



UDC 330.341.1(497.11) ; 338:339.137.2(497.11) ; 005.94

# INVESTMENT IN COMPETITIVENESS - PREREQUISITE FOR SUSTAINABLE DEVELOPMENT OF THE REPUBLIC OF SERBIA

## Summary

Competitive advantage of any given economy is the result of systemic measures and mechanisms, but also of the macroeconomic policy instruments, environment, and managerial and commercial capabilities, together with geographic, organizational, demographic and resource indicators. Preservation of a stable and sustainable economic growth is inconceivable without competitiveness and modernization of economy in the sense of innovative activities and the knowledge-driven economy. Competitiveness is being expressed today through the Global Competitiveness Index - GCI, according to which Serbia is occupying the 101<sup>st</sup> position out of the total of 148 countries.

**Key words:** competitiveness, knowledge, innovation, education, human resources - capital, foreign direct investments

**JEL:** C43, F21, F68, O31

*scientific  
review  
article*

Olgica Nestorović, MSc

JKP "Kruševac"

[o.nestorovic@jkpkruševac.co.rs](mailto:o.nestorovic@jkpkruševac.co.rs)

master Aleksandra Stanković

Graduate School for Hotel  
Management and Tourism in  
Vrnjačka Banja

[aleksandra.stankovic@kg.ac.rs](mailto:aleksandra.stankovic@kg.ac.rs)

Paper received: 02.12.2013

Approved for publishing: 05.03.2014

## Uvod

Spoljnoekonomski odnosi Srbije uglavnom se prelamaju kroz međunarodnu razmenu, protok investicija i tekuće transfere. U vođenju spoljne politike Srbije, oslanjajući se na četiri stuba svetske moći (Brisel, Vašington, Moskva i Peking), promene na globalnom planu imaju rastući značaj za kreatore domaće politike (Nikolić, 2012, 20). Za očuvanje stabilnog i održivog privrednog rasta neophodno je povećanje konkurentnosti i modernizacije privrede, kroz ekonomiju znanja i inovativne aktivnosti.

Švajcarski instituti World Economic Forum i International Institute for Management Development definišu konkurentnost kao funkcionalni skup institucija, javnih politika i faktora koji određuju nivo produktivnosti neke države. Produktivnost, s druge strane, pokazuje stepen prosperiteta i stepen isplativosti uloženog kapitala u privredi, a koji istovremeno utiče na dugoročni privredni rast i održivi razvoj.

Pojam konkurentnosti definiše statičke i dinamičke komponente. Kvantitativno se konkurentnost neke države može meriti i njenim učešćem na svetskom tržištu, u svetskom izvozu i dr. Takođe se može posmatrati i preko devalvacije nacionalne valute, postojanja pojedinih resursa itd. Konkurentna sposobnost privrede je rezultat postojanja širokog spektra njenih konkurentskih prednosti.

U današnjoj ekonomiji znanja i globalnog tržišta, nematerijalna imovina kompanija i privrede, odnosno njen deo izražen kao intelektualna svojina, predstavlja ono što je čini uspešnom i konkurentnom. O značaju ove kategorije govori procena da će do 2015. u 100 vodećih svetskih kompanija ukupna vrednost intelektualne svojine iznositi preko 90% ukupne vrednosti njihove imovine (Grgurović, 2013). Pored toga, na konkurentnost utiču i drugi brojni faktori, kako oni koji se odnose na makroekonomske pokazatelje, tako i oni koji doprinose prosperitetu sa mikroekonomskog stanovišta. To je bio povod da Porter definiše Novi sintetički indeks konkurentnosti (New Global Competitiveness Index - NGCI). On je koncentrisan na utvrđivanje nivoa produktivnosti koji nacionalna privreda ostvaruje kao i nosilaca nacionalnog prosperiteta. Globalizacija je doprinela da prosperiraju

one zemlje koje povećavaju konkurentnost, ali i da one koje imaju nisku produktivnost dodatno povećavaju troškove. U tom smislu, povoljniji uslovi u kojima kompanije mogu unaprediti svoju produktivnost povezani su sa ostvarivanjem prosperiteta.

Cilj NGCI je da otkrije izvore produktivnosti, pa je tako nivo konkurentnosti svake zemlje određena nasleđem, makroekonomskom konkurentnošću i mikroekonomskom konkurentnošću.

Ključni indikatori, ali i podstrekači produktivnosti u nekom konkurentskom okruženju su:

- domaće investicije koje su ključne za podizanje produktivnosti kompanija i razvoj infrastrukture,
- izvoz koji omogućava savladavanje barijera koje postavlja obim domaće tražnje,
- uvoz koji omogućava pristup resursima koji se ne mogu proizvesti na konkurentan način u zemlji (omogućava uvoz novih tehnologija i povećava rivalitet na domaćem tržištu),
- priliv stranih direktnih investicija čime se obezbeđuju dodatni kapital, moderne tehnologije, veštine i menadžment i pojačava konkurentski pritisak,
- odliv stranih direktnih investicija koji podstiče međunarodni rast lokalnih kompanija što takođe iziskuje povećanje produktivnosti, i
- domaća inovativnost koja direktno povećava produktivnost.

Da bi se unapredila produktivnost preko ovih elemenata potrebno je stvoriti zdravo konkurentno okruženje uz atraktivnu propoziciju vrednosti, a proizvodi moraju imati visok kvalitet i visoku proizvodnu efikasnost. Izvoz, investicije, inovacije i patentni ne smeju prosteći iz direktnih državnih subvencija, jer te subvencije češće podrivaju produktivnost.

Konkurentnost u poslednjih tridesetak godina postaje jedna od najčešće analiziranih ekonomskih pojmova. Međutim, uprkos velikom broju radova koji su objavljeni na ovu temu, ne postoji jasan konsenzus o tome kako se definiše i meri konkurentnost.

Porter (1990) zaključuje da nacionalno blagostanje nije nasleđeno, već stvoreno strateškim izborima, te se nacionalna konkurentnost može posmatrati kroz prizmu

## Introduction

Foreign economic relations of Serbia are mostly viewed through international exchange, investment flows and current transfers. In the process of conducting foreign policy of Serbia, with reliance on the four pillars of the world power (Brussels, Washington D.C., Moscow, and Beijing), the changes on the global level are having a growing importance for the creators of the domestic politics (Nikolic, 2012, 20). For purpose of preservation of a stable and sustainable economic growth it is necessary to have a boost in competitiveness and modernization of economy through the knowledge-driven economy and innovative activities.

The Swiss institutes, The World Economic Forum and the International Institute for Management Development, are defining competitiveness as a functional set of institutions, public policies and factors that are determining the level of productivity of the given nation state. Productivity, on the other hand, shows the degree of prosperity and the level of profitability of the capital invested in the economy, which in turn impacts the long-term economic growth and sustainable development.

The notion of competitiveness defines both static and dynamic components. Quantitatively the competitiveness of a given state may be measured also by its share of the world market, by its world exports, etc. It may also be observed through the devaluation of the national currency, the presence of certain resources, and so on. Competitive capacity of an economy is the result of the presence of a broad spectrum of its competitive advantages.

In the present day environment of the knowledge-driven economy and global market, intangible assets of companies and economy, i.e. its part expressed as intellectual property, is actually the part that makes it successful and competitive. The importance of this category is best illustrated by the estimate that up to 2015, in the 100 leading world companies, the total value of intellectual property will amount to over 90% of the total value of their assets (Grgurovic, 2013). In addition, competitiveness is also impacted by many other factors, both those that are pertaining to the macro-economic indicators, but also those that are contributing

to prosperity from the micro-economic aspect. This was the reason for Porter to define the new synthetic - New Global Competitiveness Index - NGCI. It is actually focused on determining the level of productivity which the national economy can achieve, as the standard-bearer of the national prosperity. Globalization has contributed to the prosperity of those countries that are boosting up their competitiveness, but also for those that are having low productivity to additionally increase their costs. In that sense, favorable environment where the companies can promote their productivity is linked with the achievement of prosperity.

