Jovan Filipović

Faculty of Organizational Sciences, University of Belgrade, Serbia

iovanf@fon.rs

Srečko Devjak

Faculty of Administration, University of Ljubljana, Slovenia

srecko.devjak@vus.uni-lj.si

Goran Putnik

Department of Production and Systems Engineering, University of Minho, Portugal

putnikgd@dps.uminho.pt

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Knowledge Based Economy: The Role of Expert Diaspora

Summary: Diasporas stand out as an economic or cultural avant-garde of transformation. This is especially true for academic and other intellectual Diaspora communities, because science and knowledge creation are global enterprises. Proclivity of knowledge workers to move in order to improve and absorb transnational knowledge through Diaspora networks might be an essential quality of an emerging national economy of a developing country. The article treats the role of expert Diaspora in knowledge based economy, innovation and talent management. Besides presenting the essentials of knowledge based economy and innovation, it discusses the role of expert Diaspora in science, technology and innovation (STI) capacity building. Also, the article emphasizes the importance of leadership for talent and its implications for Diaspora. Using WEF statistics, it illustrates negative consequences of the sad policy of "Chaseaway the brightest and the best" for innovative capacity, competitiveness, and prosperity of nations.

Key words: Expert diaspora, Knowledge based economy, DVU (Diaspora Virtual University), STI (Science, Technology and Innovation) capacity building, Leadership for talent.

JEL: 015, 032, 033.

According to the World Economic Forum (Klaus Schwab 2010, p. 4), national economic competitiveness is defined as "the set of institutions, policies, and factors that determine the level of productivity of a country". Clearly, more competitive economies are usually able to generate better income for their people.

Sustainable development, one of the three basic consensual values of the international community (the other two being human rights and poverty alleviation) is a development paradigm which affirms the equal importance of economy, society, and natural environment, promoting growth of all types of capital, but not at the expense of one another (Asian Development Bank (ADB) 2007).

As a means for creating value, knowledge should be configured to advance all three value domains, giving rise to a new, all encompassing development model instrumental in balancing economic and social objectives. The above mentioned three value domains of sustainable development, as ADB (2007, p. 10) claims, should be approached concurrently, developing and deploying "the three categories of knowledge assets: human capital through education, structural capital through innovation, and stakeholder capital through building of networks". Obviously, members of intellectual Diaspora and Diaspora in general can make significant contribution to all three categories of knowledge assets.

In an attempt to explain innovation, standard studies have focused for the most part on features of organizations and individuals in the organizations. These features are primarily the size of the organization and innovativeness. However, these studies failed to recognize that innovation is inherently social in nature. This stems from the fact that organizations (countries) gain access to external resources (such as different communities of practice and knowledge communities in which experts in Diaspora participate) through relations with other organizations and individuals (again experts in Diaspora). Therefore, networks of social relations among actors (individuals and organizations) may be important factors influencing innovation. On the other hand, innovation may influence networks of social relations as well.

1. Knowledge Based Economy

Knowledge-based economy refers to economy based on an entirely different value creation philosophy than the conventional industrial economy and where knowledge is the primary production resource instead of land, capital and labor (Peter F. Drucker 1995). Knowledge, with the possibility of spreading around the world almost instantly and attributes of "public good" and rich replication opportunities has "become the key economic resource and the dominant source of competitive advantage" (Anssi Smedlund 2008, p. 63). In knowledge based economies, knowledge is an effectual vehicle for value creation, both economic and social.

Knowledge society is inherently innovative and life-long learning, sustained by a community of experts that reside both in the Motherland and Diaspora, who use knowledge to "empower and enrich people culturally and materially, and to build a sustainable society" (World Science Forum 2003). In a nutshell, a knowledge society is the one in which everyone can "create, access, utilize, share and disseminate information and knowledge, so that individuals, communities, and peoples are empowered to improve their quality of life and to achieve their full potential" (Civil Society Declaration 2003).

