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COUNTRIES' SUSTAINABILITY TO ECONOMIC SHOCKS: THE STUDY OF CENTRAL AND EASTERN EUROPEAN MARKETS

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Abstract

Purpose – to analyze economic "shock" impact on Central and Eastern European countries' sustainable economic development.

Design/methodology/approach – Statistical data has been analyzed and sustainability theory has been applied to Central and Eastern European countries during economic downturn 2008 – 2012.

Findings – Findings suggest that commonly used macroeconomic indicators do not reflect stable social economic development. Moreover, usually high economic growth during economic cycle is determent by high level of recession in economic cycle. This finding suggests that investors and other financial decision makers should take into account the sustainability of economic performance before taking financial decisions so that during financial economic recession could mitigate risks and loses in Central and Eastern European markets. Also the impact of intangible capital on countries' sustainability was identified. There is a relationship between social and economic sustainability and intangible capital.

Research limitations/implications – Research is applied in the theory of sustainable economic development. The economic and social performance is being considered in the research. Although the concept of sustainable economic development is quite controversial in scientific literature, the aspects of economic and social indicators are taken into account not considering much of ecological aspects of sustainable development. The research logic is based on sustainability as constant and smooth social and economic development than the development through natural limitations and human being needs combinations.

Practical implications – Practical implications might be broad enough. Identification of reaction of economies to natural economic "shock" during economic downturn might be applied for governments decision makers, investors, banks, exporters to evaluate future economic financial decisions in Eastern and Central European markets.

Originality/Value – Value of the research might be high for interested parties. Applying sustainability theory to economies in transition during financial economic downturn 2008-2012 is original and novel.

Keywords: economic development, sustainability, economic "shock", Central and Eastern Europe.

Research type: research paper.

Introduction

The first decade of the third millennium was marked by fruitful events for economists. Most of the growth in the West was explained by real estate bubbles but not by the improvements in sustained productivity. Economic growth was followed by deep recession bringing new lessons to be learnt about economic processes and economic regulations. In the light of the economic downturn R. Shiller was awarded by Nobel prize in economics. The main idea of his research was that formal and informal institutions are not capable to regulate economic processes basically financial markets. In the context of sustainable development theory, in the paper sustainable economic system is treated as that system which is able not to diminish its wealthier during economic recession. In this way social and economic indicators are being analyzed in Central and Eastern European countries which response to economic shocks are undiscovered well yet. Central and Eastern European countries considered to be still the economies in transition because many social and economic indicators did not achieve the development level of advanced western markets neither in qualitative nor quantitative approach.

The economies in transition have been chosen for methodological matters. The economies are taken into account by analyzing social and economic indicators which should assess the performance of the economies during economic recession. Statistical analyses and econometric estimations are used in the research.

The concept of sustainable economic development

The sustainable economic development concept is widely spread and controversial concept in scientific literature. Classical understanding of economic development mainly related to economic growth and more or less equal involvement in economic activities of different social groups. Sustainable economic development concept is a relatively new concept in economic thought of history. In 1997, United Nations declared that development is a multidimensional undertaking to achieve a higher quality of life for all people economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development (United Nations, 1997). World Bank reported that sustainable development is the "development that continues" (World Development Report, 1992). Brundtland commission (1987) stated that sustainable development is the kind of development which satisfies the current needs without endangering the future generations to satisfy their own. The limited social, human, financial, produced and natural capital have to be used in a way that the future generations could not face with development restrictions because of previous generations' activities. However, the essential point of market economy remains economic growth and assets or capital creation. The sustainability concept started to be discussed not only in economic but social, natural, human dimensions as well. Thus, sustainable development is not about a choice between environmental protection and social progress, but rather more about striving for economic and social development that would be compatible with environmental protection (Ciegis et al, 2009).

The sustainable economic development put emphasis on "needs" and "limitations". Needs are understandable as needs of combination of present and future generations and limitations are understandable as save consumption of present generation. Needs and limitations closely associated with production and consumption. Increased welfare in society demands new and better products that increase incentives for enterprises more to produce. In this place efficiency in society and economy is crucial (Rutkauskas, 2012). However, the use of natural resources might be put in different consideration in different economic structure societies. More service produce societies have more intensive for human and capital usage since these societies have already gained certain capital ratio in the market. In this case, such societies are more concerned about effective usage its educational systems, trainings and service sectors. Less developed or developing countries put emphasis more on usage of natural capital since market capital ratio might be relatively low.

