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“OPENNESS, INNOVATION, EFFICIENCY AND
DEMOCRATIZATION AS PRECONDITIONS FOR
ECONOMIC DEVELOPMENT”

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INTRODUCTORY NOTES

In this book we offer the papers presented at the 11th International Conference of the ASECU – the *Association of Economic Universities of South and Eastern Europe and the Black Sea Region*. First of all, let me remind and/or inform our readers about some facts regarding our Association. It was established in 1996 upon an initiative taken by Prof. Yanis Tsekouras, the Rector of the University of Macedonia in Thessaloniki at that time. After many efforts and endeavours that we could recognise now as a set of preparatory activities, the leading personalities of 24 universities or faculties from Albania, Bosnia and Herzegovina, Bulgaria, Former Yugoslav Republic of Macedonia, Greece, Romania and Yugoslavia as then was called but actually – Serbia and Montenegro, gathered at the founding meeting and established the first frame of the ASECU.

However, during the meeting it was decided that the Association should be open to other countries from the region and from the neighbourhood, which was a brave yet visionary decision. Today, our Association, the ASECU, consists of 51 member universities, schools and research centres, from Albania, Armenia, Bosnia-Herzegovina, Bulgaria, Former Yugoslav Republic of Macedonia, Greece, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Turkey, Ukraine and 4 associated members from Egypt and Lebanon forming an important network of higher educational institutions in Economics and related fields of study.

For all these reasons it is particularly important to point out that our 11th conference takes place in Poland, well beyond the initial borders of the ASECU. Moreover, we shall have today several participants from the countries where we did not have our member schools, which put in front of us an important task to further enlarge the scope of our activity. It is also remarkable that we have organised our conference in the ancient city of Krakow, which is broadly renowned for its long and excellent university tradition, but also at the Krakow University of Economics in the year of its 90th anniversary. Bearing in mind a relatively short history of Economics as a separate scientific discipline this is indeed a jubilee of an undoubted importance for any higher educational institution in Economics.

The ASECU Conferences, established as a biannual events but after a while evolving into a yearly gathering, were organised in 11 different cities actively involving in that way a large group of our members. They are one of the three main channels in realising principal aims of our

Association directed to ease and promote cooperation between Economic Universities, Faculties, Departments, and Scientific Research centres and to provide members with the opportunity to exchange information, opinions etc.

The second important channel of our academic communications is our journal, the South-Eastern Europe Journal of Economics (SEEJE), which is offering opportunities for publishing research results of our members and is particularly open to younger researchers and their results.

Finally, our third channel in promoting cooperation are summer schools and students' research conferences, an activity known as the ASECU youth that is developing already for five consecutive years; in 2014 the summer school was organised also in Poland, actually in Rzeszów and this year event took place in my country, in Belgrade, several months ago.

When summarising all these facts it is easy to realise that all principal aims as well as means of cooperation within the ASECU are of an academic nature, which is definitely the most appropriate and expected way in which an association that gather scientific, educational and research institutions should act. In this doing this we can mostly contribute to the goals connected with the benefit of the economy, the society, peace and the cultural development of the countries referred to the Association – as stipulated in our Statute.

Let me say now a few words concerning the topic of our conference and of this book. In the time of crises the issue of economic development is weighed up with an exceptional carefulness. Any sign of recovery raises certain amount of optimism sometimes even despite its just temporary effects. It was remarkable how loudly it was declared recently that there was a positive growth rate of 0.2 percent in the Euro area. Even that little shift upwards brings about some smiley faces regardless of the fact that it follows a considerable previous fall in economic activity.

There is no doubt that four magic terms seen as the foundation for economic development from the title of our conference – openness, innovation, efficiency and democratisation – play a major part in achieving any sustainable progress and growth. Indeed, innovation raises efficiency, efficiency opens doors of world markets, openness extends the scene where firms may play and in turn raises efficiency while democratisation should provide and protect stable institutions and a development supportive institutional environment. But the principal question is how economies can obtain, develop and combine all these four factors of their long lasting progress.

Unfortunately, we may witness that economists differ in understanding what policies could bring all these preconditions together and whether any policy at all is necessary to hold up economic development in an optimal way. We still have not reached a definite answer; is it a simple play of market forces or something more should be done for broader development effects. Is it enough to just open a national market and democratise political life to obtain fruits of innovation and increase efficiency? Let me be a bit provocative in these first pages of our book: in my view, the two recent events – economic transition and global recession – have shown that there are many more layers that have to be taken into account when designing policies for sound and sustainable development rather than just allowing markets to act as has been thought in recent times.

For example, it was expected that market led FDI inflows should be sufficient for fostering local export industries and for introducing a broad scale of innovation through the so-called spill over effects. However, the evidence and experience from many transition economies demonstrate that fulfilment of these expectations was pretty narrow. It appeared that with no local industrial policy FDI will be directed to conquering local markets rather than to opening of new markets for local exports. Moreover, they will commonly bring their old and known suppliers, retain the most innovative practices, and even keep R&D departments in their countries of origin rather than include local firms in businesses or develop new technology in the countries they are coming to invest.

Similarly, at the eve of global recession, it was thought that austerity measures should be a correct exit path from crisis granting a balanced economy that would be able to progress on its own in the future. Although there are economists that still believe in that story it became clear that austerity measures themselves, could be only an instrument – yet a myopic one in character – for securing debt payments to the lenders. Getting out from troubles by means of economic development and growth seems to be an issue that is left to the borrower-countries to resolve it somehow on their own – by using scratches that will remain after all imposed austerity exercises.

