic enterprises raised employment by 33,000 new jobs overall (the growth rate at 74%).

In enterprises that grow fastest, i.e. 300 gazelles, employment doubled, being most apparent in medium-sized gazelles (2.4 times) and large gazelles (2 times). By comparison, in the period 2006-2010 in overall economy employment fell by 107,000 persons.

The previous research shows that by far the most important thing is to establish business environment and legislation that stimulate growth, reward achievements, motivate entrepreneurship through fiscal incentives, and create long-term stable conditions for its development. Of course, an entrepreneur is the most important agent, and so are his creativity and innovativeness, and his vision, as well as the business strategy that, with most of the fast-growing enterprises, is targeted at buyers, competitiveness on the domestic and foreign market, and liaisons and networking. The next segment of issues that is of utmost importance for a dynamic entrepreneur is management system that fosters growth and innovativeness and implements methods towards motivating employees. From the perspective of the employed, dynamic enterprises are safe and difficult to handle at the same time, as each individual must be ready for changes and constant advancement. The most important factor is the innovativeness factor regardless of whether a dynamic enterprise belongs to the group of high-, medium- or low-tech enterprises; another important factor is dynamic entrepreneur’s readiness to take a risk. From the aspect of funding, what matters is
development of financial planning and management in a dynamic enterprise.

Economic policy creators should pay special attention to incentive mechanisms for growth and development of dynamic entrepreneurship:

1. Defining incentive mechanisms for addressing key development problems of enterprises in the stage of growth and development, based on practices of highly developed economies of the OECD and the EU that have integrated similar mechanisms into the system for stimulating the development of dynamic enterprises and gazelles. In EU states this is a part of a wider process of implementation of the Lisbon strategy for providing growth and employment and creating the entrepreneurial, knowledge-based society.

2. Regulatory reforms should target not only the removal of barriers for the establishment of new companies, but also creation of favourable conditions for growth of dynamic enterprises. Apart from fiscal incentives for small enterprises, it is essential for collection of tax revenues to be brought in line with the company size. The earlier approach was to find opportunities to prevent the loss and bankruptcy, while at the moment losses and bankruptcy are accepted as a natural part of the market mechanism. Still, other ways to reduce their economic and social cost are being devised (i.e. by providing the “second chance”).

3. Apart from the policy of support for development of the entire SME sector (by improving the business environment that will stimulate the opening of as many new entrepreneurial companies as possible), a special emphasis should be put on the policy of stimulating dynamic entrepreneurship that is dedicated to the creation of an environment conducive to growth of entrepreneurial companies and the one that will encourage gifted people with a clear vision of the future to start their own business. The advantage in providing the access to resources should be given to dynamic entrepreneurs that are promising in terms of high growth.

4. An altered way of funding (public sources of funds, various forms of grants, subsidies, and soft loans), relying on the combination of public and private sources, namely loans for research and development and grants for innovations, engagement of venture capital, and the issuing of securities.

A change to the structure of services delivered by institutions for the non-financial support, and that from basic (standard) counseling for setting up a business, business planning, and the doing business of small companies, to counseling based on experience in risky funding, strategic planning, support for the inclusion into supply chains of large companies, internationalization, and growth and development of enterprises.

References


---

**Edvard A. Jakopin**

is Assistant of Minister of Regional Development and Local Self-Government, Head of the Department for Strategic Analysis and Development Research. During the period 2001-2011 he was Director of the Republic Development Bureau. He obtained all the academic titles (BSc, MSc, PhD) at the Faculty of Economics in Belgrade. He has written numerous scientific papers in the field of macroeconomics, economic development planning, structural changes, competitiveness and regional modeling. He has been the project team leader in various research projects and studies: the National Strategy for Economic Development of Serbia 2006-2012, the Strategy for Regional Development of the Republic of Serbia 2007-2012, Industrial Policy of Serbia 2011-2020, etc.

He is national representative at the European Association of Development Research and Training Institutes, and since 2004 he has been a member of the EADI Executive Board. He is a member of the Board of the Serbian Association of Economists and an associate member of the Scientific Society of Economists.