Sustainable economic development provides with a few criteria – sustainable consumption (Repetto, 1986), the level of utility of society cannot be diminishing in time (Pezzey, 1992). This concept is a complex notion and treated by different authors differently. On one hand, sustainability provides various indicators and contributes to competitiveness on the given country (Balkyte et. al., Tvaronaviciene, 2010). Also sustainability might be considered as sustained economic system and sustained governance (A. V. Rutkauskas et. al., 2012).

However, the critics of sustainable economic development stress that the concept itself is vague, there are much of contradictions (Ruchi, 2009). Some authors suggest that sufficiency should be a goal but not efficiency (Lankauskiene et al., 2012). An economic growth should be combined with development, quantitative change with qualitative change (Du Pisani et. al., 2006).

As mentioned above a number of literature provides three fundamental dimensions of sustainable economic development: economic, social and environmental (Pierantoni, 2004; Ciegis, Zeleniute, 2008; Ghosh, 2008; European Commision, 2009).

The economic sustainability concept is based upon Solow's (1986, 1993) theoretical approach on capital convertibility and Hicks-Lindahl concept of maximum income which can be acquired by saving essential wealth (capital) resources for the benefit of future generations (implementing the principle of fair distribution among generations). Social sustainability seeks to reduce vulnerability and maintain the health of social and cultural systems, and their ability to withstand economic shocks (Chambers, 1989; Bohle et al., 1994; Ribot et al., 1996). Nerveless estimation of social capital raises many challenges. Different studies suggest with strong evidence that social capital is crucial element for socio-economic system stability. Sustained social capital resists to economic shocks, downturns and different economic financial crisis remaining the entire economic system stable.

Report by the Commission on the Measurement of Economic Performance and Social Progress (2009) lead by Nobel prize winner Joseph Stiglitz stated that traditional macroeconomic indicators do not reflect real economic and social progress in society.

Commonly used indicators should gain more qualitative approach rather than only quantitative approach, for example, GDP. For measuring sustainable development Commission suggests pay more attention on following criteria: real per capita produced capital rate, savings and consumption or income ratio, human development index, life expectancy, quality of living, social exclusion and people at risk of poverty, employment, etc.

The Specificity of development of Central and Easter European countries for the last 25 years

In Lithuania as in other Central and Eastern European countries without long discussions the neoliberal imitation to transformation was chosen for transition from centrally planned economy to market economy. Imitational orientation means that Western economic models were trying to adopt and neoliberalisation – associated with deregulation process almost in all fields of economic activities. That is to say in the beginning of the privatization process two thirds of state owned capital was privatized only in two years. According to many scholars, privatization should be the last stage of transition to market economy, only then when market economy institutes are created: social capital, human capital, rule of law, social trust, entrepreneurship skills, taxation system, etc. (Marangos, 2005). Of course, these processes take place decades as well as transition to market economy and require certain preconditions. Unfortunately at the time, political elite, some economists and probably the most important society were dreaming that neoliberal economic model would bring by itself (probably society was persuaded by Adam Smith’s “invisible hand” panacea and governing elite by strong international financial institutions pressure) fast transition to market economy, achieving Western economic indicators and quality of living for all social groups.

Extensively developed economy in Soviet Union collapsed and perhaps it was the main reason of it. It was necessary to direct the economy to free market oriented model of development and it was impossible without elimination of old political system (Kornai, 1995).

After the collapse of enormous and extremely difficult social and economic system mainly two approaches were possible for transition to liberal market economy: „gradualist“ approach or “step by step” or „shock therapy“ or extremely rapid destroy of old social and economic structures and provision to liberal market economy‘s „invisible hand“ . According to Nobel prize laureate Joe Stiglitz “invisible hand” is invisible because it is not there. Gradual transformation dominated in Belarus, Central Asia, in Russia after 2000, for some time in Bulgaria and Rumania.

Social and Economic development of CEE during Economic Shock in 2008-2012

After the collapse of planned market economy every country had to adopt to new market rules and specifications. It was almost impossible to make the right decisions not only for politicians but economists as well. Every post-communist country choose its own path on the way to market economy. After 25 years of colourful changes the author of the article think that it is the right time to make some assessment on processes that were controversial at that time through sustainable economic development approach.