There are many other questions that could raise some quandaries when we speak about efficiency, institutions, world trade etc. Why so many analysts propose, at least in recent times, that efficiency upgrading and new investors attracting could be reached predominantly by diminishing of workers rights in terms of less secure jobs, lower wages, so-called flexible labour markets or by decreasing social benefits previously recognised as the European social model?

Will total efficiency truly be higher if education for example, becomes directed towards skills only putting aside disciplines like history, arts, social sciences, philosophy and even mathematics as nowadays it suggests a very modern and vivid discussion that takes place in America? Is it realistically to expect that history could be rushed up by enforcing certain political options in order to achieve a more democratic society and whether that kind of social engineering could lead to efficient economies? At least in this part of the world we had some experience with such forced ways of bringing happiness that produced decades of economic delay while today's similar examples are noticeable by long lines of migrants all over Europe.

All these provocative examples only show how serious and important task we have in analysing topics that should be the essence of this book. While drawing attention to some misinterpretations I wanted firstly, to incite a debate but also to show why we economists are sometimes presented in a pejorative manner. During this year's summer school in Belgrade I have warned our young colleagues about a joke regarding economists. People say that we are special experts who will know tomorrow why the things we predicted yesterday didn't happen today.

Indeed, this has somewhat to do with a number of our attitudes and ideas. But as time passes we have been learning the lesson. Let us hope that contributions found in this book could make even a modest step forward in a better understanding of the world around us and its economic side of life.

Prof. Božidar Cerović
President of the ASECU

Chapter I – CHALLENGES OF THE CONTEMPORARY ECONOMY

THE “AUSTERITY MYTH” AND ECONOMIC DEVELOPMENT IN THE MODERN MACROECONOMIC DEBATES

Aleksandra Prascevic¹

Abstract

The paper focuses the consequences of the implementation of austerity measures on macroeconomic performances and economic development in the modern macroeconomic debates. After taking austerity measures as a necessity, but also as a solution to economic problems which contributed to the creation of the “austerity myth”, today criticism of these measures indicate that the macroeconomic mainstream in the future will not be based only on a radical anti-Keynesianism and neoliberal paradigm. Since the positive effects of fiscal consolidation in the form of economic growth and employment in most economies were absent, the long ago opened debate in macroeconomics between the two research programs: classical and Keynesian, which was temporarily abandoned during the domination of the new neoclassical synthesis, was reopened. Supporters of the austerity measures theoretically followed the concept of the Ricardo–Barro equivalence theorem and the crowding out effect, but on the broader base it is the part of rational expectations macroeconomic framework and dynamic stochastic general equilibrium (DSGE) models which provide microeconomic foundations of macroeconomics. On the other hand, due to the fact that positive effects were absent the Keynesian approach reaffirmed the doctrinal problem of macroeconomic fluctuations, which are again, became important macroeconomic problem, putting into question the development of the microeconomic foundations of macroeconomics. Therefore not only that pragmatic Keynesianism returned in economic policy, but also the austerity measures are indicated as the key reason for deepening recessionary trends and opening wider social conflicts.

Keywords: austerity measures, macroeconomic debates, economic development

JEL Classification: B22, E32, E62

1. Introduction

The global economic crisis has had an impact on the change in economic policy, albeit a temporary one, but also on the macroeconomic debates that have been an ongoing issue between

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representatives of the two research programs – the Classical one and the Keynesian one. Neither of these is unusual, it could even be qualified as expected taking into account the milestones in the development of modern macroeconomics so far. However, the severity of the crisis, the length of its duration, as well as its global character, has led to consequences more significant for macroeconomic theory than the impacts of previous economic recessions. It should, however, be noted that, in the past, the changes in the dominant macroeconomic theory were related to cyclical fluctuations in economic activity. The sources and character of the recent global crisis, and the measures of economic policy designed to overcome it, but also the post-crisis course of the macroeconomic trends, have raised the issue of austerity measures as the key topic in current macroeconomic debates on the choice of appropriate economic policies, but also on the appropriate model of economic development.

The paper first discusses basic postulates of the macroeconomic model developed within the framework of the “new neoclassical synthesis”, which dominated until the crisis, and its elements that the crisis has challenged. It discusses the place and role of fiscal policy in it, as well as the changes that the global economic crisis has brought in terms of economic policy making and especially fiscal policy making. Then, it discusses the factors in the post-crisis period that have caused the return to the classical concept of glorifying savings (in public finances) and the possible effects of this approach on macroeconomic developments. It discusses the reasons that have led to the creation of the “austerity myth” that would be a solution to almost all macroeconomic problems in the post-crisis period of weak economic growth. The paper insists on a comparative analysis of the advantages and disadvantages of the concepts which adopt and reject austerity measures as a backbone of macroeconomic policy, as well as on a comparative analysis of the doctrine differences between these two macroeconomic approaches (the classical one and the Keynesian one).