To facilitate establishment of such a knowledge society or economy, the environment for knowledge sharing has to be favorable. If the highest effectiveness is to be reached, knowledge, as a "global public good", should be shared without distribution inequities (Joseph Stiglitz-the 2001 Nobel Laureate for Economics, as cited by Ravi S. Sharma et al. 2008). As corroboration to this initiative, we quote Koichiro Matsuura (2007, p. 7), UNESCO's Director-General, who states: "An economy based on the sharing and diffusion of knowledge provides an opportunity for emerging nations to increase the well-being of their populations." Knowledge sharing is certainly an effective way to both fight poverty and create wealth.

Nominally, all countries have access to the same pool of knowledge, but the extent to which they take up the challenge of recognizing and exploiting this treasure determines the level of their success. Precisely, it is their decisiveness to take advantage of the vast potential of transnationally networked experts, both from the Motherland and the Diaspora. Matsuura (2007, p. 7) claims that in network societies, part of which are DKNs (Diaspora Knowledge Networks-programmes supported by UNESCO), exchange and sharing of knowledge are significantly facilitated. Those

societies establish such a milieu that is particularly propitious to knowledge, innovation, training, research and scientific entrepreneurship.

Sam Turner (2009) define Diaspora Knowledge Networks as "social structures that are capable of identifying, capturing and mobilizing skills and knowledge produced in one context for application and use in another context". These structures, established for the benefit of their home countries, have been created by expert Diaspora members who, through mobility on the transnational education and job market maps, have gained not only new knowledge and skills but also established valuable professional and social contacts. Such transnational peer networking may have still been possible had these overachievers remained in their home countries but most probably not as extensive and as rich and fertile. As such, mobility of high-skilled individuals might be a beneficial process that does not inevitably means a loss of skills and knowledge for sending countries. On the contrary, it might even augment and breed the intellectual and social capital of migrants, which may benefit home countries through knowledge dissemination.

As Turner (2009) notes, knowledge, expertise and skills that intellectual, expert and entrepreneurial Diaspora put at disposal of their Motherlands is not the only thing that makes them remarkably valuable for their home countries, but it is also their position, formal ranking, credibility and reputation as well as access to modern equipments and facilities non-existent at home and guidance to international markets and funding programmes. Particularly, these eminent Diaspora members can contribute as source of venture capital, as counselors in business matters, as members of caucus to advocate, agitate, lobby or to vote collectively on particular policies relevant to home country's national interests, by providing language services, cultural know-how and acting as brokers to establish collaborative scientific projects and business connections that facilitate international trade and entrepreneurial activities.

While living and working abroad, members of intellectual Diaspora are being exposed to a wide range of knowledge and in position to acquire a profound understanding of issues which are of vital importance for their home countries. That way, they can help their countries to better comprehend and manage culturally diverse and changing conditions in a highly turbulent world, which necessitates both global awareness and local sensitivity (Ariane B. Antal 2001). By transferring from the host land, the required institutional resources, technologies, and know-how; by building country-specific knowledge and relationships; as well as educating and nurturing the local talent which is the key to long-term achievements and profitability, these expert Diaspora members play the crucial role in the process of converting opportunities into sustainable prosperity for their homeland (Yan Hsieh, Johanne Lavoie, and Robert A. P. Samek 1999).

On the other hand, circumstances are not always favorable for the experts in Diaspora who want to contribute to development of the Motherland. Antal and Jing Wang (2006) reported a few very significant factors, resulting from empirical research, about the experiences of expatriate managers after their return to their homeland. The most significant factors hindering the chance of expatriates to apply the expertise acquired abroad in their home countries are:

- (i) Dearth of interest, inability, or reluctance of their compatriots to comprehend the relevance of knowledge generated in a different context;
- (ii) Absence of mechanisms for active gathering of expertise from the returnees and its conversion into applicable and functional knowledge for the new context;
- (iii) Deficiency of the apposite job that matches the experience and expertise of the returned expatriates.

2. The Role of Expert Diaspora in Science, Technology and Innovation (STI) Capacity Building

Among the most pressing priorities of the governments worldwide is the building of government capacity for STI (Science, Technology and Innovation) policy making and enhancement of donor capacity to design successful STI capacity building projects. Herein, it is important to emphasize the role of Diaspora in both influencing governments to tailor just, smart and practical STI policies, in which Diaspora is represented, and to recognize Diaspora, especially its intellectual and entrepreneurial parts, as potential donors, brokers and participants in the projects. Capacity building in science, technology and innovation (STI), as strategic elements for economic growth and social well-being, is a precondition for comprehensive and sustainable development and poverty reduction. Specifically, these elements were counted among the prerequisites of industrial development of Serbia (Edvard Jakopin and Jurij Bajec 2009).