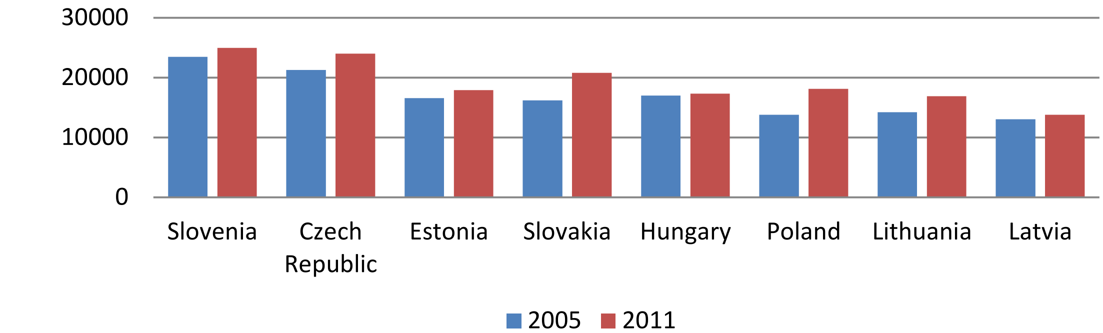
1 table shows the dynamic of global competitiveness index presented by World’s Economic Forum. That is to say three Baltic states were not taken into account in 2000. The number of assessed countries was expanded from 58 in 2000 to 148 in 2014. The methodology of global competitiveness index was reviewed a few times during analysed period but the authors of the article make assessment in the framework of officially provided methodology. Comparing global competitiveness index 2000 and 2014 the significant change is determined. Only one country’s (Lithuanian) competitiveness has improved over 14th years. Some others’ competitiveness index have slightly deteriorated (Poland, Estonia). Two of transition countries’ competitiveness has fallen by 10 positions (Latvia, Check Republic). Other countries’ in transition competitiveness have fallen more than double behind more than 30 additional countries (Hungary, Slovak Republic). How Lithuania has remained its competitiveness over 14 years while other countries’ competitiveness deteriorated and some of them deteriorated a lot?

Table 1. The dynamics of the global competitiveness index

	Country/ Year	**2000**	**2001**	**2003**	**2004**	**2006 - 2007**	**2007-2008**	**2008 - 2009**	**2009 - 2010**	**2010 - 2011**	**2011 - 2012**	**2012 - 2013**	**2013 - 2014**
1.	Lithuania	n/d	49	40	36	39	38	44	53	47	44	45	48
2.	Latvia	n/d	42	37	44	44	45	54	68	70	64	55	52
3.	Estonia	n/d	27	22	20	26	27	32	35	33	33	34	32
4.	Poland	41	41	45	60	45	51	53	46	39	41	41	42
5.	Hungary	32	26	33	39	38	47	62	58	52	48	60	63
6.	Czech Republic	34	35	39	40	31	33	33	31	36	38	39	46
7.	Slovak Republic	36	39	43	43	36	41	46	47	60	69	71	78

Notice: in 2000 global competitiveness ranking was estimated out of 58 countries comparing with 148 countries in 2014
Source: World Economic Forum reports 2000-2014

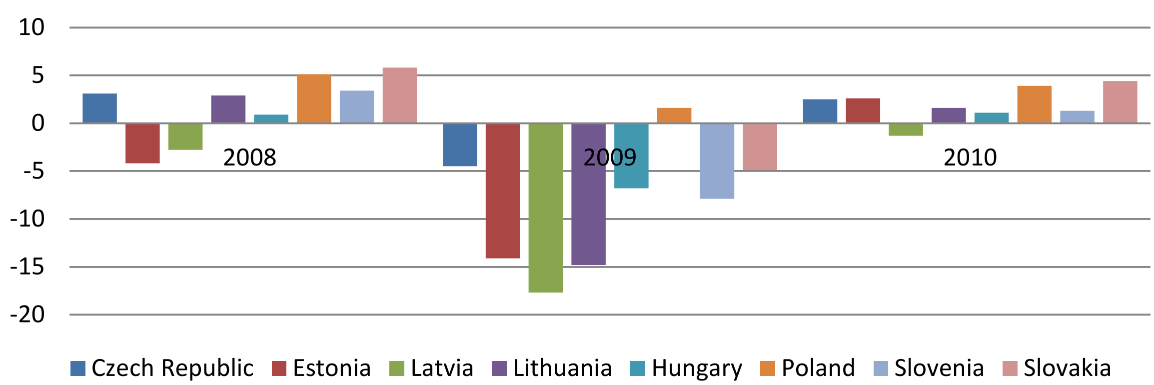
Chart 1 shows GDP per capita in PPP 2005 comparing 2011 on data available in United Nations Development Programme’s database. As mentioned before essential premise of sustainable economic development states that capital should increase in time. Hungary, Latvia, Estonia and Lithuania have slightly increased their GDP per capita in PPP during 2005-2011. Meanwhile Slovenia, Czech Republic, Slovakia and Poland could be grouped as countries in CEE that made relatively high progress accumulating capital during financial economic downturn.