2. The New Neoclassical Synthesis – The Evolution of Misleading Macroeconomic Consensus

While in the first decades after the Second World War, macroeconomic theory and policy was marked by the legacy of the British economist John Maynard Keynes – through the Keynesian economic system and the Keynesian economic policy, though they were far from the original Keynes’ ideas. Instead, a type of synthesis (the “neoclassical synthesis”²) evolved within

² The term was formulated by the American Keynesian economist Paul Samuelson.

the Keynesian macroeconomic schools (it was called the “Old Keynesianism”, Davidson, 1994, p. 4), which was, perhaps, the most successful attempt to establish a consensus in macroeconomics. However, since it was not possible to synthesize Keynes’ revolutionary approach to economics with the old neoclassical approach, it ended in excluding all Keynes’ revolutionary elements from the synthesis (Barbera, 2008, p. xii), so that the macroeconomic mainstream included an updated version of the pre-Keynes’ classical system complemented by Keynes’ recommendations for economic policy making in order to overcome the unemployment problems (Davidson, 1994, p. 4) by using fiscal policy, which is why Keynesianism was wrongly equalised with fiscalism. In doctrinal terms, the deviation from Keynes, within the framework of Keynesianism, was made by the framework of the most famous interpretation of the *General Theory* – Hicks’ IS-LM model (1937), which was crucial for modern macroeconomics to become “infected” by Walrasianism (Taylor, 2010, p. 222) and which was used by Alvin Hansen for “an American version of standard Keynesianism” (Mynski, 2008, p. 32). However it did not provide the opportunity for an adequate analysis of a growing economy characterized by an imbalance, as a consequence of aggregate demand due to the trends in the financial markets in which borrowing increases as a result of an increase in income, as indicated by the post-Keynesian author Mynski (Keen, 2010, p. 130).

The “new neoclassical synthesis” can be seen as the consensus that was established in macroeconomics between the New classical macroeconomics and new Keynesian economics, which was essentially based on “microeconomic foundations of macroeconomics” and rational expectations. Restricting macroeconomics to the aggregation of behaviour of representative entities that optimize their behaviour in an environment of perfect competition and availability of perfect information (the neoclassical environment) or in the environment of market rigidities and asymmetries in information (the new Keynesians environment) did not happen as a random effect. This macroeconomic consensus was the result of decades-long development of macroeconomics, especially of the monetarist and classical counter-revolution during the 1970s, when the Keynesian approach collapsed. Instead of this, the neoliberal concept of economic policy, based on the recommendations of monetarism and neoclassical theory, through the introduction of rules in economic policy making, particularly in the field of monetary policy and the transition from full employment goal to the aim of low and stable inflation rate, as the

responsibility of the central bank, secured stable economic growth with low inflation rates (Prascevic, 2014).

The “new neoclassical synthesis”, or macroeconomic mainstream, according to Akerlof, can be equated with the five important macroeconomic neutralities – “misleading illusions” which contributed to “radical anti-Keynesian conclusions” (Akerlof, 2007, pp. 6-7): 1) The life cycle hypotheses; 2) The Modigliani - Miller Theorem; 3) The natural-rate hypothesis; 4) The rational expectations hypothesis; 5) The Ricardo-Barro equivalence theorem. During the time monetary policy was based on nine principles according to these neutralities (Mishkin, 2010): 1) Inflation is always and everywhere a monetary phenomenon; 2) Price stability has significant advantages; 3) There is no long-term trade-off between unemployment and inflation; 4) Expectations are crucial to macroeconomics; 5) The Taylor Rule is necessary for price stability; 6) The problem of time inconsistency is relevant for monetary policy; 7) The independence of the Central Bank improves macroeconomic performances; 8) A credible commitment to a nominal anchor encourages price and income stability; 9) Financial shocks play an important role in generating business cycles.

In the period before the onset of the crisis, all the above mentioned neutralities were important, especially the Ricardo–Barro equivalence theorem, which fully contested the possibility of effective influence of growth of government expenditure on the level of aggregate demand and economic activity. Coupled with the permanent income hypothesis, these neutralities explained rational behaviour of a representative entity (i.e. a representative household), which saw financing of increased government expenditures by issuing bonds as future liabilities (as opposed to the conduct of the so-called “Keynesian household”). Therefore, the households with the growth of government expenditures, which are financed by government bonds, would reduce their spending, which would nullify the effect of increased government expenditures on aggregate demand. The basis of Ricardo–Barro theorem is causality:

$$\text{growth of budget deficit} \rightarrow \text{growth of private savings}$$

By including the permanent income hypotheses, or that of consumption life cycle, real interest rates will have to rise in a closed economy which leads to crowding out investment. National debt thus becomes an intergenerational burden which leads to reduced capital stock of future generations. The effect of substituting tax by issuing bonds in open economies will primarily lead to increased borrowing from abroad. The balance of payments deficit that has

occurred in this manner will mean a reduction in the national wealth stock in the long term. Therefore, it will have negative impact on economic growth.

3. The Impact of Global Recession on Macroeconomic Consensus

The global recession, characterized an exceptional decline in global aggregate demand since the Great Depression (1929-33), has led to changes in the macroeconomics in the sense of accepting pro-Keynesian ideas and economic policies. At the beginning of 2008, the “pragmatic Keynesians” from the IMF, Dominique Strauss-Kahn and Olivier Blanchard, stressed the need for changes in the conduct of economic policy. After 25 years of commitment to a “strong” economic policy, relying on monetary rules and fiscal conservatism, as well as the liberal ideology of free market capitalism embodied in the Washington Consensus, the IMF proclaimed active fiscal policy through fiscal stimulus. With the transition of recession into crisis, in autumn 2008, there was an almost complete domination of Keynesians in the next two years. However, while Keynesians blamed the Washington Consensus for the crisis, using similar logics, their opponents saw it as an insufficiently liberal concept, which, to a certain extent, didn’t follow Friedman's recommendations, but to a much extent was in accordance with activism of John Kenneth Galbraith (Boettke & Luther, 2010, p. 16).