The objective of the NGCI is to discover sources of productivity, so that the level of competitiveness of every country is designated by its heritage, macro-economic competitiveness, and micro-economic competitiveness.

The key indicators, but also the instigators of productivity in any given competitive environment, are the following:

- Domestic investments that are crucial for raising the level of productivity of companies, and the development of infrastructure;
- Exports that allow for overcoming barriers placed by the volume of domestic demand;
- Imports allowing access to resources that can not be produced in a competitive manner in the country (allowing import of new technologies and a more vibrant competition on the domestic market);
- Inflow of foreign direct investments thus providing for additional capital, modern technologies, skills and management, intensifying further competitive pressure;
- Outflow of foreign direct investments instigated by the international growth of local companies, which is also requiring an increased productivity; and
- Domestic innovation techniques which directly impact boost to productivity.

In order to improve productivity through these elements it is necessary to create a sound competitive environment together with attractive value proposition, while the products must have high quality and high production efficiency. The exports, investments, innovations and patents must not be deriving

četiri svojstva svake nacionalne privrede koji zajedno formiraju takozvani „dijamant nacionalnih prednosti“. U ta svojstva spadaju:

- uslovi faktora proizvodnje, jer da bi zemlja obezbedila konkurentsku prednost u određenoj privrednoj grani mora da raspolaze odgovarajućim faktorima, kao što je na primer obučena radna snaga ili infrastruktura;
- karakter domaće tražnje, koja se ogleda kroz domaću tražnju za tim proizvodima i uslugama;
- postojanje podržavajućih i povezanih grana koje će omogućiti razvoj i jačanje pozicije grane koja se dobro pozicionirala u odnosu na međunarodnu konkurenciju; i
- uslovi u zemlji za nastajanje i organizovanje preduzeća, kao i njihovog upravljanja i karaktera konkurencije u zemlji.

OECD (The Organisation for Economic Co-operation and Development) prihvata da se konkurentnost može definisati kao stepen do kojeg, pod povoljnim tržišnim uslovima, zemlja može da proizvede robe i usluge koje zadovoljavaju međunarodnu konkurenciju, a istovremeno omogućava uvećanje realnog domaćeg dohotka i standarda stanovništva. Svetski ekonomski forum - (WEF-World Economic Forum) (2012) definiše konkurentnost kao skup institucija, politika i faktora koji određuju nivo produktivnosti zemlje, koji pak, predstavlja održivi nivo prosperiteta koji može jedna ekonomije da dostigne. To upućuje da je nacija konkurentna ukoliko njeno stanovništvo može da uživa visoki i rastući standard života, uz visoku zaposlenosti na održivoj osnovi (European Competitiveness Report, 2012). Zajednička osobina svih mera kojima se determiniše nivo konkurentnosti nacionalne privrede je veliki broj varijabli koji utiču na njeno formiranje, odnosno multidimenzionalnost.

Konkurentnost možemo definisati i kao skup institucija, politika i drugih makroekonomskih činilaca koji određuju stepen produktivnosti zemlje. Stepenom konkurentnosti se izražava kapacitet nacionalne privrede da u srednjoročnom periodu generiše održivi

privredni rast na postojećem nivou razvijenosti.

## Konkurentnost Republike Srbije

Stvaranjem povoljnih uslova za domaća i strana ulaganja, kroz sve veću globalizaciju i pritisak da se bude konkurentan u poslovanju na tržištu stvara potrebu za neprestanim poboljšanjem opšteg poslovnog okruženja i rezultata rada privrednih društava (Roskić, 2010, 9.). Prema izveštaju WEF-a za 2013. godinu, Srbija je rangirana na 101. poziciji na listi globalne konkurentnosti, koja obuhvata 148 zemalja, što je pad za šest mesta u odnosu na prošlu godinu. Srbija je u 2013. godini imala vrednost Indeksa globalne konkurentnosti (IGK) od 3,77, koji je u odnosu na prethodnu godinu opao za 0,1, što je dovelo do pada Srbije sa 95. na 101. mesto na listi (World Economic Forum, 2013). Ovakva pozicija predstavlja istorijski minimum kada je rang Srbije u pitanju.

Najveću vrednost IGK i prvo mesto na listi WEF-a u 2013. godini zabeležila je Švajcarska, dok je najnižu vrednost od 2,85 zabeležio Čad koji je na poslednjem, 148. mestu. Redosled vodeće trojke na listi je Švajcarska, Singapur i Finska, i nije se menjao u odnosu na prošlu godinu.

Prema ukupnoj konkurentnosti, merenom IGK u 2013. godini, Srbija se nalazi na začelju grupe zemalja u koju spadaju Albanija, Bosna i Hercegovina, Hrvatska, Grčka, Mađarska, Makedonija, Crna Gora, Rumunija, Slovačka i Slovenija. Pored Srbije, u ovoj godini, značajne padove na listi zabeležile su Albanija, Slovačka i Slovenija, dok su značajan napredak na listi ostvarile Hrvatska, Grčka, Makedonija i Crna Gora.

Najznačajniji pad Srbija je zabeležila u oblastima infrastrukture, makroekonomskog okruženja i sofisticiranosti finansijskog tržišta, dok je umereni pad zabeležen kod efikasnosti tržišta rada i tehnološke osposobljenosti (Fondacija za razvoj ekonomske nauke, 2013). Značajnih pozitivnih pomaka u 2013. godini nije bilo, a umereni pomaci prisutni su kod efikasnosti tržišta dobara i sofisticiranosti poslovanja (Slika 1).

from the direct government subsidies as such subsidies more often than not are actually undermining productivity.

Competitiveness, over the last thirty years, has become one of the most frequently analyzed economic concepts, in spite of the large number of papers and studies produced and published on this topic, there is not as yet a clear consensus how to define and measure competitiveness.

Porter (1990) concludes that the national welfare is not a heritage, but something created through strategic choices, hence that the national competitiveness may be observed through the prism of four features inherent in every national economy, the elements which are together forming the so-called "diamond of national advantages". These features are the following:

- Status of production factors, for if a country is to provide competitive advantages in any given industrial branch, it must have available corresponding factors such as, for example, well qualified work force or infrastructure;
- Character of domestic demand which is reflected through the domestic demand for such products and services;
- Presence of supporting and related branches that will allow for the development and strengthening of the position of the given industrial branch which has well positioned itself in respect to the international competition; and
- Conditions in the country supportive of establishment and organization of companies, but also of their management, and the character of competition in the country.

The Organization for Economic Co-operation and Development - OECD recognized that the competitiveness may be defined as the degree up to which, under favorable market conditions, the given country can produce goods and services which are compliant with the international competition, while at the same time allowing for the growth of the real domestic product and standard of living of the population.

The World Economic Forum - WEF, in 2012, defined competitiveness as a set of institutions, policies and factors that are determining the level of productivity of the country, which in turn represents a sustainable level of prosperity that the given economy is able to achieve. This indicates that the nation is competitive

if its population is able to enjoy a high and growing standard of living, together with a high employment rate on sustainable grounds (European Competitiveness Report, 2012). The common feature of all the measures which define the level of competitiveness of any given national economy is a large number of variables that are impacting its formation, i.e. its multi-dimension properties.

We can define competitiveness also as a set of institutions, policies and other macro-economic factors which are determining the level of productivity of a country. The degree of competitiveness is expressing the capacity of the national economy to generate, over a medium-term period, a sustainable economic growth on the existing level of development.