Source: UNDP, 2014

Figure 1. GDP per capita in PPP in CEE

Baltic countries real GDP growth rates were the highest ones in all European Union estimating the growth of 7-8% rate on average. Accession to EU encouraged FDI in all countries. However the Baltic states were not exception among other countries. That is to say the growth was based on housing credits and supporting export initiatives very hardly investing in new technologies and innovations. Because of deep financial downturn in 2008-2009 Baltic states experienced one of the highest falling GDP rate in EU – Lithuania 17%, Estonia 14%, Latvia 18%. Only Poland remained a country which did not experience recession and during the peak of financial downturn Poland's GDP growth rate was 1%. That is to say, Poland's government twice devaluated zloty that made polish export competitive in European markets. Separate from Poland, Lithuania did not have even theoretical chance to devaluate Lithuanian Litas because of its exchange linking to Currency Board model. However, Baltic states sustainability considered as stability might be said that is poor enough accounting the highest GDP drop among CEE countries and EU-28. In this perspective short term investment are risky enough in these types of countries. However the Baltic states had recovered faster than any other CEE country and experienced one of the highest rates of growth in EU-28.



Source: Eurostat database, 2014

Figure 2. Real GDP growth rate

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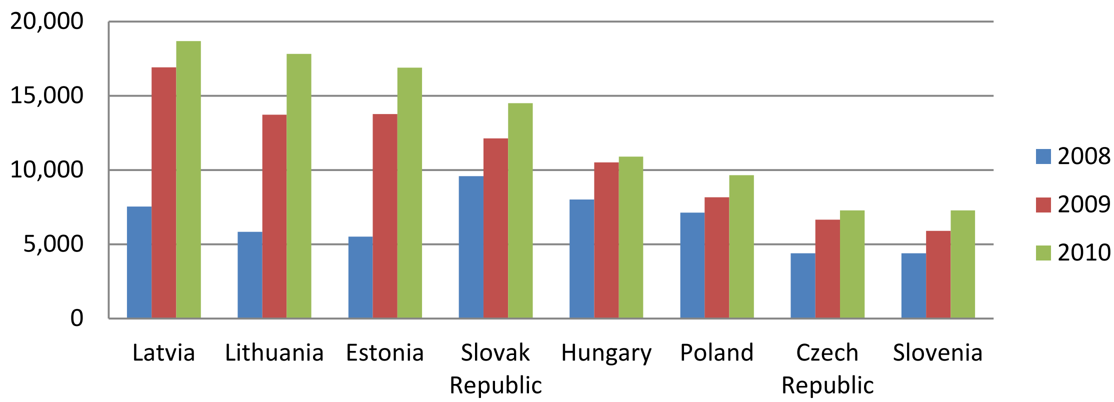
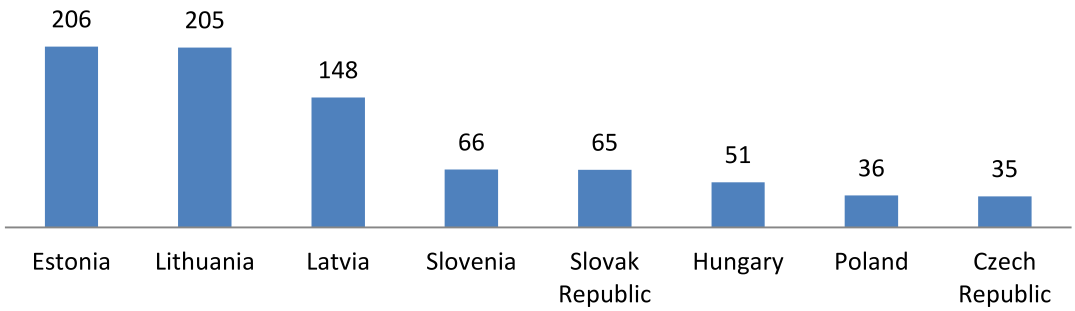
Chart 3 indicates the unemployment increase. Again the Baltic states demonstrated the highest absolute unemployment rates achieving from 16% up to 19% of all active labour force in the labour market. Extremely high level of labour forces demonstrates that economy is unstable and unsustainable since economic fluctuations directly reduce wellbeing in society. According to Chart 3 the highest unemployment rate change is seen in Estonia, Lithuania, Latvia, respectively 206%, 205%, 148% from the level being before financial downturn to its bottom line of the fall.