STI capacity building is aimed at two types of capacity (Figure 1) (Alfred Watkins and Michael Ehst 2008): (i) to acquire and use existing knowledge and (ii) to produce and use new knowledge. It occurs at four distinct levels: (1) Government policy making; (2) Labor force skills and training; (3) Enterprise innovation; (4) Education and training institutions and research institutes.

2.1 Types of STI Capacity and How Diaspora Contribute in their Building

The two types of capacity are as follows:

(i) To acquire and use existing knowledge - Most of the knowledge that countries, being developed or developing, need for their further growth and improvement is, at least conceived, if not fully developed somewhere else. It is unlikely that any country will be able to create through national R&D system nearly as much knowledge and especially of required quality, to satisfy its own needs. Therefore, irrespective of country's level of development the major way to structure its STI capacities is through acquiring, adapting, diffusing, and adopting existing knowledge. The information and communication technology (ICT) are only a technical precondition, but they nearly do not cover the entire spectrum of the infrastructure "needed to tap into the existing pool of global knowledge" (Watkins and Ehst 2008, p. 13). An important agent in STI capacity building is Diaspora, which contribution is of vital importance in each of the phases of this process, starting with how to identify, then find, acquire existing knowledge created outside the country, adapt it for local use, diffuse it throughout the country, and adopt it locally.

(ii) The capacity to produce and use new knowledge via R&D, which involves capacity to perform both high-level basic research or discover novel ways of solving specific problems of local relevance. In both scenarios, the role of Diaspora is irreplaceable, either as the direct participant in the research, or as convener and broker for establishing partnerships with leading global R&D organizations.

2.2 Levels of STI Capacity Building and the Role of Diaspora

STI capacity building occurs at four levels (Watkins and Ehst 2008).

- 1) The capacity of government to formulate coherent STI policies and link them to discrete development strategies, including Diaspora policy.
- 2) The capacity of the workforce to engage in more knowledge-intensive production. This capacity includes direct involvement of Diaspora members as well as their contribution to both the supply of skilled workers (so that enterprises see the country as an appropriate location for skill-intensive activities) and the demand for skilled workers (so that investments in education and training do not result primarily in brain drain).
- 3) The capacity of enterprises to use new and existing knowledge to innovate, and to design, produce, and market more knowledge-intensive, value added goods and services. Diaspora contributes both to understanding of relevance of greater enterprise innovation and the diffusion of technology from outside the country to enterprises inside the country, as well as to catalyze operationalization of these processes.
 - 4) Education, vocational training, and R&D institutes.

Diaspora will help transformation of these institutions into "centers of excellence and transmission mechanisms for global knowledge", which will then became the driving force of economic growth.

2.3 National S&T Learning and the Role of Expert Diaspora

According to United Nations Conference on Trade and Development - UNCTAD (2006, p. 61), productive capacities are defined as "the productive resources, entrepreneurial capabilities and production linkages which together determine the capacity of a country to produce goods and services and enable it to grow and develop". Watkins and Ehst (2008, p. 70) claim that in order to build productive capacities through usage of STI, we need to develop national technology learning strategies to "increase access to, and effective use of, foreign technology, as well as to blend modern and traditional knowledge and create linking institutions".

National S&T learning is defined as the "learning process happening at all levels of national economies from the level of individual residents to the level of firms, industries, sectors, and governments, by which countries absorb and disseminate existing S&T knowledge as well as generate and process new S&T knowledge at the global technological frontier", where S&T knowledge encompass not only "scientific and engineering knowledge, but also economic, managerial, and institutional knowledge that is required for successful use of more technical knowledge" (Tatyana P. Soubbotina 2006, p. 7).

