MANAGING AND MEASURING INTANGIBLES AS KEY RESOURCES FOR DEVELOPMENT SUSTAINABLE COMPETITIVENESS OF THE REPUBLIC OF SERBIA

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Abstract

The rise of the "new economy", one principally driven by information and knowledge, international competitiveness and changing patterns of interpersonal activities is attributed to the increased prominence of intellectual capital (IC) as a management and research topic. It become obvious, that in last fifteen years developed nations of the world have seen a significant movement in terms of the important economic activities that comprise their GDP (knowledge-based fields such as financial and insurance products, software development, biotechnology, creative industries, and education and training.). There is indeed much to support the assertion that IC in the new century will be instrumental in the determination of enterprise value and national economic performance. As economies continue to become more knowledge intensive, intellectual capital will become the competitive edge of people, corporations, and nations. Stemming from this awareness of the value of know-how is a drive to establish new metrics that can be used to record and report the value attributable to knowledge within an organization and nation at whole.

The aim of this paper is to study the relation between intellectual capital (IC) as well as creative capital and development of sustainable competitiveness of an nation. In a macroeconomic point of view, IC is considered as major tool of enhancing the economic development. For this reason, it is becoming more and more essential to visualize the intellectual capital in the micro, mezzo and macroeconomic level. This paper consists of tri main parts. In first part of the paper, authors underline importance of recognizing and understanding the potential for Intellectual capital and Creative capital as his subcomponent, in creating and managing a sustainable competitive advantage. Second part, is about managing and measuring intangible assets on the level of organizations, regions and nations as a key factor of enhancing competitiveness and economic development. Also in this section, VAIC methodology for measuring intellectual capital on corporate and national level will be presented. Third part of this paper is focusing on creative capital and his influence on economic growth. Creative capital theory (R. Florida) states that the key determinant of global competitiveness no longer turns simply on trade in goods and service or flows of investment and capital, but rather in flows of creative people (creative class). On a global scale, there is an emerging talent war. In the future, the most competitive nations will be those nations that are best able to attract, retain and develop creative talent and harness their creative assets and capabilities. One of the leadership consequences is the need to focus on competence and talent inflow by development of organizational or societal attractiveness, instead of competitiveness as a key driver for value constellations and value networks. This will result with more management attention on creative industries, values and ethos. The special attention will be paid to exploring how creative intangible assets could be transformed into a source of economic development and sustainable competitiveness of Serbia.

Key words: intangibles, creative industries, competitiveness, managing

1. Introduction

Globalization, enhanced with revolution in IT, has provided much of the inputs for many countries to move towards knowledge based economy. In 1997, analysts recognized the U.S. economy went through a decade of strong growth. This could not have been explained by traditional methods of evaluation of economic growth. It has been concluded that the basis of this tremendous expansion of post-industrial society was in implementing IT. IT strongly affected organization, innovation, costs, development and productivity. Internet became one of the most important tools of globalization and basic tool for enhancing and sharing knowledge and information. Furthermore, in developed countries, large sums of public and private funds were directed towards both, fundamental and applied research, with the objective of establishing those countries as leaders in diverse, knowledge-based fields such as financial and insurance products, software development, biotechnology, creative industries and education and training. It become obvious, that in last fifteen years developed nations of the world have seen a significant movement in terms of the important economic activities that comprise their GDP. Today, these economies are far less reliant upon traditional primary (resource based) commodities or even secondary (low value added) commodities such as manufactured goods. In the „new economies“, the emphasis in terms of high economic value-added, is on service activities and intangible-based outputs or contents. During nineties, it became obvious, the trend of value creation is moving from material to nonmaterial. At the same time, international economic follows were influenced by increasing "transition of the production-oriented economy to a consumption-oriented one, as well as the grater importance of cultural and symbolic goods and invisibles, material and immaterial cultural products and creative services in economic development".[1] This situation signifies the transformation, from an industrial economy to a creative economy that generates wealth by harnessing intellectual labor, intangible goods and human creative capabilities. In that sense, the terms "experience economy", "value-added economy", "creative economy" and "symbolic economy" are sometimes used to describe transformation by underlining the market culturalization now occurring rapidly and to a wider extent in our economy.