Source: Eurostat database, 2014

Figure 3. Unemployment rate increase during downturn peak

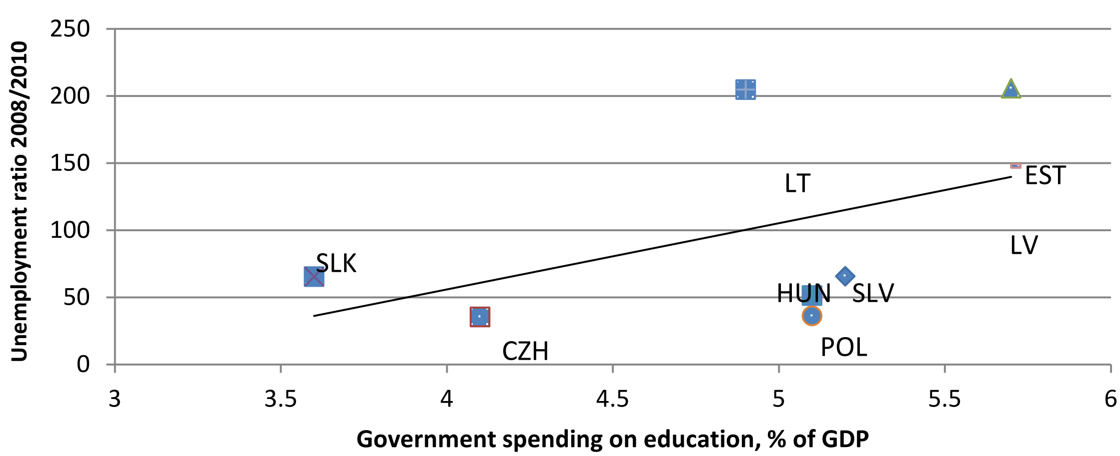
Moderate loss of labour force in the labour market in Czech Republic, Poland, Hungary, Slovak Republic and Slovenia could be explained by their capability to adopt to economic "shocks". Also the great change in employment represents the quality of workforce skills, trainings, outcomes of educational system (International Labour Office, 2010). Qualitative educational and training systems in the country encourage workforce for innovations, better investments and business management in general. High level of unemployment contradicts to sustainable development concept's premise that national capital should increase over time. High rate of unemployment restricts potential economic growth, does pressure on public finances and most important long term unemployment might cause mental or psychological problems. Another negative aspect of unemployment is that higher workforce supply reduce nominal wages of qualified workers. In a short period this phenomena might bring competitive advantage on cost, however, in a long period workers will lose their initiatives for more productive work. As it is seen from Chart 4 and 3 all three Baltic states has the highest rate of unemployment and unemployment rate change since the beginning of crisis till the pick of downturn of it.



Source: author's estimations 2014

Figure 4. Unemployment rate change comparing 2008 vs 2010

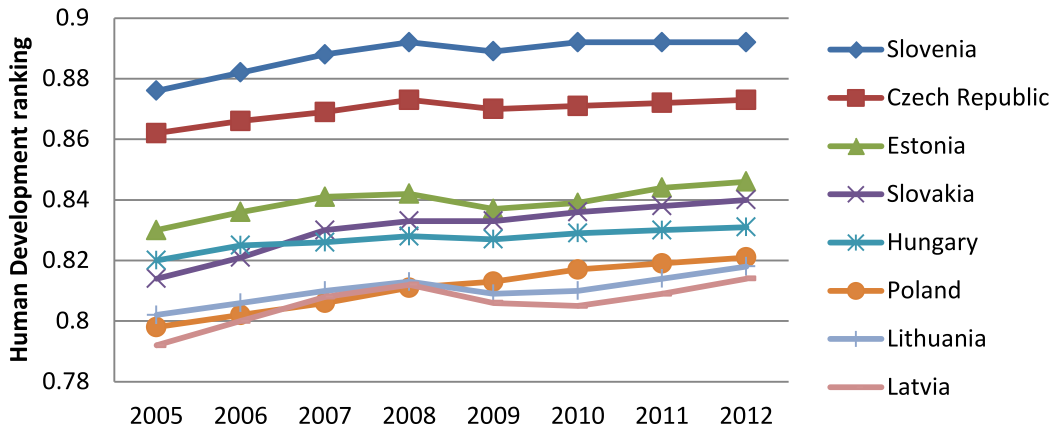
Chart 5 presents relationship between unemployment change and government spending on education. However, graphs shows opposite relations to expected – statistical correlation contradicts to thesis that the more government spends on education the more sustainable workforce is. However, the distortion of correlation might suggest that there is significant impact of efficiency of government. Some studies suggest that the efficiency of government is one of the main tools for implementing policies. The Baltic States and other CEE countries have poor government efficiency (The Strategy of Europe, 2012).