The recession challenged the following important postulates which the mainstream macroeconomic thought relied on (Romer, 2011, pp. 1-2):

1. Macroeconomic fluctuations that had been considered to have successfully been brought under control, became a significant macroeconomic problem.
2. The liquidity trap was gaining in importance because it became obvious that the problem of low nominal interest rates (almost zero) was not uncommon.
3. Insufficient attention given to the problem of financial regulation, given that the problems in the functioning of the financial system emerged as quite important.
4. The acceptance of high unemployment rates for a longer period, which had been almost unimaginable in previous years.
5. Small value of the new Keynesian dynamic stochastic general equilibrium models (DSGE) in explaining the origin and methods of overcoming the crisis.

Table 1. Lessons for fiscal policy from financial crisis

Lessons for fiscal policy from global crisis	Meaning of lessons in the field of fiscal policy
Short-term stabilization requires fiscal policy measures	Due to the fact that low nominal interest rates reduce the effectiveness of monetary policy (the “liquidity trap”), coupled with the traditional approach of central banks to the unemployment problem. In contrast to the period before the recession in which the short-term stabilization was ceded to monetary policy as being more flexible and resistant to political pressures than fiscal policy
Fiscal policy is effective in the fight against recession	Conventional measures of fiscal stimulation proved to be very effective. This led to the famous anti-Keynesian “neutrality”: it was shown that changes in the amount of current income affect the amount of spending, and that cash flow has an impact on investment
Fiscal area is valuable for the conduct of macroeconomic policy	Healthy public finances enable more powerful use of fiscal expansion in the situation when it is necessary, or in cases of a deep recession. Therefore, the real limitations in the form of lack of strong public finances in the period when economic trends did not require this were the reason why fiscal expansion could not be significant enough
The political economy of fiscal policy is very important	Political economy is crucial for understanding the undertaken fiscal responses to the recession. In periods of economic recession, its primary focus is shifted to political macroeconomics topics related to the political motives of economic policy makers, as well as the motives of voters who, faced with limited personal income, become fiscally conservative, not understanding the reasons for fiscal expansion

Source: (Romer, 2011).

The economic policy measures that were applied were Keynesian measures of encouraging aggregate demand, coupled with measures for increasing financial stability and providing more general help for the financial sector (Table 1). With the abandonment of fiscal conservatism, fiscal policy underwent significant changes, compared to the period before the crisis. Fiscal stimulus packages were significant in most countries, and as it would later prove, were applied even in places where they were not sustainable in the medium term, creating large fiscal deficits and high share of public debt. This was especially true in underdeveloped economies and those with emerging markets that were “innocent observers” and that the crisis spilt over to, leaving them confronted the withdrawal of capital investors, even in cases where there was no increased risk, as well as with falling global aggregate demand.

4. The “Austerity Myth” and Classical Comeback in Macroeconomics

The shift towards abandonment of pro-Keynesian economic policy measures occurred already in mid-2010, when economies faced significant problems of public finances as the cost of saving banks, insurance companies and the overall financial sector, together with expenditures for stimulating economic activity, became extremely high. Countries were beginning to face a sovereign debt crisis. It was to be expected because the analyses show that in the period of three years after an economy is hit by a financial crisis, there is an increase in central government debt. Therefore, they had to start with the implementation of austerity measures which had recessionary effects on economic trends. This contributed to the intensification of the debate between the supporters and the opponents of fiscal austerity measures, as well as the general return to classics – anti-Keynesian (neo-liberal) approach to macroeconomics.

After relatively easy acceptance of Keynesian fiscal stimulus at the onset of the crisis, it was not hard to accept the idea that fiscal expansion had to be completed, but there was no agreement as to a suitable moment to begin with that. The economists who supported anti-Keynesian approach considered that fiscal austerity measures should be undertaken immediately, contributing to the creation of the “austerity myth” according to which fiscal consolidation would eliminate most of the economic problems that economies were facing – the high public debt, government deficit, and unemployment. Namely, macroeconomic policy, and fiscal policy in particular, should be conducted in order to increase investor confidence in sound foundations of public finances and economy in general. Thus, budgetary consolidation would not be harmful to the economic recovery, but rather the opposite – it would be positive for GDP growth (Alesina & Perotti, 1995; Alesina & Ardagna, 2009).

Advocacy of austerity measures is comparable to the concept of “expansionary fiscal contraction” or of the “German view” of fiscal policy that was developed in the 1990s and whose effects were discussed in detail by many important economists Giavazzi & Pagano (1990), Bertola & Drazen (1993), Barry & Devereux (1995). According to this intertemporal model, expectations and rational behaviour of individuals play the decisive role in explaining why the strong fiscal contraction has expansionary effects on economy. Starting from two opposite views on the effects of a restrictive fiscal policy: the Keynesian one, which highlights the consequences of recession and the so-called “German view”, which highlights the consequences in the form of

encouraging economic activity (economic expansion)³, an attempt was made to reconcile them and provide explanations for why both approaches are correct, of course, in different circumstances.

The Keynesian approach is based on the direct impact of austerity measures on reducing aggregate demand (through the reduction of private consumption), which has immediate effects in slowing down economic activity, which is especially evident in the circumstances of post-recessional slow recovery of economies after 2010. German or anti-Keynesian approach assumes that fiscal consolidation will have an indirect positive effect on expectations, especially if it is conducted through the reduction of government expenditure. This positive effect will mean that, due to the reduction in the share of government in GDP, there is an expectation of lower tax burden in the future, which will stimulate private consumption and investment (crowding-in effects on private sector consumption and investment) – contrary to the Keynesian vision. It will be more significant if fiscal austerity is expected to last longer, because it will provide a significant reduction in the tax burden in the future and the results, i.e. the positive impact on consumption and investment depend on the expected fiscal policy in the future. Theoretical and empirical analysis of the effects of fiscal austerity implies that they are considered through three channels of impact: 1) through the reduction in disposable income due to an increase in the current tax burden; 2) through the effect of wealth due to the reduction of nominal and real interest rates; 3) through the effect of reducing the volume of public goods that are available to consumers (Giavazzi & Pagano, 1990, pp. 80-82).