On the global level, different estimations shows for example, that creative industries account for more than 7 per cent of the world’s gross domestic production[2] and their annual average growth is 10 per cent. These industries represent a leading sector in the OECD economies, showing annual growth rates of 5 to 20 per cent.[3]

Therefore, the 21 century brings with it a brand new challenge for nations It is becoming more and more essential to visualize intellectual capital as well as it different components such as creative capital on economy level. It is because the old market drivers may have been manufacturing, land and capital, but the driver of the new era is intellectual capital efficiency as well as ability of a country to mobilize and manage creative talents for innovation, industry transformation and long-term prosperity. Consequently, the recognition, identification, measurement, benchmarking, development and harvesting of nation’s and its firms’ intellectual capital as well as developing creative industries as an economic subject have been moved to the mainstream of policy agenda in many economies.

[1] Du Gray (1997), p. 175.
[2] World Bank (2003), p.4.
[3] UNICTAD (2004), p. 3.

2. Intellectual capital from macroeconomic perspective

From macroeconomic perspective, IC is considered as a major tool of enhancing the economic development (EC). IC is seen as a production factor and as an asset (like physical capital) that organization has to mix, in order to have success: in consequence, IC is a tremendous tool of wealth production and economic development. Since the early day's great economists: Smith, Malthus, Ricardo, Marx, and Keynes, considered the working skills as a condition for bigger growth. The neoclassical early studies (made by Harrod, Domar and Solow), continued in that line of thought, although they did not analyze in detail the question of labor heterogeneity. In the early 1960s, Schultz stated that E&T, knowledge and skills, were important to determine growth.[4] Machlup was the first who invented the term „intellectual capital" and used it to emphasize the importance of general knowledge as essential to growth and development[5]. Alfred Marshall says that knowledge is our most powerful engine of production; it enables us to subdue nature and satisfy our wants.[6] The concept of intellectual capital was further analyzed by Kendrick confirmed that finding and the idea that „non tangible capital" is important for the existence of economic development.[7] Management guru Peater Drucker in his description of post-capitalist society also further expanded the concept of IC. Drucker highlights the importance and arrival of a society that is dominant by knowledge resources and competitive landscape of intellectual capital allocation.[8] The term intellectual capital became well known in 1991, thanks to Tomas Stewart groundbreaking cover story in *Fortune Magazine*, which provided the main impulse for a new world of intellectual capitalists.[9] Boisot and Malhotra defined the concept of national knowledge assets as the intangible assets of a country that have significant impact on a country's potential growth and progress.[10] Malhotra further defines knowledge assets or intellectual capital as the hidden assets of a country that underpin and fuel a country's growth. As knowledge becomes a key production factor it is important to understand the value of knowledge capital. Many countries understand how value creation and GDP growth is spurred by service and knowledge-based output in addition to manufacturing output.[11] However assessment of national economic performance is still tied to traditional factors of production (land, capital, labor) rather than a thorough understanding of the value of knowledge assets, which are assets governed by the law of increasing returns.[12] If assets can be described as physical claims to future benefits (potentially generating value or cash flows), intangibles assets represent the ''non-physical'' claim of future benefits and values.[13] These assets can lead to the production of goods and services that display a high-knowledge content and value (for example, high-technology products; consulting services, etc.). The value of knowledge assets is not elicited by current accounting practices and intangible assets continue to represent the ''hidden'' value of a firm or a country.[14] Malhotra explains that leaders of national economies are trying to find reliable ways for measuring knowledge assets to

[4] Schultz (1961), pp. 1-17.
[5] Machlup, (1962).
[6] World Bank (1998), pp.20.
[7] Kendrick, (1993).
[8] Drucker, (1993).
[9] Stewart, (1991), pp. 44-60.
[10] Boisot, (1998); and Malhotra, (2003a)
[11] For more extensive discussion, see Guthrie and Petty, (2000).
[12] Arthur, (1996).
[13] Value Based Management.net, (2006).
[14] Edvinsson and Malone, (1997); Stewart, (1997).

understand how they relate to future performance. So, the dawn of the new millennium brings with it a brand new challenge for nations and firms.[15]