Diaspora virtual university (DVU) is a place where new solutions are created through actualization of potential knowledge of a nation (Diaspora and Motherland experts with transnational experience) and where old solutions are reconsidered and redefined through the process of virtualization. It is an emerging transnational community of identity creating the conditions for healthy, sustainable, and life-enhancing local communities, culture, and economy to flourish and evolve.

The role of the DVU in the process of National S&T learning is illustrated in Figure 1, which depicts the DVU contribution to both S&T learning capacity and S&T learning opportunities. Through its activities, DVU funnels education, R&D, S&T cooperation, licensing, standardization, accreditation, capital imports, inward FDI and other important activities and channels them into S&T learning opportunities. Similarly, DVU employing its knowledge generation absorption capacities play a crucial role in the nations' S&T learning capacity building. Michael E. Porter (1990) claims that competitiveness, driven by ability to innovate and upgrade, exists not only among organizations, but also among nations.

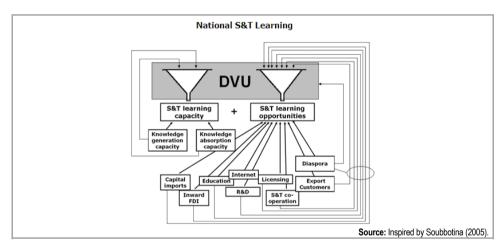


Figure 1 DVU within the Framework of National S&T Learning

3. The Role of Expert Diaspora Innovation and Innovative Capacity

Today's economies are based on information, creativity, innovation and collective intelligence. Rising prosperity and national well-being require that hearts, minds, and spirits of a nation come together to address shared opportunities and challenges and utilize the full creativity, talent and all kinds of available capital located in the Motherland and Diaspora. As a result, the palette of trust, networks, options, ideas and energies we employ expands beyond national borders, and new qualities emerge from the synergies among participants from both the Motherland and Diaspora.

Knowledge society is inherently an innovative and life-long learning society, having at its disposal academics, researchers, engineers and other experts, both from Motherland and Diaspora, as well as R&D institutions and companies, that are net-

worked nationally and transnationally and "engaged in research and in production of high-technology goods and service provision" (World Science Forum 2003). They all together constitute a national innovation-production system, itself transnationally (to a large extent through its Diaspora) integrated into knowledge production, diffusion, utilization, and protection networks, through which, different nations have the opportunity to access the body of global knowledge.

Henry W. Chesbrough (2003) claims that "Open innovation is a paradigm that assumes that... (organizations) can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology". Of particular significance to this notion is the role of the organization's external geographic-societal spatial configurations and institutional context in defining the fields of actual and virtual knowledge that the organization can act on in pursuing an Open Innovation strategy. On a national level, an adoption of this strategy creates opportunities for developing countries to use a vast array of possibilities offered through partnership with its Diaspora, which has a transnational and transdisciplinary access to a widely distributed sources of knowledge creation. As a response to the increased demand for innovation, the traditional form of the linear value chain is yielding its place to the new concept of value networks, or "constellations" (Richard Norman and Rafael Ramirez 1993).

All sectors of nation's economies and societies are required to be open to innovation, entrepreneurship, and the generation of useful knowledge. The ongoing century is saturated with promises to bring more change, more complexity, more competition and, as always, new opportunities. The forces compelling or propelling them include the economy, technology, and globalization.

Every country's prosperity and economic performance are based to a high degree on knowledge, skills and ability to innovate. At the same time they are new impetus for growth and innovation. Although efficiency and control are still important, innovation, creativity, flexibility and timing occupy the focus of attention of managers and decision makers. According to the World Economic Forum (Schwab 2010), countries pass through three stages of development: (a) Factor driven; (b) Efficiency driven; (c) Innovation driven. For the sake of comparison, a list of countries/economies at each stage of development is included here (Figure 2). Particularly, a radar diagram, with 12 pillars of competitiveness, comparing Serbia and Slovenia is also shown in Figure 3.