The classical approach of those advocating austerity measures means that a policy of fiscal consolidation should be the result of social consensus, as well as appropriate political decisions, i.e. not to be challenged in the long run, considering the fact that its impact will depend on changes in expectations with respect to fiscal policy to be conducted in the future (a reduction in expected future tax). Therefore, changes in fiscal policy must be credible, they must be trusted; otherwise, the positive effects, according to advocates of applying austerity measures, will fail. If we apply this requirement to the fiscal consolidation policy implemented in the European post-crisis economies faced with the problem of public finances, coupled with recession pressures (rising unemployment), it is evident that they could not fulfil it, partly because of the

³ Examples are implemented economic policy of the “expansionary stabilization” in Denmark (1982-84) and Ireland (1987-89), when the fiscal consolidation led to economic expansion, not the economic recession; it is in accordance with the “German vision”.

recessionary effects that the applied austerity measures had, and partly because of the deteriorating social status of the majority of the population. Thus, in most economies, the positive effects of fiscal consolidation did not materialise, and negative impact on economic growth, employment and income distribution in the form of increased poverty, led to political consequences in the form of choices of economic policy makers (the government) who reject austerity measures, regardless of necessity their application in some form. This, of course, entitled the Keynesian approach, which promotes postponement of fiscal consolidation until a recovery in economic activity is achieved, particularly in economies where there is no threat of rising inflation rate.

The Keynesian theoretical approach suggests just the opposite, demanding that fiscal restriction is time-limited, because only in this case it will not have long-term detrimental effects on economic activity and slow economic growth. In either case, however, it can be expected that the effects of the trends in the unemployment rate will be a negative one, or that they will increase, although in certain circumstances, fiscal contraction can stimulate consumption and investment (Barry & Devereux, pp. 250-251).

The main differences between those who are supporters and those who are against the austerity measures could be summarized in the following table (Table 2).

Table 2. “Pros” and “Cons” of the austerity measures

	PROS of the austerity measures	CONS of the austerity measures
WHO?	Classicalists – mainstream macroeconomists	Keynesians (New Keynesians, Post Keynesians, “pragmatic” Keynesians)
WHEN AND HOW LONG?	Immediately and long lasting	Postponement and time-limited (until an economic recovery particularly when there is no threat of rising inflation rate)
WHY?	To eliminate most of the economic problems – high public debt, government deficit and indirectly unemployment (“austerity myth”)	Strong recessionary effects on the economy (increasing unemployment)
HOW?	To increase investors and households confidence in sound public finances and economy in general (positive for GDP growth) – especially expenditure based fiscal consolidation	By reducing aggregate demand (fall in government expenditures will not be eliminated by the rise of private consumption and investments due to recessionary pressures and psychological factors)
PREVIOUS EXPERIENCE	“Expansionary fiscal contraction” concept or the “German view” of fiscal policy (developed in the 1990s)	Aggregate demand management – Keynesian fiscalism

MODEL – THEORETICAL BASE	Intertemporal model with rational expectations (decisive role) (R-B theorem)	Aggregate demand model and fiscal multipliers, “Keynesian household”, bounded rationality of the economic agents, psychological factors
TRANSMISSION MECHANISM	Encouraging economic activity through an indirect positive effect on expectations – due to an expectation of lower tax burden in the future and fall in interest rate, which will stimulate private consumption and investment (crowding-in effects on private sector consumption and investment), otherwise it could be expected to have further crowding out effects (with recessionary consequences) and rising inflation	Revenue and expenditures based consolidation decrease aggregate demand (due to fall in disposable income and wealth; government expenditures), missing the rise in private investment due to psychological factors (animal spirit of investors) and rise in interest rates (due to premium risk)
CONSTRAINTS	Lack of political support and social consensus – positive consequences on consumption and investment depend on the expected fiscal policy in the future	Economic recession as a result of the austerity measures will have to be overcome by fiscal expansion in the future

The debate on the implementation of austerity measures in the post-crisis period also included an analysis of the impact of high public debt (public debt/GDP ratio) and the deficit on the realized rate of economic growth. It was, of course, based on empirical analysis, but there are no unambiguous conclusions in this case either. Empirical analysis made during the global economic crisis (2007-09), which considered a longer period of time, or trends during several financial crises, point to different conclusions – from a slight decrease by only 1 percent of the average real GDP growth rate in the periods where the economies were facing problems with public finances (for economies in which the debt/GDP level was equal to or greater than 90 percent, Reinhart & Rogoff, 2010, p. 25), to a significant decrease by 2.2 percent (Herndon, Ash & Pollin, 2013, p. 2). In emerging market economies, the problem of high public debt had a significant impact on the rate of inflation, as opposed to advanced economies (Reinhart & Rogoff, 2010). This suggests a level of debt that creates the so called “debt intolerance” in which there is a significant increase in risk premiums that further stifles economic activity and forces governments into implementing very severe austerity measures in order to maintain the credibility of public finances and thus reducing the risk premium. The increase in risk premiums, coupled with the implementation of austerity measures, has significant recessionary impacts that are particularly evident in the European economies in the post-crisis period after 2010.