In the last years, there is increasing research interests for creative capital as a specific form of intellectual capital. Florida point out that from an economic point of view, creativity or high level of human creativity potential is a form of capital – creative capital. He defines creative capital as a human ability to create new ideas, new technologies, new business models, new cultural and artistic forms etc.[16] Florida differentiates creative capital from intellectual capital by using occupationally based concept of creative capital and he introduces concept of creative class.[17] The Creative class is the new class structure in economy that its members engage in work whose function is to create meaningful new forms.[18] From his point of view, new economic decade is characterized by global competition for talents and key dimension of economic leadership as well as competitiveness will depend on national's ability to mobilize, attract and retain human creative talent – creative capital.

Today managing intangible assets on the level of organizations, cities, regions and nations has definitely been recognized as a key factor of enhancing competitiveness and economic development and policy makers, important international organizations, governments and economic bodies have addressed the issue. Some of them have seat a clear goals for their future economic development strategy and took practical steps by examining the methods to transform institutional knowledge into intellectual capital of nation. At the macro-economic level most of the efforts have started from analytical assessments of a country's knowledge endowments as well as analytical measures for assessment the full range of creativity resources. For example, Malhotra represents efforts from the Nordic European countries to identify knowledge assets and the value of intellectual capital.[19] The Danish and Norwegian governments have sponsored efforts to identify a financial reporting system that would elicit companies' intellectual capital assets to be included in firms' annual reports. On the other side, there are different research approaches to identify creative capital. For example, Florida have developed key indicator of creative competitiveness of nations by using Creativity Index, while most countries use pragmatic measures for estimating creative capital in narrow sense such as creative industries mapping studies.

3. Measuring intangible assets

Recognizing the significance of intangibles for corporate and national economy, many companies, scientific institutions and regional and national policy makers started initiatives for researching, stimulating and measuring intangibles. To the present day companies, practitioners and academics are experimenting with various ways of identifying, measuring, managing and reporting intangible assets. As part of this trend, new types of management and accounting models are beginning to emerge. Those models were all made in the perspective of companies. Their authors tried to extend the study of company valuation away from the balance sheet traditional measures, in order to make valuation more in line with the market

[15] See Malhotra, (2003a).
[16] Florida, (2005), pp. 32.
[17] Creative class has two major sub-components: a Super creative core (computer and mathematical occupations, architecture and engineering occupations, physical and social science occupations, education, training and library occupations, arts, design, entertainment and media occupations) and Creative professionals (management occupations, business and financial occupations, legal occupations, healthcare practitioners and technical occupations, high end sales and sales management). Florida, (2002), pp. 328.
[18] Florida, (2002), pp. 68.
[19] Malhotra, (2003a, b)

capitalization. Today there is less and less doubts that the traditional indicators of business success, such as increase in total income, profit or cash flow, do not reflect the real business capacity of a company. That is why authors of those models imply the need for financial and management practice to adapt to new performance measurement systems that focus on intellectual capital in an effort to re-engineer the traditional accounting and management reporting process. Moreover, traditional indicators do not reveal whether companies create value or not, as we can talk about value creation only if a company is creating more than it has invested in resources, capital employed (physical and financial) and intellectual capital.[20] In 2001 the Financial Accounting Standards Board (FASB), one of the leading institutions defining accounting standards together with the IASB published a special report: Business and Financial Reporting: Challenges from the New Economy«. The report is dealing with a problem raised by the IC-community, namely that the economy in 2000, is fundamentally different from one in the 1950s and traditional financial monitoring of business success does not-and cannot monitor the moving force of business success, which is intellectual capital.

The limitations of the existing financial reporting system for capital markets and other stakeholders have motivated an evolving dialogue on finding new ways to measure and report on a company's intellectual capital. The product of this dialogue is a plethora of new measurement approaches that all have the aim, to a greater or lesser extent, of synthesising the financial and non-financial value-generating aspects of the company into one external report. Principal among the new reporting models are the intangible asset monitor (Sveiby, 1988[21]; 1997; Celemi, 1998); the balanced scorecard (Kaplan and Norton, 1992[22]); the Skandia value scheme (Edvinsson and Malone, 1997[23]).; and *Value added intellectual capital coefficient* by Ante Pulic[24].