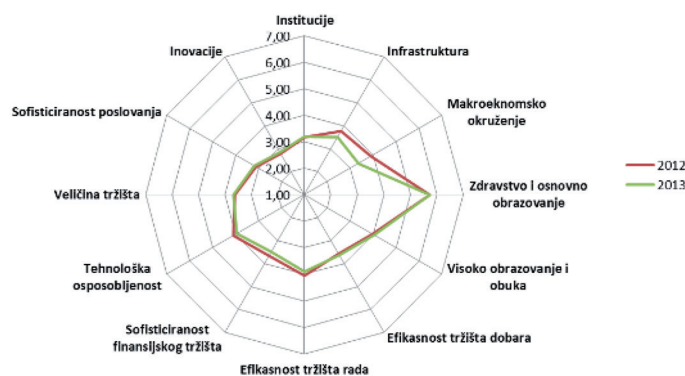
## Competitiveness of the Republic of Serbia

Creation of favorable conditions for the domestic and foreign investments, through growing globalization and a pressure to be competitive in business on the market, is creating the need for a constant improvement of the global business climate and results of work of economic entities (Roskic, 2010, 9). According to the report of the WEF for 2013, Serbia was positioned on the 101<sup>st</sup> place on the global competitiveness list that covers 148 countries, which is a fall for six places in respect to the previous year. Serbia, in 2013, had the value of the global competitiveness index (GCI) of 3.77, which in respect to the previous year has fallen for 0.1, and this in turn brought about the fall of Serbia from the 95<sup>th</sup> to the 101<sup>st</sup> place of the list (The World Economic Forum, 2013). Such a position designates a historical minimum when ranking of Serbia is concerned.

The highest value of the GCI and the first place on the list of the WEF in 2013 was occupied by Switzerland, while the lowest value of 2.85 was recorded by Chad which is occupying the last position on the list with its 148<sup>th</sup> place. The order of ranking of the leading threesome on the list is Switzerland, Singapore and Finland, and it did not change in respect to the previous year.

According to the total competitiveness measured by the GCI in 2013, Serbia is placed at the end of the group of countries comprising

Slika 1: Vrednosti Indeksa globalne konkurentnosti po stubovima konkurentnosti u 2012. i 2013. godini



Izvor: World Economic Forum, <http://reports.weforum.org/global-competitiveness-report-2012-2013/>, (pristup 01.11.2013.)

Srbiji su potrebni sveobuhvatni reformski napori kako bi se poboljšalo poslovno okruženje i u tom smislu je potrebno doneti novu Strategiju privlačenja stranih direktnih investicija, budući da postojeća nije dala zadovoljavajuće rezultate, a koja se ogleda i u nivou konkurentne pozicije Srbije u svetu.

## Indikatori konkurentnosti privrede Republike Srbije

Kroz liberalizaciju spoljnih tokova, politiku smanjenja barijera za ulazak na tržište i dr. pospešuje se prisustvo multinacionalnih kompanija na domaćem tržištu. U slučaju Republike Srbije, konkurencija će dovesti do stvaranja atraktivnije poslovne klime, koja će u narednom periodu pozitivno delovati na dalje privlačenje stranih direktnih investicija, što je važno za popravljavanje platnobilansne pozicije Srbije, povećanje zaposlenosti i međunarodne konkurentnosti.

Veza između politike konkurencije i politike stranih direktnih investicija je posebno važna u momentima kada se vrši procena privlačnosti ambijenta za ulaganje stranih investicija. Istraživanja potvrđuju da je dugoročno osvajanje novih tržišta cilj koji motiviše multinacionalne kompanije da ulažu svoj kapital u zemlje u razvoju. Bitna su tri faktora: struktura tržišta, ponašanje tržišnih učesnika i politika i praksa vladajućih struktura. Danas je, ipak, ključno stanovište da je izloženost konkurenciji najbolji način da se unapredi poslovanje kompanija, grana i sektora privrede, samim tim da se privredni subjekti

uspešno suoče sa zahtevima kompetitivnog tržišta. U zemljama u razvoju danas imamo tendenciju za usvajanjem perspektivnih reformskih procesa sa karakterom tržišne orijentisanosti koji jačaju ulogu konkurencije. Posebno su značajne reformske politike koje se odnose na deregulaciju, cenovnu liberalizaciju, privatizaciju, liberalizaciju trgovinske i investicione politike, kao i politike borbe protiv korupcije.

Dostizanje određenog nivoa nacionalne privredne konkurentnosti je jedan od

prioritetnih uslova za prijem u EU (Evropska unija). U tom smislu, izvoz je prioritet, jer se bez njega ne može ostvariti pokrivenost uvoza izvozom i izbalansirati platni bilans. Za izvoz je potrebna, pored ostalog, konkurentnost kvaliteta i cena proizvoda i usluga. Bez promene ponašanja svih ekonomskih subjekata (države, firmi, zaposlenih itd) i obezbeđivanja realnih izvora finansiranja nije moguće ostvariti planirane ciljeve.

U narednim godinama očekuje se rast udela EU u ukupnom izvozu Srbije zbog smanjivanja percepcije rizika investiranja u Srbiju, mogućnosti većeg izvoza, povećanja intenziteta intraindustrijske trgovine i vizne liberalizacije.

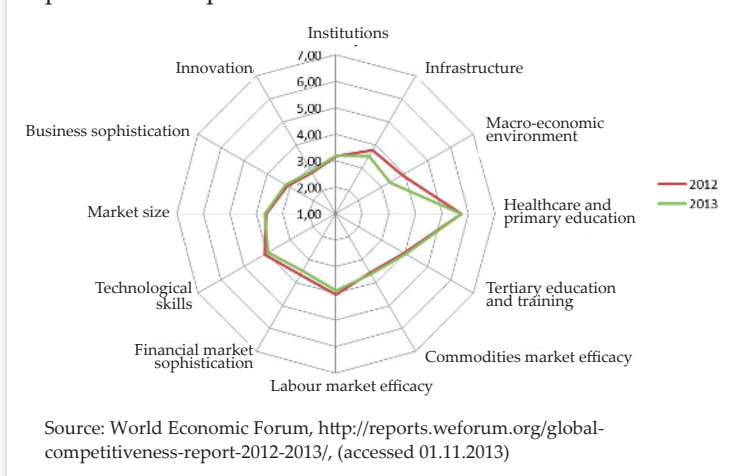
Najvažniji ekonomski partner Srbije je EU, pa potom CEFTA, koje ujedno ostvaruju preko devet desetina srpskog izvoza i oko tri četvrtine domaćeg uvoza (European Integration Office, 2013). Strane direktne investicije se u narednom periodu moraju staviti u funkciju konkurentnosti i održivog razvoja, a preduslov za to je pravilno valorizovati domaće resurse, unaprediti edukaciju radne snage i osavremeniti oblike i načine upravljanja.

Jedan od prioriteta predstavlja izgradnja institucionalnih kapaciteta u zemlji, zatim u oblasti inkluzivnog rasta, u pogledu rigidnosti tržišta rada (odlikuje ga neslaganje između produktivnosti i zarada, slabog odnosa na relaciji radnik-poslodavac i visoka stopa nezaposlenosti mladih). Veća fleksibilnost tržišta rada obezbedila bi realokaciju radnika iz jedne ekonomske aktivnosti u drugu i time omogućila kretanje i prilagođavanje zarada bez socijalnih

Albania, Bulgaria, Bosnia and Herzegovina, Croatia, Greece, Hungary, Macedonia, Montenegro, Romania, Slovakia, and Slovenia. In addition to Serbia, in this year significant fall on the list was also recorded by Albania, Slovakia and Slovenia, while a substantial progress on the list was marked by Croatia, Greece, Macedonia, and Montenegro.

The most significant fall Serbia has recorded in the fields of infrastructure, macro-economic environment and sophistication of financial market, while a moderate fall was observed in the labour market efficiency and technological qualification (Foundation for Economic Science Development, 2013). There was no significant positive progress made in 2013, while some moderate moves forward were present in the commodities market efficacy, and business activities sophistication (Figure 1).

Figure 1: Value of the Global Competitiveness Index per pillars of competitiveness in 2012 and 2013



Serbia needs a comprehensive reform effort in order to improve its business environment and to that end it is necessary to adopt a new Foreign Direct Investment Attraction Strategy, as the present one did not yield satisfactory results, and is reflected in the low competitive position that Serbia now occupies in the world.