There is yet another important aspect related to episodes of high public debt, which refers to its duration and the long-term impact on economic growth – reducing the growth rate by 1 percent per year has significant cumulative effects if the problem of high public debt lasts for a decade or two (Reinhart, Rogoff & Reinhart, 2012, p. 84). Out of the 26 episodes of high public debt in advanced economies in the period since 1800, even 20 of them lasted for longer than a decade (Reinhart et al., 2012, pp. 69-70).

5. Conclusion

During and after the global economic crisis (2007-09), fiscal policy was the backbone of economic policy in most countries, both in the developed ones and those with emerging markets, providing the necessary stimulus to the slowed down economic activity. It was an element of the return of “pragmatic” Keynesianism to the macroeconomic scene, which, in the theoretical domain, challenged decades-long domination of the classical theory through the “new neoclassical synthesis” based on dynamic stochastic general equilibrium models (DSGE) of the New Classical and New Keynesian macroeconomics. The implementation of counter-cyclical fiscal policy, however, did not go without costs, which, in the years after the crisis, proved to be extremely high for whole society. This relates primarily to the deterioration of public finances in many countries – the growth of debt-to-GDP ratio. This led to demands for severe austerity measures. Initially, they were presented as a solution to the overall economic problems. However, the initial enthusiasm in the implementation of these measures was soon lost because these measures turned into the austerity myth, so that, in most countries, they had very negative impact on economic activity, economic growth and employment as well as the overall social trends due to increased poverty and other social consequences (income redistribution). This resulted in political consequences in the countries where fiscal consolidation was implemented, which involved increased support for political opponents to fiscal austerity. However, although the commitment to austerity measures is considered to be the strategy of banks, lenders and other financial institutions through which they are trying to keep their financial and political position, it is possible to found a theoretical debate behind it. This debate relates to the acceptance or rejection of the classical concept based on the Ricardo-Barro theorem and radical anti-Keynesianism. Actual trends show that in many economies, instead of improvements, public finances have experienced deterioration, along with economic and social collapse. This also contributed to the conclusion that the commitment to austerity measures is actually an austerity

myth that will not yield results unless accompanied by the implementation of the structural reforms that would provide a stimulus to economic growth.

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“GREEN PRODUCT”: WHERE WE ARE AND WHERE TO GO?

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Abstract

Nowadays interest in corporate environmental strategies has shifted from cleaner processes to green products. The relevant literature of “Porter Hypothesis”, argues firms have the opportunity to pioneer through green products’ innovation, allowing them to differentiate and thus gain competitive advantage. On the other hand, products’ environmental burden during entire lifecycle is undeniable. Yet, bearing in mind the weakness of previous work to adequately address a commonly accepted green product definition, as well as the inconclusive academic empirical results on firms’ competitiveness, many cases of corporations’ green-washing behaviour come as no surprise.

In this exploratory paper we proceed with an exhaustive literature review, aiming to fill the gap of terminology absence. We develop an integrative concept that regards green product from “cradle to grave” and provides a combinatory framework for defining and evaluating the degree to which a product / procedure contributes to social and environmental sustainability.

Keywords: green products and procedures, social and environmental sustainability

JEL Classification: Q56

1. Introduction

Nowadays multidimensional crisis calls for simultaneous economic stability, social equity and environmental protection pushing firms to actively engage and complete their “corporate social responsibility”. Dynamic relationship between firms and environment has undergone progressive change (De Bakker et al., 2002). In the 1960s and 1970s, environmental problems were basically neglected from firms, while in the 1980s biophysical environment – seen as an externality and thus additional cost – led some businesses to simple compliance with end-of-pipe technologies. Until then, the majority of US-products did not incorporate environmentally friendly characteristics with the exception of organic foods in the food industry (Air Quality

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Sciences, 2010). After the publication of Brundtland Report in 1987 with the alongside emergence of “sustainable development” terminology, the 1990s were marked by the revolutionary approach of „Porter Hypothesis” (De Bakker et al., 2002; Berry & Randinelli, 1998). According to Porter and van der Linde (1995), environmental innovation as response to ecological challenges may offer multiple competitive opportunities that stem from differentiate and/ or cost strategies, in a win-win logic.

Since then, “green” became a hot topic in academia and there has been a growing number of references regarding terms such as “green products”, “green strategies”, “green labeling” and so on (Air Quality Sciences, 2010). The problem is that every term including the notion “green”/“environmental” seems to totter and be quite complex. So, the correct definition should be the starting point. That is the reason why we turn to the very basics: what is finally a “green product”?

Main objective of this work is to identify works on the field of “green product” definition and thereafter to see the progress that has been made in theoretical as well as empirical studies concerning the relationship “green vs. competitiveness” in the last years. The exhaustive literature review seems to be the necessary methodological approach helping to the conceptual content of the field and guiding us towards proper theory development, in an attempt to establish a functional term in order to fill the existing gap.

The rest of the paper is structured as follows: next section presents the environmental management literature review, in which we see the transition from “green processes” to “green products”. Section 3 provides the theoretical background of the field, in order to help us define clearly the concept “green product” through relevant terminology. In the forth section we explore the debate on the empirical studies concerning “green vs. competitive”. Last but not least, section 5 summarizes this study and provides conclusions and proposals for further research.