3.1. Skandia navigator

Leif Edvinsson, the chief architect behind Skandia's initiatives developed a dynamic and holistic IC reporting model called the *Navigator* with five areas of focus: financial, customer, process, renewal and development, and human capital. This new accounting taxonomy sought to identify the roots of a company's value by measuring hidden dynamic factors that underlie "the visible company of buildings and products".[25] According to Skandia's model the hidden factors of human and structural capital when added together comprise intellectual capital.

Human Capital is defined as the combined knowledge, skill, innovativeness, and ability of the company's individual employees to meet the task at hand. It also includes the company's values, culture, and philosophy. Human capital cannot be owned by the company.

Structural Capital is the hardware, software, databases, organizational structure, patents, trademarks, and everything else of organizational capability that supports those employees' productivity - in other words, everything that gets left behind at the office when employees go home. Structural capital also provides customer capital, the relationships developed with key customers. Unlike human capital, structural capital can be owned and thereby traded.

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[20] IC report (2002), s.5.

[21] Sveiby, K.E. (1997), ''The intangible assets monitor'', *Journal of Human Resource Costing and Accounting*, Vol. 2 No. 1, pp. 73-97.

[22] Kaplan, R.S. and Norton, D.P. (1992), ''The balanced scorecard: measures that drive performance'', *Harvard Business Review*, Vol. 70 No. 1, pp. 71-9.

[23] Edvinsson, L., Malone, S. (1997), *Intellectual Capital,* Harper business, New York

[24] Pulic, A. (2004), „Intellectual Capital-Does it Destroy or Create Value?" *The Journal of Business PerformanceManagement: Measuring intangible assets - the state of the art,* Vol. 8 No. 1

[25] Edvinsson and Malone, 1997, p.11

Intellectual Capital equals the sum of human and structural capital. According to Edvinsson and Malone IC encompasses the applied experience, organizational technology, customer relationships and professional skills that provide Skandia with a competitive advantage in the market. In sum, Skandia's value scheme contains both financial and non-financial building blocks that combine to estimate the company's market value. This conceptualization achieved a balance for Skandia in trying to represent both financial and non-financial reporting, uncovering and visualizing its intellectual capital, tying its strategic vision to the company's core competencies reflecting knowledge-sharing technology and knowledge assets beyond intellectual property, and reflecting better its market value.