### Economic competitiveness indicators of the Republic of Serbia

Through the liberalization of the cross-border circulation, the policy of lowering market access barriers, etc. what is enhanced is the presence of multinational companies on

the domestic market. In case of the Republic of Serbia, competition will bring about the creation of a more attractive business climate, which will have over the forthcoming period a positive effect on further attraction of foreign direct investments, which is important for improving the balance of payment position of Serbia, boosting employment and international competitiveness of the country.

The connection between the policy of competition and the policy of foreign direct investments is especially important at the moment when an assessment is being made of the attraction that the environment has for the venture of foreign investments. Research has confirmed that a long-term mastering of new markets is the target that is motivating multinational companies to invest their capital in the developing countries. There are three

important factors in this respect: market structure, conduct of market participants, and the policy and practice of governing structures. Nevertheless, the key view prevailing today is that exposure to competition is the best way of improving company business, industrial branches and economic sectors, and thus bringing economic stakeholders in the position to face successfully the demands of the competitive market. In the developing countries today we have a tendency for adoption of prospective reform processes

with the character of market orientation which is strengthening the role of competition. Especially important are the reform policies which pertain to the deregulation, price liberalization, privatization, trade and investment policy liberalization, and the political fight against corruption.

One of the high priority requirements for the accession to the European Union is mastering a certain level of national economic competitiveness. To that end, export is a priority as without exports it is not possible to achieve coverage of imports by exports and balance out the balance of payment. What is necessary for export, among other



nereda i štrajkova. U zavisnosti od ostvarenog nivoa BDP po stanovniku, zemlje su razvrstane u tri grupe, s tim što se u prvu grupu svrstavaju sve zemlje sa 70% učešća primarnih proizvoda u izvozu (petogodišnji prosek), bez obzira na nivo produktivnosti (Jakopin, 2013, 5).

Tabela 1: Vrednosti Indeksa globalne konkurentnosti po stubovima konkurentnosti u 2012. i 2013. godini

	2012	2013	Promene
Institucije	3,16	3,20	↗
Infrastruktura	3,78	3,51	↘
Makroekonomsko okruženje	3,91	3,36	↘
Zdravstvo i osnovno obrazovanje	5,73	5,75	↗
Visoko obrazovanje i obuka	3,97	4,05	↗
Efikasnost tržišta dobara	3,57	3,64	↗
Efikasnost tržišta rada	4,04	3,90	↘
Sofisticiranost finansijskog tržišta	3,68	3,48	↘
Tehnološka osposobljenost	4,10	3,94	↘
Veličina tržišta	3,64	3,68	↗
Sofisticiranost poslovanja	3,11	3,18	↗
Inovacije	2,81	2,85	↗

Izvor: World Economic Forum, <http://reports.weforum.org/global-competitiveness-report-2012-2013/>, (pristup 01.11.2013.)

Tabela 1 pokazuje vrednost Indeksa globalne konkurentnosti po stubovima konkurentnosti u 2012. i 2013. godini. Na osnovu ovog pregleda može se zaključiti da je najveći pad zabeležen u oblasti infrastrukture, makroekonomskom okruženju i sofisticiranosti finansijskog tržišta, dok značajnih pozitivnih pomaka nije bilo.

Srbija je od 2001-2008. godine povećavala BDP po stanovniku u proseku 23% godišnje i time se približila proseku zemalja Zapadnog Balkana (International Monetary Fund, 2013). Konkurentnost privrede Srbije u ovom trenutku se može unaprediti jedino značajnijim prilivom stranih direktnih investicija, što zahteva otvorenu privredu i zdrav tržišni ambijent. Strane direktne investicije zahtevaju sprovođenje razvojne politike bez uplitanja birokratskih organa, kao i bez administrativnog odugovlačenja, uz korektnu pravnu regulativu, postojanje adekvatne putne infrastrukture i efikasan bankarski sistem. Takođe, država treba da podstiče stvaranje industrijske baze i realne konkurentnosti izvoza (Jakopin, 2011, 84). Akcenat u privlačenju stranih direktnih investicija treba staviti na privlačenje

“greenfield” investicija. Nakon određenog vremena strane direktne investicije indukuju rast zapošljavanja u malim i srednjim preduzećima, a kao posledica ovih procesa je brži rast produktivnosti i povećanje konkurentnosti nacionalne privrede. Strane direktne investicije

omogućavaju uključivanje privrede u globalne privredne i finansijske tokove stvaranjem i povećavanjem međunarodno konkurentnih, industrijskih, uslužnih i agroindustrijskih kapaciteta za modernu proizvodnju i snabdevanje savremenih tržišta (Nešić, 2008).

Povećavanje nacionalne konkurentnosti treba tražiti u sledećim preduslovima:

- Srbija je postala pridružena članica EU i kreće se prema procesu usklađivanja zakonodavnih i administrativnih kapaciteta sa EU,
- Srbija je potpisnica brojnih sporazuma o slobodnoj trgovini i time zauzima posebno mesto u regionu, i

- Vlada je odlučna u nameri da ubrza zakonodavne reforme, radi na jačanju institucionalnih kapaciteta, nastoji da reši problem konkurentnosti i unapredi značaj stranih direktnih investicija kroz olakšice i podršku u sprovođenju njihovih investicionih aktivnosti.

## Ulaganje u obrazovanje i inovacije-put ka konkurentnosti

Kroz brojne materijalne i intelektualne probleme prilikom uspostavljanja održivog razvoja u Srbiji, postavlja se pitanje ulaganja u obrazovanje i inovacije, jer je nacionalna ekonomska konkurentnost povezana sa intelektualnim i kreativnim kapitalom koji je vođen znanjem, kreativnošću i inovativnošću (Sahlberg, Oldroyd, 2010).

Znanje je ključni faktor konkurentske prednosti, zbog čega je značajna vrednost kompanije zasnovana na znanju, umeću i intelektualnoj imovini. Znanje je osnova za inovacije, a one pomažu kompanijama da se razvijaju u skladu sa promenama poslovnog okruženja, i na taj način znanje i inovacije su

requirements, is competitive quality and price of products and services. Without change in the behavior of all the economic stakeholders (government, companies, work force employed, etc.) and securing real sources of financing, it is not possible to achieve the planned targets.

Over the years to come, growth of EU in the share of total exports of Serbia is expected because of the lower perception of risk of investment in Serbia, but also the options of higher exports, increase in intensity of intra-industrial trade, and visa regime liberalization.

The most important economic partner of Serbia is the EU, to be followed by CEFTA, which are covering combined over nine tenth of the Serbian exports and some three quarters of domestic imports (European Integration Office, 2013). Foreign direct investments over the forthcoming period must be placed in the function of competitiveness and sustainable development, with a prerequisite of properly valuating domestic resources, promoting work force education and upgrading forms and manner of management.

One of the priorities is building up of institutional capacities in the country, also in the field of inclusion growth regarding the rigid norms prevailing of the labour market (distinguished for the discrepancy between productivity and income, poor relations between employee-employer, and a high youth unemployment rate). Higher flexibility of the labour market would provide for re-allocation of work force from one economic activity into another, thus enabling circulation and adjustment of earnings without social unrests and strikes. Depending on the GDP per capital level achieved, countries are classified into three groups, with the first group comprising all the countries with 70% share of primary products in their exports (five-year average), regardless of the productivity level (Jakopin, 2013, 5).