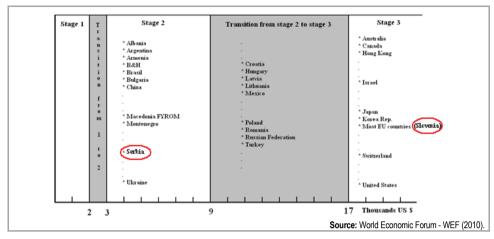


Figure 2 Countries/Economies at Different Stages of Development

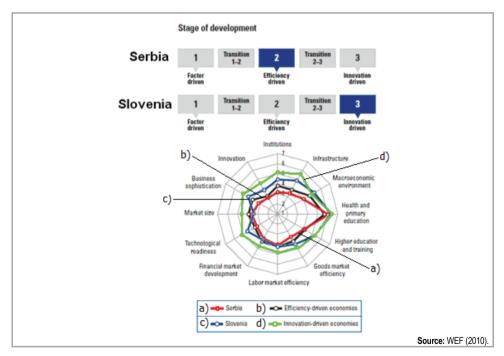


Figure 3 Radar Diagram, with 12 Pillars of Competitiveness, Comparing Serbia and Slovenia

3.1 Defining Innovation

Simply put, innovation is a new way of doing things, and doing of new things. Organization for Economic Cooperation and Development - OECD (1999) defines innovation as any new knowledge that is introduced into and utilized in an economic or

social process. Innovation may refer to incremental, breakthrough and transformational changes in thinking, products, processes, or organizations.

Peter M. Senge (2005) believes that the generator of an increasing need for innovation is the increasing level of complexity created around the world and a rapidly mounting number of problems that exceeds the capacity of existing institutions. In fact, the ability to innovate has become a key to success, and for some, a core survival competence in a fast-moving global economy.

An innovation system is defined as a "set of interrelated agents, their interactions, and the institutions that condition their behavior with respect to the common objective of generating, diffusing, and utilizing knowledge and/or technology" (David Spielman 2005, p. 12). A national innovation system (NIS), a concept that was born in the 1980s to describe the significance of innovation for the national economy, as perceived by Markus Balzat and Horst Hanusch (2004, p. 197) is "historically grown subsystem(s) of the national economy (and societal system) in which various organizations and institutions interact with and influence one another in the carrying out of innovative activity." Herein, societal means "Of or relating to the structure, organization, or functioning of society" (Houghton Mifflin 1995). Sometimes innovation means preventing things from happening (change prevention) or retaining status quo. If a nation, through its DVU, recognizes that certain trends are not favorable it should, as an activity of NIS, reject trendy, modish or otherwise imposed changes. In other words, in this context, innovation means being innovative in choosing the right path. The pioneer in the area, Chris Freeman (1987) stresses the role of both public and private institutions in creation, shaping and dissemination of new technologies, including the social ones.

The NIS offers possibilities for a more comprehensive view of a country's innovation system, based on the notion of non-linear and multidisciplinary innovation processes. It should encompass research and development endeavors by business firms and public sector as well as "the determinants of innovation such as, for instance, learning processes, incentive mechanisms" and efforts to identify, retain, attract and motivate talent and skilled labor, both in the Motherland and Diaspora (Balzat and Hanusch 2004, p. 198).

Practicing innovation is not the sole responsibility and privilege of any institution, rather, different institutions, enterprises and individuals must co-operate and interact in order to establish and apply an effective and efficient national innovation system (NIS). Alberto Rodríguez, Carl Dahlman, and Jamil Salmi (2008) suggest that innovation should not be understood solely as invention or the first global use of a new technology, but rather a novel application in a specific setting. Lagging behind developed countries, developing countries should think less about inventions of sophisticated technologies but, instead, concentrate on knowledge and technology that are within their reach, which can be significantly expanded if they are to count on their intellectual Diasporas.

The report by Rodríguez, Dahlman, and Salmi (2008) proposes three approaches to innovation, that can be applied separately, or as a combination: (i) Creation and commercialization of new knowledge and technology (with the help of Diaspora); (ii) Acquisition of knowledge and technology from abroad (for example

through the Diaspora networks) for local use and adaptation; (iii) The dissemination and effective application of knowledge and technology (whether domestically created or acquired from abroad, again through Diaspora networks) that is already available in-country though not broadly utilized.