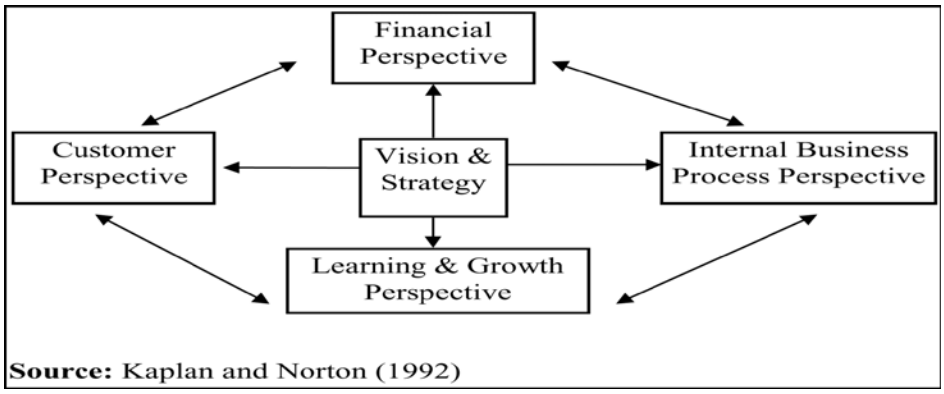
3.2. Intangible asset monitor

In the intangible asset monitor, Sveiby (1997) proposes a framework developed from the invisible balance-sheet. He foresees an intangible model as clearly understood as that of an organization's *book value* equal to tangible assets minus visible debt. Sveiby asserts that key to such a system is having a coherent conceptual framework. But to do this, Sveiby argues that money has to stop being used as a proxy for human effort. Invisible assets are matched on the financing side of the balance-sheet by equally invisible finance, most of which is in the form of invisible equity. The intangible asset monitor model classifies intellectual capital into the same three categories: internal structure, external structure, and individual competence. Individual competence refers to people's capacity to act in various situations. Internal structure consists of both the formal and informal culture within the organization. It includes patents, concepts, models, databases and internal systems. External structure comprises the relationships between the organization and others e.g. customers, suppliers, brand names, trademarks and reputation. Human capital is vital to organizations because without people an organization cannot function. Employee competence, skills, training and experiences are all elements of individual competence. Sveiby recommends replacing the traditional accounting framework with a new framework that contains a knowledge perspective. Within this framework, he argues that both non-financial measures to measure intangible assets and financial measures to measure visible equity can be jointly used to provide a complete indication of financial success and shareholder value.

3.3. Balance scorecard

Kaplan and Norton (1992) developed the balanced scorecard which measures organizational performance across four linked perspectives: financial, customer, internal business processes, and learning and growth.

As we can see, the balanced scorecard represents a set of cause-and-effect relationships among output measures and performance drivers. It provides for the control of intangibles while simultaneously monitoring financial results.



Source: Kaplan and Norton (1992)

3.4. VAIC

Ante Pulic led research studies on the measurement of intellectual capital performance in Croatia and other European countries. He developed a ‘‘Value Creation Efficiency Analysis,’’ a measurement system that links performance of key physical, financial, and intellectual capital resources to financial data.[26] His work recognizes the value of intellectual capital by bridging the gap between the new economic drivers and the traditional accounting standards and provides a new way to look at the national economy’s performance. His research focuses on Croatia as a case study and compares measures of intellectual capital efficiency to other Eastern European countries (such as Slovenia, Hungary, the Czech Republic, and Poland). Pulic’s work offers important national and regional insights into measuring the value of intellectual capital. VAIC is an analytical procedure designed to enable management, shareholders and other relevant stakeholders to effectively monitor and evaluate the efficiency of VA by a firm’s total resources and each major resource component. Formally, VAIC is a composite sum of three separate indicators:[27]

(1) Capital employed efficiency (CEE) – indicator of VA efficiency of capital employed;[28]
(2) Human capital efficiency (HCE) – indicator of VA efficiency of human capital;[29]
(3) Structural capital efficiency (SCE) – indicator of VA efficiency of structural capital.[30]

In this approach employee expenses are not calculated as input, in other words, they are not treated as cost, but as investment and therefore come into analysis as Human Capital. The benefit of this measuring method is his focus on value creation, not control and takes intellectual capital, particularly human capital, into account. It considered human capital to be key resource and driving force of value creation in the new economy, and thus its ability to create value has to be measured and monitored.[31]

As we said, this methodology also can be used as a new output measure for measuring intellectual capital performance on corporate, local, sector, regional, national and global level. According to Professor Pulic, measuring the efficiency of IC on national level is as important as on a company level. It may be even more important, as laws and political decisions, which are issued at macro level strongly, influence the entire economy and individual company’s business success. By monitoring IC-efficiency at national level, a new perspective on economy’s performance can be obtained. Pulic believes that like revenue and profit, which are no longer adequate indicators of business success at macro level, GDP cannot be considered a valid indicator of national economy performance any more. He thinks that the problem with GDP is the fact that if country has a GDP of X billion euro, similar to revenue, you have no information, whether this is good or bad, with regard to the utilized resources.

Second problem is that the macro level is measured with one measure and the micro level with another, although both belong to the same economic organism. Therefore, according to principals of new economy Pulic suggests a substitute for GDP, an ICE of country. The results from VAIC analyses on national level can indicate governments to what extent economy has

[26] Pulic, (2004).
[27] The following equation formalizes the relationship algebraically: VAIC (Value Added intellectual coefficient for firm) = CEE + HCE + SCE.
[28] CEE = VA (value added)/CE (book value of the net assets for firm).
[29] Human capital coefficient for firm (HCE) = VA (value added)/HC (total investment salary and wages for firm).
[30] Structural capital VA for firm SCE = SC (value added – human capital) /VA (value added).
[31] IC report: Intellectual capital efficiency in Croatian economy (2002), s. 5.

made progress or stagnated in comparison to the previous year and how individual national economies are performing in comparison to others. General trends show how the "value creation ability" has been developing, in certain sector of economy, which are stagnating and which the growing ones. Therefore, VAIC can help national and local governments, company management and consultants in determining weak points and reasons for value destruction, in systematic improvement of value creation efficiency and establishing balance on higher and higher levels. In addition, as a close relationship between the ICE and MV of company has been provided in many cases, it enables forecasting fluctuations in share value.