Source: UNDP, 2014

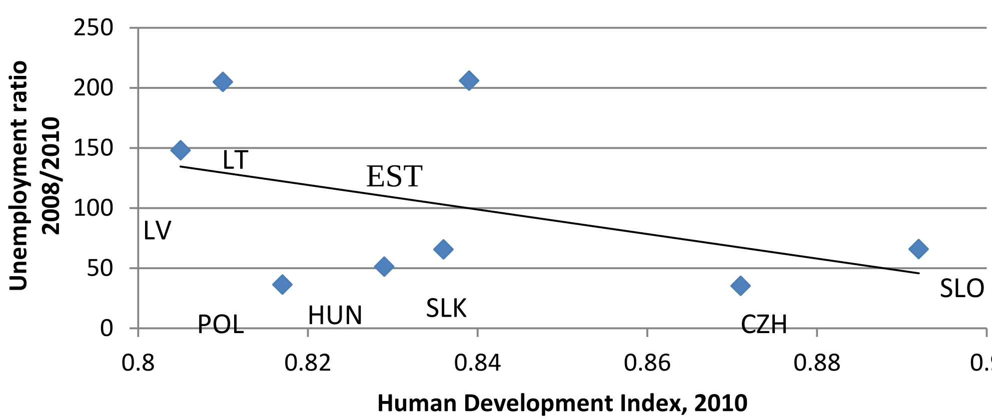
Figure 5.Workforce sustainability dependency on government spending on education

Human Development Index (HDI) estimated by United Nations could be analysed in Chart 6. It is seen that countries with less unemployment rate have higher lever of HDI. Even though, there is a trend that all CEE countries have improved their social and economic development and all might be grouped as high developed countries, the difference among them still exists. Slovenia has one of the smallest rate of unemployment and GDP downturn as well as Czech Republic. Latvia, Lithuania and Poland has the lowest rate of HDI making a progress in 7 years just for 0,02 HDI points.



Source: UNDP, 2014

Figure 6. Human Development Index dynamics in CEE countries



Source: author's estimations based on UNDP, 2014

Figure 7. Human Development Index and unemployment rate change

As seen from Chart 7, there is a correlation between Human Development Index and Unemployment ratio change since the beginning of economic downturn till its pick. Lithuania and Latvia have the highest unemployment rate of change and the least HDI, respectively 0,81 and 0,805. Poland, Hungary and Slovakia grouped as low unemployment rate change countries having high HDI. Czech Republic and Slovakia are grouped as the highest HDI ranking countries having the one of the lowest rates of unemployment change. So it could be concluded that human development matters for labour sustainability as well as for economic development as well.

Conclusions

The research suggests following conclusion. CEE countries could be grouped in three main blocs. The first block of countries might be considered as able to resist to economic downturn saving relatively low social and economic losses during financial economic downturns. These countries are: Slovenia and Czech Republic. Another group of CEE countries are countries which have medium ability to adopt themselves to economic “shocks” and sustain social economic development: Hungary, Poland, Slovak Republic. The third group of countries that easily linked to economic and social fluctuations and less to resistance to economic “shocks” are the Baltic States: Lithuania, Latvia and Estonia. The amplitude of fluctuations of their social and economic parameters is the most radical among CEE countries.

The research suggests that intangible capital (social capital, human capital, institutional capital) is a significant component in the development of the countries as economic “shocks” mitigating factor. Economies that have higher level of intangible capital accumulation are more likely to bring less social, economic and financial loses during economic cycle’s recession period. However, the research field is relatively new and forward studies must be carried out for deeper understanding of intangible capital impact on countries’ sustainable development and ability to resist to economic “shocks”.

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