John Houghton and Peter Sheehan (2000) stress that policies about science and technology, industry and education, (as well as skilled Diaspora), need to reflect on the role and significance of innovation systems, the requirement for infrastructures, and incentives for investments of different kinds of capital in those systems. A number of incongruent initiatives, programs and proposals, promoted by government ministries or agencies, cannot be an alternative for a well-thought and sound innovation policy. The definition of innovation policy adopted in this paper is: "a set of policy actions to raise the quantity and efficiency of innovative activities", where "innovative activities" refer to the "creation, adaptation and adoption of new or improved products, processes, or services" (Robin Cowan and Gert van de Paal 2000, p. 9).

Although creation of an innovation is a very demanding Endeavour, its adoption might be even more difficult to achieve. Adoption of an innovation, according to (Everett M. Rogers 2003, p. 21), is "the decision to make full use of an innovation as the best course of action available". The role of expert Diaspora members may be of crucial importance for both innovation creation and adoption. They are the source of precious potential, new knowledge, necessary to create innovation, but their expertise to choose the right course of action and, moreover, convince the others to follow them is even more appreciated.

4. Leadership for Talent and Repercussions for Diaspora

Talent is defined as: "Natural endowment or ability of a superior quality" (Free Online Dictionary¹). The word talent comes from a Greek word that also tells us about something of great value. This means that talent is a natural ability or quality, possessed by a person in a particular field or activity (Chris Phillips 2008), one that cannot be taught. That is why talent is even more precious than knowledge and why it is recognized as a kind of a "gift of nature". On the other hand, talent management, which is emerging as a fundamental element of leadership, is a complex set of processes aimed at identification, retainment, attraction and motivation of talent.

We are witnessing increased demand for talent in almost all areas of human endeavors. Talent is now being seen as the only "true and sustainable competitive advantage" (Phillips 2008, p. 26), but far more difficult to harness than physical or even information assets. As Philips (2008, p. 26) writes, "the war for talent heats up" and "the competition for talented employees is at an all time high". Talent will, what many believe, drive economic and social performance in the future.

¹ Free Online Dictionary.

http://www.freeonlinedictionary.com/eflpgg/dictionary/pid18568/D36862/C22318/provGOOD (accessed September 20, 2011).

Rich Karlgaard (2003), publisher of Forbes magazine, asserts that the most valuable natural resource of this century is brains. He adds "Smart people tend to be mobile. Watch where they go! Because where they go, robust economic activity will follow". Clearly, many of them engage in transnational endeavors, such as creation and operation of expert Diaspora networks.

A recent study by Stephan Manning, Silvia Massini, and Arie Y. Lewin (2008, p. 48), aimed at exploring the means of gaining access to a pool of science and engineering (S&E) talent in developing countries indicated that, "while the pool of domestic S&E talent in Western countries has been shrinking in recent years, due to declining interest in S&E careers, ageing populations, and inadequate secondary education, new S&E clusters providing highly skilled talent are emerging in developing countries." As an alternative to finding suitable S&E talent on their own soil, advanced economies will increasingly exploit "seemingly unlimited availability of such talent in emerging economies" (Manning, Massini, and Lewin 2008, p. 35) which, evidently, results in brain drain. This trend was also reported for some of the less developed EU countries, for example Portugal (João Sousa Andrade and Adelaide Duarte 2011). On the other hand, Constantin Gurdgiev et al. (2011) report that a reversal of net outward emigration toward strong inflow of returning emigrants and new immigrants had positive effects on Ireland's economy, over the period of 1989-1999

Therefore, in the coming years, developing countries, Serbia certainly being one of them, will have no choice but to seriously rethink their talent and performance strategies and policies. Emphasis on talent is relatively new territory for most developing countries, and thus offers a palette of prospects and opportunities. Well-tailored, resonant talent strategies and policies can truly differentiate one from other developing countries. In the first place, countries "need to adapt their mindset and processes if they are to" (Phillips 2008, p. 26) identify, retain, attract and motivate the next generation of talent. Pervasive adoption of a talent management mindset and utilization of modern technologies are the key to success of developing countries in their efforts to transform "brain drain" into "brain gain" through "brain chain" (networks), by no means neglecting the importance of "brain retain".