2. Environmental management

The emergence of environmental management that cares for coordinating organizations with environment, arose in order to minimize the ongoing and conspicuous environmental degradation, caused by the prolonged industrial production and is traced in the 1990s (Chen, 2008; Lee, 2009). It became quite fashionable since the new millennium and concepts such as “green management”, “green innovation”, “environmental strategies” have come to the forefront and have been widely researched (Chen, 2008; Orsato, 2006). Although there is no common

classification among the forces that motivated businesses' sensitiveness and led to the acquaintance of environmental management, two of them seem to be mainly addressed in the literature: the stringency of environmental legitimacy, which took place in international and national scale and the rise of consumerism (Wong, 2012).

Firstly taken strategies of corporate environmental management have started to go beyond regulatory compliance – an approach that flourished since 1960s – as the continuous emergence and adjustment of environmental laws led to increased costs (Ross & Evans, 2002; Tien et al., 2005). At that time the existing corporate environmental management focused on reactive strategies. Later on, the shift that took place was from end-of-pipe pollution control technologies (e.g. filters) to corporate environmental management of environmental proactivity (Charter et al., 2001).

These proactive strategies are distinguished in organizational and operational/ functional, with the later to further divide in process oriented and product oriented strategies (González Benito & González Benito, 2006). At first, the focus was on cleaner production processes, aiming at reduction of impacts through a more environmentally conscious production process (González Benito & González Benito, 2006; Frondel et al., 2007).

The progressive change that followed, next to cleaning production technologies and pollution prevention, caused the environmental management to entail forms of product stewardship (De Bakker et al., 2002). Over the last decades, corporations' shift towards proactive environmental protection strategies shifted from processes to products due to stringent environmental regulations that aim at minimizing the ecological footprint of products since there has been the understanding that products can create an environmental burden during their whole lifecycle, from production to consumption and finally to disposal (Albino et al., 2009; Boons 2002; Triebswetter & Wackerbauer, 2008). According to Wong (2012), the “green product” innovation seemed to be more influential than “green process” innovation. Moreover, there are major markets for eco-products that require businesses' full compliance (Wong, 2012).

Nowadays, it has been perfectly clear that economic growth should be accompanied by minimization of ecological degradation as well as attention to social problems. Thus, an increasing number of companies are working on the development of environmentally friendly products that will function as a differentiation tool, aiming at competitiveness (Chen, 2013). Consequently, concepts such as integrated environmental management (Margerum, 1999), integrated product policy (Commission of the European Communities, 2001), product-oriented

environmental management (De Bakker et al. 2002), environmental design (Tien et al., 2005), green supply-chain management (Shrivastava, 2007), green product design (Chan, 2011), green product development (Jasti et al., 2015), design for the environment (Us term)/eco-design (European term)/environmental conscious design (Bauman et al., 2002; Van Weenen, 1995; Tukker et al., 2015), green product innovation (Wong, 2012) and product stewardship (De Bakker et al., 2002) have come to the forefront and are researched in academia, while at the same time have led to the development of new methodologies for the evaluation of environmental impacts such as Life Cycle Analysis, Strategic Environmental Assessment, Environmental Management Systems and many more (Albino et al., 2009; Bauman et al., 2002; De Bakker et al. 2002; Finnveden et al. 2009).

3. What means a “green product”

Although “green” caught the attention of nowadays political speech (that seeks for the new paradigm of “green growth”) and has become mainstream in hitherto literature review, there exists a definitional issue since research in the field is underdeveloped and the concept of what really constitutes a “green product” still remains unclear (Durif et al., 2010; Hartmann & Ibáñez, 2006). That was as well empirically confirmed by Durif et al. (2010), who studied the concept of “green product” in a 30-year old period from three different viewpoints: academia, businesses and consumers. Durif et al., (2010) concluded that the concepts neither match nor even converge. The concept of “green” is characterized as *evocative and powerful* since consumers and companies seem to be attracted to this differentiator (Air Quality Sciences, 2010). No wonder why the problem regarding the terminology absence seems to be mostly addressed in the marketing and management field (Chen et al., 2006; Russo & Fouts, 1997).

There is no unified definition, thus “green products” are interpreted in different ways. The most prominent notions used in the literature are ‘green’, ‘eco’, ‘environmental’ and ‘sustainable’. Albino et al. (2009) argues that “green” and “eco” in terminology are used interchangeably, but the term “sustainability” shows a broadening in scope, taking into consideration the so-called “3 pillars” of sustainable development: economic vitality, environment and social fair, that are also commonly referred as triple bottom line. According to Yanarella et al. (2009), “green” is a much easier and convenient term to follow, since sustainability calls for radical changes in our growth model. Maybe that justifies the rise in the use of the term “green” in recent years.

The term also seems to depend every time on the field of research (Durif et al., 2010; Saha & Darnton, 2005). For instance, there exists a terminology gap between business management and environmentalists (Chen, 1991; Jasti et al., 2015). At the same time, there is no terminology convergence even in economic sectors. For example, a “green product” in health sector might be a product that minimizes the damage in human health whereas in manufacturing business, it should combine economic and environmental protection (Saha & Darnton, 2005).

Moreover the concept itself, which is under research, is never the same thus we have a plethora of concepts. In prior literature, concepts such as green products (Albino et al., 2009, Chen, 1991; Durif et al., 2009), green product innovation (Chen et al., 2006; Kam, 2012; Wahid & Lee, 2011), eco-products (Karlsson, 2006), environmental innovation (Costantini & Mazzanti, 2012), and eco-innovation (Rennings, 2000) were addressed. Finally, concepts aim at different elements such as environmental impacts (Albino et al., 2009), parts of life cycle analysis (Pickett-Baker & Ozaki, 2008), green core competence (Chen, 2007).