Considering that Serbia tends to become a member of EU, it is necessary to try to accomplish EU existing standards, and there is a lot of work which has to be done. In November, 2006, at conference titled „Valuing and measuring Intellectual capital in Serbia" in organization of Ministry of economy of Republic of Serbia and Regional chamber of economy Novi Sad, Professor Pulic made presentation of IC efficiency in Serbia region of Vojvodina. His calculation shows that IC efficiency of region of Vojvodina is 1.54 which is below European average which is 2, 3. Today in Serbia, investments in R&D are only 0.6 from GDP. In addition, Serbian population has a low level of education - 60% of population have not finished or finished only elementary school. Also, Serbia is still in phase of building infrastructure for internet.

4. Creative capital, economic growth and competitiveness

As we mentioned, there are two research approaches for measuring creative capital. The first of them have a pragmatic sense – creative industries concept. The first study of this kind was carried out in Great Britain where, at the same time, the basic research methodology was developed, but the idea for analyzing economic potential and impact of creative resources came from The International Intellectual Property Alliance (IIPA) in 1990 with research of economic potentials of copyright industries in the USA. It is important to underline that pragmatic tool for measuring creative capital is aimed to measure creative capital in narrow sense than Florida's creative capital definition. Creative industries mapping documents as a toll for evaluation and measuring creative capital tray to identify and estimate capitalization of artistic creativity potentials through creative industries concepts.[32] From a methodological point of view, starting point in most of mapping studies is not to define or measure creativity, but to examine how creativity is exploited and transformed to tradable products or services, and how process of production, commercialization, distribution and consumption can be properly evaluated within the same sector of economic activities. In that sense, the creative industries are an industrial system that transforms intangible assets based on artistic creativity into processes of production and distribution of goods and services of symbolic values and social meanings. In this sense, measuring creative capital through creative industries concept is a powerful means for analyzing driving forces of certain areas within creative industries and their contribution to short-run economic growth in national frameworks, but they cannot be accepted as consistent indicators for gaining a global and comparable picture on

[32] Creative industries are a conglomeration of very heterogeneous economic branches where creativity is the essential input for creating product and services. The first definition of creative industries appeared in Britain in 1998 and it was adopted by many countries: "creative industries are those industries which derive from individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property" See Creative Industries Mapping Document (1998), p. 4. Under this concept, the creative industries include usually 13 sectors: advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and television and radio and methodological differences depending on official classification of industrial activities.

competitiveness of creative capital. In this paper, we use concept creative sector for measuring potential of creative capital in generating economic growth in Serbia.[33] In 2005, creative sector participation in creating GDP was 1,1%, growth of annual revenues was 25% and profitability ratio 9,1%. Just for comparison, in 2004 average profitability ratio for creative sector was 5,53%, while for whole economy 3,75%.[34] Creative sector in Serbia account for 2,7% of Serbian employment, but it should be noticed that the employment is much higher than it is "statistically visible". The employment in creative sector is quite unique. It is characterized by atypical forms of employment: job flexibility, multi-tasks, higher job mobility, freelance contracts, part-time or self-employment activities, so it is difficult to estimate a real employment effect in creative sector. All of those figures demonstrate that in the future creative capital in Serbia could be one of important factors for transformation economy and creating economic development portfolio areas. The economic importance, in terms of creating wealth, national attractiveness, generating creative potentials and opening new work positions is a reason and in some way a universal motif for development of creative industries, but is by no means the essence. In the transitional countries improvement of competitiveness and economic position, can be realized only if they encouraging local creativity, allow and support development of their own creative sector.