Terms like "scientific" (Jean-Baptiste Meyer and Mercy Brown 1999; Nalini P. Anand, Karen J. Hofman, and Roger I. Glass 2009) "intellectual" (M'hammed Sabour 1995; David Kaplan 1997; Brown 2002), "knowledge" (Meyer 2006; Hongxing Cai 2009) and "expert" (Terry Edwards and Siriluck Kedseemake 1997; Jennifer M. Brinkerhoff 2008) Diaspora have emerged in the literature, mainly to describe networks, sometimes communities, of self-organized professionals and scientists scattered around the globe who work for the prosperity of their home country, mostly in science, technology, and education or through entrepreneurial endeavors. They also make efforts to promote the scientific and economic development of their home countries. These networks may be officially tied to national governments or be fully independent.

4.1 A Sad Policy of "Chase-Away the Brightest and the Best"

The strong relationships between talent, its retention and attraction, and innovation, as a precondition for prosperity, has been proven in developed countries. For example, Phillips (2008, p. 28), writes about the increase of "the criticality of attracting and retaining the best people... and the necessity to manage talent holistically on a unified and business-centric talent management platform". Looking at talent from a successful country prospective, it is not incidence that he puts the word attract before the word retain. Developing countries perception of talent management is quite different; they first need to identify and retain their brightest people within its "innovation mileau" and then attract those ones who left it or worked outside it. Usually, the processes of retention and attraction need to go simultaneously, combined with motivation, because they are inseparable. As it was wisely concluded in Future Michigan (2008), the concentration of talent is what most distinguishes more from less successful areas. They also state that "economic development priority one is to prepare, retain and attract talent".

We suspect that these powerful statements would fall on deaf ears in Serbia. This belief rests on the vast evidence, and is corroborated by the 2010–2011 World Economic Forum, The Global Competitiveness Report. There, statistics on brain drain put Serbia in the 136 out of 139 places. The higher the WEF score, the less likely talented people are to leave the country.

Judging by the results presented, it is quite obvious that brain drain is Serbia's Achilles heel, and that the Brain drain indicator can be justly named the "chase-away the brightest and the best" indicator. Probably, the reason for such appalling statistics might be found in the words of Senge (2005, p. 10), which perfectly paint the situation in Serbia: "Basic innovation is always threatening to the status quo. When it occurs in organizations and management, it threatens power relationships. It threatens established beliefs. It threatens habitual ways of doing things that, even if we do not entirely like them, are the only ways we know how to do things.... (such concepts are) deeply threatening because (they) represent just such basic innovations, and that is why it is impossible for the mainstream business mind-set to confront." Strong belief is that such a basic innovation is the concept of DVU, which might pull Serbia from the very bottom of the world's statistics. Moreover, citing Armenia's experience, Yevgeny N. Kuznetsov (2006) offers a good analysis of the situation where Motherland elites, when faced with prospects of development related to Diaspora, might react to them as both opportunities and threats. Very often, their reaction might be hesitation to cooperate and even an open or, even worse, concealed, systematic opposition and resistance to the involvement of capable Diaspora in the domestic affairs. The situation in Serbia should be understood within the context of Central-Eastern European (Ioan M. Ciumasu 2007) and countries with similar background realities, such are the countries of former USSR.

Similar to Armenia, in the early 1990s, Serbia was among the "most promising" countries, destined to prosperous future. Unfortunately, situation in both Armenia and Serbia did not go as it was expected. Both countries rightfully expected cooperation with their, in financial, intellectual and social capital rich, as well as politically influential Diasporas. The main obstacle to "Diaspora spurred" development

was "a domestic elite composed, like the elite of many contemporary stalled states, of communist bureaucrats, security service officers, and managers of large state owned enterprises. This elite did, and does, push aggressively for economic liberalization and privatization, but in a way that allows its own members, especially enterprise managers, to capture the major benefits of reforms." (Kuznetsov 2006, p. 17). To make things worse, even some of the returnees from intellectual Diaspora, who become influential political figures and who were motivated by similar motives, hindered or slowed down the process of further strengthening the relations with Diaspora.