Table 1 - Global Competitiveness Index value per competitiveness pillars, in the years 2012 and 2013

	2012	2013	Changes
Institutions	3.16	3.20	↗
Infrastructure	3.78	3.51	↘
Macro-economic environment	3.91	3.36	↘
Healthcare and primary education	5.73	5.75	↗
Tertiary education and training	3.97	4.05	↗
Commodities market efficacy	3.57	3.64	↗
Labour market efficacy	4.04	3.90	↘
Financial market sophistication	3.68	3.48	↘
Technological skills	4.10	3.94	↘
Market size	3.64	3.68	↗
Business sophistication	3.11	3.18	↗
Innovation	2.81	2.85	↗

Source: World Economic Forum, <http://reports.weforum.org/global-competitiveness-report-2012-2013/>, (accessed 01.11.2013)

Table 1 shows the values of the Global Competitiveness Index - GCI per pillars of competitiveness, for 2012 and 2013. On the basis of this survey it may be concluded that the highest fall was recorded in the field of infrastructure, macro-economic environment, and financial market sophistication, with the absence of any significant positive shifts.

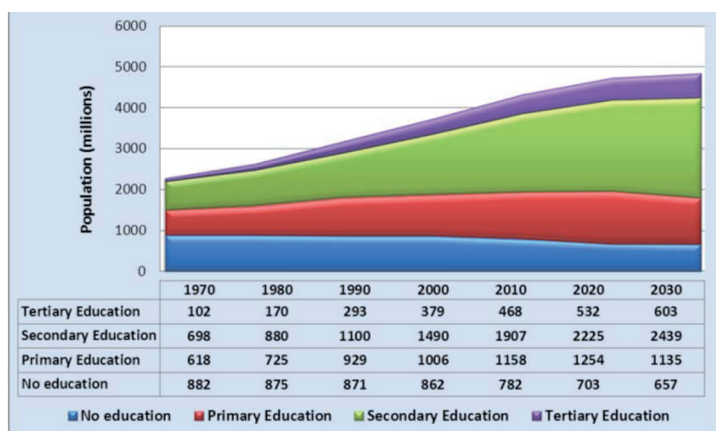
Serbia, in the period 2001-2008, was increasing its per capita GDP on an average of 23% annually and had come closer to the average of the Western Balkan countries (International Monetary Fund, 2013). Competitiveness of the Serbian economy, at present, can be improved only through a substantial inflow of foreign direct investments, which require an open economy and a sound market environment. Foreign direct investments demand implementation of such a development policy that will be free from interference of bureaucratic authorities, but also freed from administrative delays, with correct legal framework, presence of an adequate road infrastructure, and an efficient banking system. In addition, government should instigate creation of an industrial base and real competitiveness of exports (Jakopin, 2011, 84). The focus in attraction of foreign direct investments should be placed on attraction of the green-field investments. After a certain time, foreign direct investments induce employment growth in small and medium-sized enterprises, and as a result of this process faster growth of productivity and higher

od vitalnog značaja za stvaranje konkurentske prednosti.

Jezgro kompetentnosti kao izvor konkurentske prednosti je posjedovanje i korišćenje izuzetnih sposobnosti, veština i znanja uz korišćenje tehnologije. Čitav proces organizacionog učenja je stalan, doživotan. Prema Kotleru (2004, 19), "sposobnost da učimo brže od svojih konkurenata možda je naše jedino održivo konkurentsko oružje".

Prema Porteru, firma se diferencira u odnosu na konkurente ukoliko može da bude jedinstvena u nečemu što ima vrednost za kupca. Svaka aktivnost koja stvara vrednost predstavlja potencijalni izvor jedinstvenosti. U tom smislu je važno prepoznati i stvarati nove kreacije jedinstvenosti u odnosu na konkurente (Porter, 2007, 133.).

Grafikon 1: Radno sposobno stanovništvo (15+) za 120 zemalja prema školskoj spremi od 1970. do 2030. godine



Izvor: World Population Program, International Institute for Applied Systems Analysis. *Population Projections by Level of Education*. <http://www.iiasa.ac.at/Research/POP/>, (pristup 22.12.2010.)

Grafikon 1 pokazuje projekciju radno sposobnog stanovništva preko 15 godina i iznad za 120 zemalja prema školskoj spremi za period od 1970. do 2030. godine, bazirane na blago umerenom optimističnom scenariju. Takođe, pokazuje da je prošla dekada imala veći progres u obrazovanju. Tokom četrdeset godina, broj ljudi bez obrazovanja ili samo sa primarnim obrazovanjem je ostao gotovo nepromenjen, dok se srednje i visoko obrazovanje povećalo skoro četiri puta. Stanovništvo sa samo osnovnim obrazovanjem ili neobrazovano stanovništvo je dostiglo vrhunac tokom 2010. godine i trebalo bi da taj broj vremenom opada.

Postoji širok spektar pitanja vezanih za

ljudski kapital i održivost, sa akcentom na veze između zapošljavanja, zdravstva, obrazovanja, privrede, održivog razvoja, socijalne zaštite i ekologije. Ispitujući pojedinačno, svako od ovih pitanja je dovoljno složeno. Rešenje za ove kompleksne izazove je moguće, ako je ljudski izbor i razvoj ljudske svesti glavni inicijator, a nikako samo tehnologije, politike, privrede ili bilo koji drugi faktor koji može postati poluga za promenu (World Population Program, 2010).

Jedan od ciljeva dinamičkog privrednog rasta je ulaganje u obrazovanje tj. privredni rast treba bazirati na ekonomiji zasnovanoj na znanju. Znanje je temelj napretka i razvoja društva. Ulaganje u znanje obuhvata izdatke za obrazovanje, istraživanje i softver. Raspolaganje investicijama u znanje i merenje ovih investicija se razvilo u jedno od najznačajnijih pitanja sa

kojima se suočava ekonomija zasnovana na znanju (Bojanić, 2012). Ekonomija zasnovana na znanju je definisana od strane OECD-a kao ekonomija koja je "neposredno zasnovana na proizvodnji, raspodeli i upotrebi znanja i informacija" (The Organisation for Economic Co-operation and Development, 2013). Ekonomski komitet za ekonomsku saradnju Pacifičke Azije (APEC) je ekonomiju zasnovanu na znanju definisao na sledeći način: "Proizvodnja, raspodela i upotreba znanja je glavni pokretač rasta, stvaranja bogatstva i zaposlenosti u

svim privredama" (Asia-Pacific Economic Cooperation, 2013).

Termin "ekonomija znanja" se odnosi na sveukupnu ekonomsku strukturu koja se danas pojavljuje, a ne na bilo koji pojedinačni fenomen ili njihovu kombinaciju. Ulaganje u znanje koje povećava ekonomsku efikasnost i ekonomski rast će omogućiti tehnološki razvoj i postaviti temelje za povećanje zaposlenosti. S tim u vezi, izdaci za obrazovanje su investicija koja može da potpomogne brži društveni rast, podigne produktivnost, doprinese ličnom i društvenom razvoju i smanji društvenu nejednakost. Procenat ukupnih finansijskih sredstava koja se izdvajaju za obrazovanje jedan

competitive advantage of the national economy ensue. Foreign direct investments are allowing integration of the economy into the global economic and financial trends by creating and boosting internationally competitive, industrial, services and agro-industrial capacities suitable for modern production and supply of modern markets (Nesic, 2008).

Enhancing national competitiveness should be looked for in the following prerequisites:

- Serbia has become an associate EU member and is moving towards the process of harmonization of its legislative and administrative capacities with the EU;
- Serbia is a signatory to a large number of free trade agreements thus occupying a special place in the region; and
- Government is determined in its intent to accelerate legislative reforms, working on the strengthening of institutional capacities, striving to resolve the problem of competitiveness and promote the importance of foreign direct investments through facilities and support in the implementation of their investment activities

### Investment in education and innovation - Road towards competitiveness

Through many material and intellectual problems in the attempts to establish sustainable development in Serbia, the question is raised on investments into education and innovation, as the national economic competitiveness is linked with the intellectual and creative capital which is led by knowledge, creativity and innovativeness (Sahlberg, Oldroyd, 2010).