The second research approach for measuring creative capital is the Creativity Index. It is developed by Florida in 2002, and measures the creative competitiveness of nation according to his 3Ts theory of growth: technology, talent and tolerance.[35] Creativity index is composite measures as sum of the Talent index, the Technology index and the Tolerance index, and its value is normalized on a scale from 0 to 1.[36] This index serves as a measure of country's base of creative talent which affects long-run prosperity as well as relative position of country to mobilize, attract and generating creative capital.

By using Florida approach, we adapted indicators for measuring competitiveness of creative capital to the West Balkan context. These indicators differ in several important aspects from the indexes originally use in Florida analysis. Because data is limited, we use proxy measures to capture the creative capacity in West Balkan.[37] Our analysis preliminary suggests that the competitive epicenter of West Balkan potentially can be Montenegro, Croatia and Serbia. Serbia and Croatia can be seen as future creative pools in region. They are top the West Balkan Talent index, and score responsibly well on the West Balkan Technology index. It is

[33] Creative sector include: publishing and printing, music recording, film industry, radio and television, advertising industry, protecting cultural monuments, artistic work, performing arts and other artistic activities. Detailed figures and mapping results see Jovicic, Mikic (2006); Mikic (2008).

[34] Chamber of commerce of Serbia (2006).

[35] 3 Ts of Economic growth is based on three critical factors: talent, technology and tolerance. Florida emphases that the economic leaders of the future will be the nations and regions within nations than can best mobilize the creative capacities of their people and attract creative talent from around the world. It argues that technology and creative people are key drivers for economic development, but tolerance critically affects the ability of nations to mobilize their own creative capacities and compete for creative talent. Florida, (2004), pp. 12.

[36] The Talent index measures level of creative capital and it include three components: creative class measure, human capital measure and scientific talent measure. The Technology index measures level of technology capitalization and represents continuous accumulation and explanation of human knowledge. It includes two components: R&D measure and innovation measure. The Tolerance index measure openness and diversity of place and it represent ability of country to generate, attracting and holding critical factor of development – talent and technology.

[37] For example, in our paper creative class is represented by combination of super creative class and creative professional based on national statistic data, not from International Labor Organization data. Than, we use data from World Intellectual Property Organization for calculating Innovation Index, as well as original Value survey data for calculating Value index and Expression index. For more details concerning Florida methodological issue see Florida (2005), pp. 270-280; Florida (2004), pp. 42-44.

important to notice, that future improvement of competitiveness of creative capital attraction in those countries will depended on development of strategy to attract and retain talent in the filed of creative industries and creative capabilities management.

Table 1: West Balkan Creativity Index

Country	Talent				Technology			Tolerance			*Creativity Index*
	Talent Index	Creative class	Human Capital	Scientific talent	Technology Index	R&D Index	Innovation Index	Tolerance index	Value Index	Expression index	
Serbia	0,770	2,7	11,03	2203	0,56	0,27	23,18	0,5495	15,9	10	0,6264
Montenegro	0,667	3,7	25,9	200	0,585	1,17		0,89	25,6	8,7	0,7139
Bosnia and Herzegovina	0,042	1,98	4,04	441	0	0,15	0,39	0,5	25,7	1,8	0,1805
Macedonia	0,412	2,31	9,97	778	0,164	0,26	5,4	0,317	14,8	7,2	0,2976
Croatia	0,777	2,61	11,89	2.135	0,556	1,14	3,61	0,65	20,8	8,3	0,6611

CONCLUSION

IC in his various forms is a very important tool of economic development. Importance of IC is growing with the emergance of new technologies, forming new industrial grups and the economic development itself. IC has become fundamental resource in today's knowledge based economy. Therefore IC investment for one country represents investments in country's sustained competitivness and consequantly they determine its future wealth and economic development. Huge investments in IC are fundamental for economic development to happen, other important factors, such as established democracy, a high degree of economic and political stability, democratic and open society and international integration are necessery for improving relation betwen IC and economic development. Although, Serbia like most developing countries lacks the IC, and the infrastructural and organizational tools, which are needed to accomplish a sustainable economic development process, it should make strong effort to restructure industrial age organization structures, processes, and mindsets to utilize the wealth-creating potential of its people.

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