While there is no doubt that such quasi elites welcome influx of all kinds of Diaspora capital, since they see intellectual and entrepreneurial Diaspora as their political and economic rival, they are very resolute to curb any significant Diaspora influence in the country. On their side, Diaspora stayed largely unorganized, not united and very passive in their relationship with the governments. Kuznetsov (2006, p. 17) notes that for Diaspora "the act of giving seems more important than the actual effect". This constellation has a spiraling negative outcome: instead of using government's heavy reliance on its support to strengthen its position in relation to development of the nation, Diaspora did just the opposite. Giving an unconditional financial and political support to the regimes in the Motherlands, Diaspora "relieves pressure" on the domestic quasi elite giving them a "breathing space for delaying necessary reforms despite extreme poverty and emigration of the most skilled" (Kuznetsov 2006, p. 17). Remittances, unless accompanied by other forms of investment, never contribute to sustainable development; moreover they induce further emigration, help the ruling oligarchy to strengthen grip to power and procrastinate resolution of the most pressing political, social and economic questions.

Instead of losing much of its top native talent, with disastrous Brain drain indicator, Serbia needs to, through Diaspora Virtual University, attract talented people from Diaspora who can contribute to its technology innovation, help foster value-added industries, and introduce global management techniques that can support sustainable growth.

5. Innovative Capacity, Competitiveness, and Prosperity

Using data from the The Global Competitiveness Report 2010–2011, we examine the relationships between the Brain Drain and capacity for innovation, depicted in Figure 4. Herein, we included data for all the countries of EU, countries of the Western Balkans, as well as some other countries that seem relevant to this research, such as the countries with an extraordinary focus on innovation, namely USA, Japan, Israel, Switzerland, and some countries with prominent Diasporas, among which are Armenia, Taiwan, Turkey, India, Russian Federation and China. In order to increase the level of productivity required to attain and sustain overall competitiveness, countries need to improve their capacity for innovation (Porter 1990).

The Brain Drain index and Capacity for Innovation index are fairly well correlated (Figure 4). Most countries in this figure follow the regression line from the overall sample, and those ones that diverge from it tend to fall into several categories. First, countries such as Germany, Japan, Finland, Sweden, Israel and France, al-

though not with the highest Brain Drain indexes (BDI), owing to strong focus on innovation, outperform other countries with similar BDI. On the other side of the regression line are countries like India, Cyprus and Ireland, which have significantly improved their "retain and attract talented people" attitude, but still need to advance their innovation infrastructure. The other countries, among which are Serbia and Slovenia, more closely follow the regression line, revealing good correlation between the BDI and Capacity for innovation. The correlation coefficient, R, which is a measure of linear association or clustering around a line, is quite high R=0,8438. Thus, Brain drain and innovation are fairly well positively correlated.

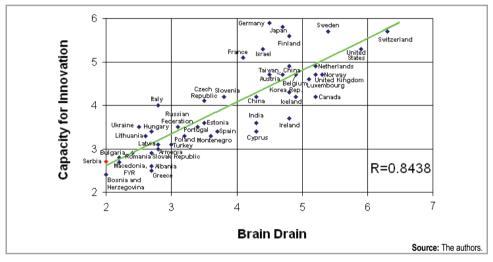


Figure 4 Relationships between the Brain Drain and Capacity for Innovation

6. Concluding Remarks

The article treats the role of expert Diaspora in knowledge based economy, innovation and talent management. It has been demonstrated that expert Diaspora members play a crucial role in the process of converting opportunities into sustainable prosperity for their homelands. On the other hand, we need to be aware of numerous factors hindering the chance of expatriates to apply the expertise acquired abroad in their home countries. Moreover, administration behavior towards Diaspora, and in particular intellectual Diaspora, is often associated with individuals and organizations that function in an environment complacent to the needs and wants of some political groups. Strategic objectives of those groups more often than not (albeit explicitly defined in politically correct terms) contain implicit isolationist territorial and "Diaspora excluded" attitudes which then transpire in academic and research policy documents on a national level.

Countries having disastrous Brain drain indicator, with Serbia championing the group, instead of practicing the sad policy of "Chase-away the brightest and the best", need to retain its talent and attract talented, educated and skilled people from Diaspora who can contribute to its technology innovation, help foster value-added industries, and introduce global management techniques that can support sustainable growth.

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