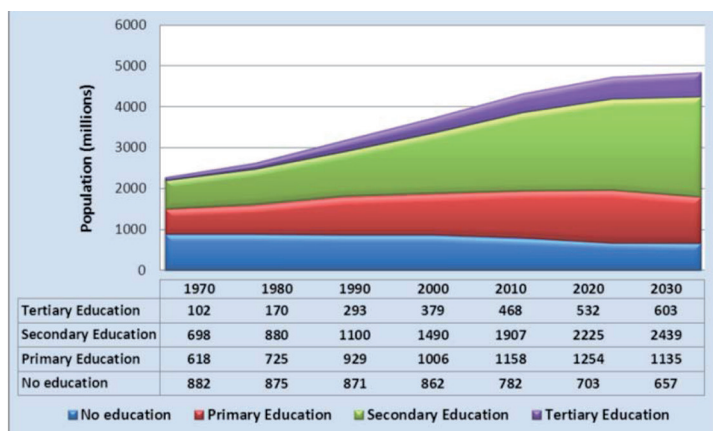
Knowledge is a key factor of the competitive advantage and thus significant value of a company is based on its knowledge, skills and intellectual property. Knowledge is the basis of innovations, and they help companies to develop in accordance with the changes of the business environment and in this way knowledge and innovation become factors of vital importance for the creation of competitive advantage.

The core of competitiveness, as a source of competitive advantage, is the possession and use of extremely good capabilities, skills and knowledge together with the use of technology. The entire process of organizational learning is a constant and a life-long process. According to Kotler (2004, 19), "the ability to learn faster than our competitors is perhaps our only sustainable competitive weapon".

According to Porter, a company can differentiate itself from its competitors if it is able to be unique in something that has a buyer-value. Every activity which is creating value is a potential source of uniqueness. In this sense, it is important to recognize and build up new creation of uniqueness in comparison with the competition (Porter, 2007, 133).

Graph 1 shows working-age population

Graph 1: Labour-able population (15+) for 120 countries according to the formal education, from the year 1970 to 2030



Source: World Population Program, International Institute for Applied Systems Analysis. *Population Projections by Level of Education*. <http://www.iiasa.ac.at/Research/POP/>, (accessed 22.12.2010)

projections for those 15 years of age and plus, for 120 countries according to the formal education, for the period from 1970 to 2030, based on a moderately optimistic scenario. In addition, it shows that the past decade had achieved a higher progress in education. During a period of forty years, the number of people without any education or those with only primary education has remained almost unchanged, while secondary and tertiary education had increased almost four-fold. Population with only the basic primary education or with no education at all had reached its peak during 2010, and this number is expected to fall over time.

There is a broad spectrum of question related

je od ključnih izbora koji se prave u svakoj od zemalja OECD-a.

Posmatranjem faza ekonomskog razvoja država, primećuje se da zemlje sa inovacijama imaju velika ulaganja u obrazovanje. Sada te zemlje posebno ulažu u visoko obrazovanje, nauku i istraživanje. Takođe vidljivo je da su određeni nivoi u osnovnom i srednjem obrazovanju dostignuti, a da je neophodno kvalitativnije ulaganje u istraživanje, jer to omogućava povećanje produktivnosti i inovacija. Veća produktivnost i inovativnost obezbeđuju i konkurentsku prednost tih zemalja.

### Konkurentnost u EU-reindustrijalizacija zasnovana na znanju

Iako težina proizvodnje u privredi EU opada u korist usluga, proizvodnja se sve više posmatra kao ključni sektor u privrednom razvoju. Međutim, potrebna je kritična masa u vidu minimalne proizvodne baze. Industrijska politika kroz podršku inovacijama i spoljna konkurentnost mogu da imaju značajnu ulogu u smislu preokreta opadajućeg trenda. U tom smislu, EU svoju industrijsku politiku treba da usmeri kroz strukturne promene u pravcu veće produktivnosti u proizvodnju i boljem pozicioniranju preduzeća EU u globalnom lancu vrednosti, zasnovanih na komparativnim prednostima u vidu znanja i tehnologija. EU zaostaje u produktivnosti u odnosu na nove industrijske gigante i neke od njegovih glavnih konkurenata. Raste jaz između EU-SAD u produktivnosti onih proizvoda koji

su uslovljeni smanjenjem efikasnosti proizvodnje izazvane propisima, smanjenim ulaganjima u informaciono-komunikacione tehnologije i nematerijalnim ulaganjima. Drugo, strukturne promene su spore, ali treba da se nadovežu na postojeće prednosti, koje se mogu stimulisati tako što se pravi institucionalni okvir, koji pokriva obrazovanje, istraživanje, tehnologiju i inovacije, ali se fokusira i na opšti kvalitet upravljanja (European Competitiveness Report, 2013).

Postojeća komparativna prednost EU u proizvodnji je povezana sa kompleksnim i visoko-kvalitetnim proizvodnim segmentima. Postepeno se povećava složenost njihovih proizvoda, tako da su proizvodne industrije EU uspele da održe svoju konkurentsku poziciju u 2009. godini u odnosu na 1995. (Tabela 2).

EU ima komparativne prednosti u većini proizvodnih sektora, koji uključuju vitalne visoke tehnologije i srednje-visoke tehnologije u sektorima kao što su lekovi, hemikalije, vozila, mašine i transportni uređaji. Još jedan dokaz industrijskih prednosti EU pokazuje analiza sofisticiranosti (intenzitet znanja) EU prilikom izvoza proizvoda sa komparativnim prednostima. Ovo je napredni pokazatelj ne-

Tabela 2: Domaća i strana dodata vrednost sadržana u izvozu bruto proizvodnje po zemljama u 1995. i 2009. godini (%)

	EU		Kina		Japan		Koreja		SAD	
	1995	2009	1995	2009	1995	2009	1995	2009	1995	2009
Domaća	91,1	85,6	82,7	73,6	93,3	85,4	73,3	61,3	86,9	84,5
Strana	8,9	14,4	17,3	26,4	6,7	14,6	26,7	38,7	13,1	15,5
EU	-	-	2,8	5,1	1,2	1,8	4,4	5,2	3,7	3,3
Kina	0,3	2,3	-	-	0,4	2,4	1,7	6,7	0,4	2,5
Japan	1,0	0,7	3,8	3,3	-	-	6,3	4,7	2,2	0,9
Koreja	0,3	0,4	2,0	1,8	0,5	0,5	-	-	0,6	0,4
SAD	2,3	2,4	2,0	3,4	1,4	1,6	5,1	3,8	-	-
Australija	0,2	0,2	0,5	1,3	0,3	0,9	1,1	1,8	0,1	0,2
Brazil	0,2	0,4	0,1	0,6	0,1	0,2	0,3	0,4	0,2	0,3
Kanada	0,4	0,4	0,4	0,5	0,3	0,3	0,7	0,5	1,8	2,0
Indonezija	0,1	0,2	0,5	0,4	0,3	0,6	0,6	1,2	0,1	0,1
Indija	0,1	0,3	0,1	0,3	0,1	0,1	0,2	0,3	0,1	0,3
Meksiko	0,1	0,2	0,0	0,2	0,1	0,1	0,1	0,2	0,7	1,2
Rusija	0,8	1,5	0,3	0,7	0,1	0,4	0,4	1,0	0,2	0,3
Turska	0,1	0,3	0,1	0,1	0,0	0,0	0,0	0,1	0,0	0,1
Tajvan	0,2	0,2	1,8	1,8	0,3	0,4	0,6	0,9	0,5	0,3
Ostali	2,8	5,0	2,9	7,1	1,7	5,2	5,4	11,9	2,4	3,8

Izvor: World Input-Output Database, <http://www.wiod.org/>, (pristup 05.05.2013.)

to the human capital and sustainability, with the accent on the links between employment, healthcare, education, economy, sustainable development, social protection, and environment protection. Examining them individually, every one of these questions remains sufficiently complex. The solution to these complex challenges is possible if the human choice and development of human awareness is to be the main initiator, but never only the matter of technology, politics, economy, or any other factor that may serve as a lever for change (World Population Program, 2010).

One of the targets for a dynamic economic growth is investment in education, i.e. economic growth that is based on a knowledge-driven economy. Knowledge is the basis for progress and development of society. Investment in knowledge covers expenditure for education, research and software. Management of investments in knowledge and measurement of such investments had developed into one of the most important issues facing the knowledge-driven economy (Bojanic, 2012). Knowledge-based economy is defined by the OECD as an economy which is "directly based on production, distribution and distribution of knowledge and information" (The Organization for Economic Co-operation and Development, 2013). The Asia-Pacific Economic Cooperation committee (APEC) has defined the knowledge-driven economy in the following manner: "Production, distribution, and use of knowledge are the main trigger of growth, creation of wealth and employment in all the economies" (Asia-Pacific Economic Cooperation, 2013).

The term "knowledge economy" pertains to the totality of economic structure which is today present, and not to any particular phenomenon or the combination thereof. Investment in knowledge that offers an enhancement to the economic efficacy and economic growth will allow for the technological development and will provide grounds for the boost to employment. To that end, costs of education are actually an investment which can help and support faster social growth, boost productivity, contribute to the personal and social development, and reduce social inequalities. The percentage of total economic funds allocated for education is one of the key choices which are being made in

every country of the OECD.

When observing the economic development phases of any given society, it is noted that countries with innovations are making large investments into education. At present, these countries are especially investing into tertiary education, sciences and research. What is also visible is that certain levels in primary and secondary education have been achieved, and that more qualitative investment is needed in research as it allows for a boost in productivity and innovation. Higher productivity and innovation provide also for competitive advantage of these countries.

### **Competitiveness in the EU - Re-industrialization based on knowledge**

Although the weight of industrial production in the EU economy is on a decline in favor of services, production is increasingly regarded as the key sector in the economic development. However, what is needed here is the critical mass in the form of a minimal production base. Industrial policy, through its support of innovation and a foreign competition, may have a significant role to play in the sense of being a turning point to any downward trend. To that end, EU should focus its industrial policy, through the structural changes, in the direction of higher productivity, into the production and better positioning of the EU companies in the global value chain, based on comparative advantages in the form of knowledge and technology. EU is lagging behind in productivity in respect to the new industrial giants and some of its main competitors. The gap is broadening between the EU and USA in productivity of those products that are caused by the drop in efficacy of production caused by regulations, lower investments into information-communication technologies and intangible investments. Secondly, structural changes are slow, but should continue on to the already existing advantages that may be stimulated by drafting a proper institutional framework which would cover education, research, technology and innovation, and also would be focused on the global management quality (European Competitiveness Report, 2013).

troškovne konkurentnosti koji pokazuje da prerađivačka industrija u EU ima viši stepen složenosti. Izveštaji pokazuju da je EU ostvarila izvoz i sačuvala svoju prednost zahvaljujući razvoju sofisticiranih proizvoda, proizvoda zasnovanih na visokom intenzitetu znanja i time ostvarila prednosti na troškovima u odnosu na nove industrijske sile. Postepenim povećanjem složenosti svojih proizvoda od 1995. do 2010. godina (Tabela 2) EU je zahvaljujući proizvodnoj industriji uspjela da održi svoju konkurentsku poziciju. U 2010. godini, EU je izvozila oko 67% proizvoda sa ostvarenom komparativnom prednosti, dok je Kina imala komparativnu prednost u 54% izvoza, SAD u 43% svojih proizvoda, a Japan 24% (EC, *Towards knowledge-driven reindustrialisation*, 2013).

## Zaključak

Komparativne prednosti u vidu znanja i tehnologija u proizvodnji visoko sofisticiranih proizvoda su neophodne karakteristike konkurentnosti nacionalnih privreda. Dinamičan privredni rast se može ostvariti jedino ulaganjem u obrazovanje, istraživanje i softver. Ulaganje u znanje povećava ekonomsku efikasnost, a privredni rast će omogućiti tehnološki razvoj i povećanje zaposlenosti. Izdaci za obrazovanje su investicija koja može da pomogne bržem društvenom razvoju, razvoju produktivnosti, i smanjenju društvene nejednakosti. Takođe je neophodno ulaganje u nauku i istraživanje koje omogućava veću produktivnost i inovativnost i obezbeđuje konkurentsku prednost nacionalne ekonomije.

Srbija i dalje beleži pad konkurentne pozicije u svetu, i potrebno je definisati set novih mera i koraka koje treba preduzeti kako

bi se krenulo uzlaznom putanjom. Posebno je važno napraviti razliku između obrazovanja i realnog znanja tj. veština, budući da preduzeća navode da je to jedna od glavnih smetnji za unapređenje poslovanja pa i konkurentnosti. U cilju poboljšanja konkurentnosti posebnu pažnju treba obratiti na nivo obrazovanja i jaz koji postoji između znanja i obrazovanja, kao i u veštinama. Paradoksalno, u regionu gde postoji relativno visok stepen sticanja obrazovanja koje se sve više širi relativno kvalitetnog obrazovanja koje se stiče u ranijim godinama školovanja, nedostatak radnih veština se pokazao kao jedna od glavnih prepreka za ekspanziju preduzeća u zemljama jugoistočne Evrope.

Cilj Evropske Unije, kada je u pitanju konkurentnost je da proizvodnju posmatra kao ključni sektor u privrednom razvoju i da se konkurentnost odnosi na reindustrializaciju zasnovanu na znanju. EU je ostvarila izvoz i sačuvala svoju prednost zahvaljujući razvoju sofisticiranih proizvoda, proizvoda zasnovanih na visokom intenzitetu znanja i time ostvarila prednosti na troškovima u odnosu na nove industrijske sile. Postepenim povećanjem složenosti svojih proizvoda od 1995. do 2010. godine, EU je zahvaljujući proizvodnoj industriji uspjela da održi svoju konkurentsku poziciju. U ovom pravcu treba razvijati i konkurentnost privrede Srbije, kroz reindustrializaciju, privlačenje stranih direktnih investicija i izvoz. Budući da je Srbija na putu da postane članica EU, u toku je usklađivanje sa njihovim zakonodavstvom, kao i stvaranje preduslova za izgradnju stabilnog makroekonomskog okruženja, čime se doprinosi stvaranju povoljne klime za strane direktne investicije i njihove pozitivne efekte.

The existing comparative advantage of the EU in production is linked with the complex and the high-quality product segments. There is a gradual growth of complexity in their products so that the production industries of the EU have succeeded in retaining their competitive position in 2009 in respect to 1995 (Table 2).

EU has a comparative advantage in the majority of production sectors which cover vital high technologies and medium to high technologies in the sectors such as pharmaceuticals, chemicals, vehicles, machines, and transport vehicles. Yet another proof of industrial advantage of the EU is illustrated in the analysis of EU sophistication (knowledge intensity) during export of products with comparative advantages. This is a progress indicator on non-cost effective competitiveness which points out at the fact that the processing EU industry has a higher degree of complexity. The reports show that EU had achieved exports and preserved its advantage thanks to the development of sophisticated products, products based on high intensity of knowledge-driven focus,

having thus achieved the advantage on costs in respect to the new industrial powers. Through the gradual enhancement of complexity of its products, from 1995 to 2010 (Table 2), thanks to its production industry, EU succeeded in preserving its competitive position. In 2010, EU exported some 67% of products with achieved comparative advantage, while China had a comparative advantage in 54% of its exports, USA in 43% of its exports, and Japan in 24% (EC - Towards knowledge-driven reindustrialization, 2013).

## Conclusion

Comparative advantage in the form of knowledge and technology in the production of highly sophisticated products are the indispensable characteristics for the competitiveness of the national economies. Dynamic economic growth can be achieved only through the investment into education, research and software. Investment in knowledge is boosting up economic efficacy, while the economic growth enables the technological development and growth of employment. The

costs for education are an investment which can support a faster social development, development of productivity and fall in social inequality. In addition, it is also necessary to invest in sciences and research which allow for a higher productivity and innovation and provide competitive advantage of the national economy.

Serbia is still recording a fall in its competitive position in the world, hence it

Table 2 - Domestic and foreign added-value contained in the gross production exports per countries, in 1995 and 2009 (%)

	EU		China		Japan		Korea		USA	
	1995	2009	1995	2009	1995	2009	1995	2009	1995	2009
Domestic	91.1	85.6	82.7	73.6	93.3	85.4	73.3	61.3	86.9	84.5
Foreign	8.9	14.4	17.3	26.4	6.7	14.6	26.7	38.7	13.1	15.5
EU	-	-	2.8	5.1	1.2	1.8	4.4	5.2	3.7	3.3
China	0.3	2.3	-	-	0.4	2.4	1.7	6.7	0.4	2.5
Japan	1.0	0.7	3.8	3.3	-	-	6.3	4.7	2.2	0.9
Korea	0.3	0.4	2.0	1.8	0.5	0.5	-	-	0.6	0.4
USA	2.3	2.4	2.0	3.4	1.4	1.6	5.1	3.8	-	-
Australia	0.2	0.2	0.5	1.3	0.3	0.9	1.1	1.8	0.1	0.2
Brazil	0.2	0.4	0.1	0.6	0.1	0.2	0.3	0.4	0.2	0.3
Canada	0.4	0.4	0.4	0.5	0.3	0.3	0.7	0.5	1.8	2.0
Indonesia	0.1	0.2	0.5	0.4	0.3	0.6	0.6	1.2	0.1	0.1
India	0.1	0.3	0.1	0.3	0.1	0.1	0.2	0.3	0.1	0.3
Mexico	0.1	0.2	0.0	0.2	0.1	0.1	0.1	0.2	0.7	1.2
Russia	0.8	1.5	0.3	0.7	0.1	0.4	0.4	1.0	0.2	0.3
Turkey	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Taiwan	0.2	0.2	1.8	1.8	0.3	0.4	0.6	0.9	0.5	0.3
Other	2.8	5.0	2.9	7.1	1.7	5.2	5.4	11.9	2.4	3.8

Source: World Input-Output Database, <http://www.wiod.org/>, (accessed 05.05.2013)



## Literatura / References

1. Asia-Pacific Economic Cooperation, [http://www.apec.org/Press/News-Releases/2013/1003\\_monetary.aspx](http://www.apec.org/Press/News-Releases/2013/1003_monetary.aspx), (pristup 01.11.2013.)
2. Bojanić, R., Razvoj modela za praćenje uspešnosti rada visokoškolsko obrazovnih institucija, Novi Sad: Fakultet tehničkih nauka, doktorska disertacija, 2012.
3. EC, European Competitiveness Report - Raping the Benefits of Globalization, European Commission, 2012.
4. EC, European Competitiveness Report, [http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/index\\_en.htm](http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/index_en.htm), (pristup 01.11.2013.)
5. EC, Towards knowledge-driven reindustrialisation, Commission Staff Working Document, 2013., [http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/index\\_en.html](http://ec.europa.eu/enterprise/policies/industrial-competitiveness/competitiveness-analysis/european-competitiveness-report/index_en.html), (pristup 01.11.2013.)
6. European Integration Office, <http://www.seio.gov.rs/documents/agreements-with-eu.220.html>, (pristup 15.10.2013.)
7. Fondacija za razvoj ekonomske nauke, <http://www.fren.org.rs/>, (pristup 01.11.2013.)
8. Grgurović, N., Ekonomska institucionalizacija i konkurentnost privrede, Univerzitet za poslovni inženjering i menadžment Banja Luka, Studijski centar Trebinje, 2013.
9. International Monetary Fund, The World Economic Outlook, Washington DC, 2012.
10. Jakopin, „Okvir nove industrijske politike Srbije“, *Ekonomika preduzeća*, 1-2, (2011.), 73-88.
11. Jakopin, E., „Institucionalne performanse konkurentnosti privrede Republike Srbije“, *Institucionalne promene kao determinanta privrednog razvoja Srbije*, Ekonomski fakultet, Kragujevac, (2013.), 3-21.
12. Jugoistočna Evropa, Redovni ekonomski izveštaj, 2011., [http://www.worldbank.org/content/dam/Worldbank/document/SEERER\\_3\\_FINAL\\_Bosnian.pdf](http://www.worldbank.org/content/dam/Worldbank/document/SEERER_3_FINAL_Bosnian.pdf), (pristup 01.11.2013.)
13. Kotler, P., *Marketinška znanja od A do Z*, Binoza press, Zagreb, 2004.
14. Nešić, S., „Konkurentnost privrede Srbije“, radni document, Srpski Ekonomski Forum, Beograd, 2008.
15. Nikolić, G., „Tektonske promene u globalnoj ekonomiji i njihov potencijalni efekat na Srbiju“, *Finansije*, br.1-6, (2012.), 7-26.
16. Porter, M, E., „The Competitive Advantage of Nations“, *Harvard Business Review*, (1990.), 74-91.
17. Porter, M., *Konkurentna prednost. Ostvarivanje i očuvanje vrhunskih poslovnih rezultata*, Asee, Novi Sad, 2007.
18. Roskić, J., „Unapređenje poslovnog ambijenta u Republici Srbiji - zakonski okvir za strana ulaganja“, *Finansije*, br. 1-6, (2010.), 8-25.
19. Sahlberg, P., Oldroyd, D., „Pedagogy for Economic Competitiveness and Sustainable Development“ *European Journal of Education*, Vol. 45, No. 2, Part I, (2010.), 280-299.
20. The Organisation for Economic Co-operation and Development, <http://www.oecd.org/about/>, (pristup 01.11.2013.)
21. The World Bank, *Skills, not just diplomas: Managing education for results in Eastern Europe and Central Asia*. World Bank, Washington, DC, 2011.
22. World Economic Forum, <http://reports.weforum.org/global-competitiveness-report-2012-2013/>, (pristup 01.11.2013.)
23. World Economic Forum, <http://reports.weforum.org/the-global-competitiveness-report-2013-2014/>, (pristup 01.11.2013.)
24. World Input-Output Database, <http://www.wiod.org/>, (pristup 05.05.2013.)
25. World Population Program, International Institute for Applied Systems Analysis. *Population Projections by Level of Education*. <http://www.iiasa.ac.at/Research/POP/>, (pristup 22.12.2010.)

is necessary to define a set of new measures and steps to be taken in order to start on an ascending path. It is especially important to make a difference between education and real knowledge, i.e. skills, as the companies are reporting that this is one of the main obstacles to the promotion of business and thus of competitiveness itself. In order to enhance competitiveness special attention should be paid to the level of education and the gap that exists between knowledge and education, but also in the skills. Paradoxically, in the region where there is a relatively high degree of available education which is now ever more expanding, especially those high quality education skills acquired in the early years of schooling, the lack of operational skills has appeared to be one of the main obstacles for the expansion of companies in the countries of South-Eastern Europe.

The aim of the European Union, regarding competitiveness, is to treat the production as a key sector in the economic development and

deem competitiveness linked to the knowledge-driven reindustrialization. EU has achieved and preserved its advantages thanks to the development of sophisticated products those ones based on high intensity of knowledge and thus has gained advantage in costs in respect to the new industrial powers. Through a gradual building up of complexity of its products, from 1995 to 2010, EU has, thanks to its production industry, succeeded in maintaining its competitive position. In this direction should also be developed the competitive advantage of the Serbian economy, through reindustrialization, attraction of foreign direct investments, and exports. In view of the fact that Serbia is on its way of becoming an EU member-country, harmonization with the EU legislation is now taking its course, but also the achievement of prerequisites for building up of a stable macro-economic environment, which will help create a favorable climate for foreign direct investments and their positive effects.