The absence of a universal definition of the term and the ongoing debate of what really constitutes a “green product” has led to a twofold problem. At first, there is a methodological deficiency in academic research because the term is quite ambiguous, which is considered as the main reason to conflicting empirical results (López-Gamero et al., 2009). In praxis, on the other hand, the industrial sector and third party authorities have long started to communicate their “greenness” in the market, mainly by establishing standards for “green products” (e.g. eco-labeling) and personal declarations that come through their environmental policy reporting, thus they are in several cases dealt with skepticism and accused of “greenwashing” their products (Albino et al., 2009; Durif et al., 2010). It is remarkable that 32% of the so called “green products” are fake, according to the 2010 TerraChoice Report, which saw a 6% rise in comparison to 2009 (Air Quality Sciences, 2010). The rise of a properly developed term will solve the above problem and at the same time will lead to proper environmental strategies.

From a conceptual point of view, despite the terminology variation, there seems at least to be a convergence that “green product” should take into consideration the environment and that there must be a life cycle thinking, since environmental impacts are generated at each stage of product life cycle (Air Quality Sciences, 2010; Chen, 1991; Wong, 2012). That was apparent from the early 1990s because every product causes multiple ecological impacts on extraction of raw materials, energy use, air and water consumption, production of intermediate and end

products (in general “green” manufacturing, which if further divided in end-of-pipe and integrated/ clean technologies), distribution, consumption (products generate private environmental benefits for the consumer such cost and energy savings, toxic free), recycling and finally disposal (Chan, 2011; Frondel et al., 2007; Wahid & Lee, 2011). Thus, bearing in mind the product lifecycle management, the same classification was applied to “green products”, leading to the development of Environmental Life Cycle Analysis as a tool in order to measure the ecological impact of products’ (Finnveden et al., 2009).

Although “green product” definition is not frequently found in the literature, an early relatively proper concept is Ottman’s (1998, p.89), according to which: “Green products are typically durable, non toxic, made of recycled materials, or minimally packaged. Of course, there are no completely green products, for they all use up energy and resources and create by-products and emissions during their manufacture, transport to warehouses and stores, usage, and eventual disposal. So green is relative, describing products with less impact on the environment than their alternatives”. The term of course falls short because it does not incorporate the intangible (services) together with the tangible (physical) which would represent a significant increase in scope and is too long. On the other hand, the OECD (1998) term according to which “environmental goods and services include all activities that measure, prevent, limit, minimize or correct environmental damage” does not refer to products effect from “cradle to grave” (Fankhauser et al., 2013).

The right definition should interpret the boundaries of the concept clearly so that it will constitute the foundation for valid inferences. The main goal is the contribution to the conceptual understanding by harmonizing the different terms to a general that could be implemented in all fields. Thus the term must be short but at the same time exhaustive and inclusive. Thus the following laconic concept could be proposed: green is a product/service that minimizes its environmental impact during its whole life-cycle.

4. Green and competitiveness

Firms in global scale are continuously trying to develop innovative ways to enhance their competitiveness in 21st century and be led to a win-win situation. The empirical confirmation is thus of utmost importance.

Firstly it was the impact of the constantly changing environmental regulations on firms that gave rise to many academic debates since early 1990s (Ambec & Barla, 2006). During these

last 25 years, academia has witnessed a transition in empirical investigation to more complex and specific empirical researches, from case study analysis to micro and macro frameworks, from examining effects of end-of-pipe technologies to the effects of proactive ones (Costantini & Mazzanti, 2012; Frondel et al., 2007). But hitherto empirical investigation still varies in studies that depict positive relationship between environmental variables and firms' competitiveness and in those that show negative or no relationship (Eiadat et al., 2008; Iraldo et al., 2011).

Since there is not a universal term of what constitutes a "green product" with no solid theoretical core, mixed empirical results come as no wonder. The reasons for this debate have not been yet exhaustively examined (Horváthová, 2010). There exists a long list of environmental as well as economic variables that have been used (López-Gamero et al., 2009). According to Horváthová's (2010) meta-analysis investigation, the problem seems to merely focus on the environmental variables. At the same time there is a plethora of parameters (such as firm size) and techniques that might influence the results (with multiple regression and panel data techniques to be more objective) (Horváthová, 2010; Iraldo et al., 2011).

5. Conclusion and further research

Concluding, there has been a shift in corporations' interest to "green products" over the years. Hitherto literature review though still seems to be inconclusive in theoretical investigation. Despite the development on the field, there exists a terminology gap maybe due to the fact that the field is considered relatively new. Our effort was to contribute to this discussion by providing a laconic yet inclusive term in order to fulfill this gap in literature. Finally, there is an ongoing debate in empirical investigation as well.

Last but not least, on a further research there should be a list of the environmental and economic variables as well as of the techniques that have been used in past researches in order to find the most suitable and objective ones and then move to a thorough empirical investigation to examine the relationship "green vs. competitive". That would be of course quite challenging, since the majority seems to be based in questionnaire surveys (Chen et al., 2006; Triebswetter & Wackerbauer, 2008) and would require suitable data. Lastly, since the majority of empirical examination focuses on the US economy (Darnall et al., 2008) it would be of great interest to focus on European Union.

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Chapter II – MACROECONOMICS: FACTORS OF GROWTH

EUROPEAN UNION EFFORTS TO CREATE GREEN GROWTH THROUGH GREEN INNOVATION

Dorota Murzyn¹, Paulina Szyja²

Abstract

Innovations connected with changes in production processes as well in products and services being more environmentally friendly represent a new approach to global challenges by giving practical dimension of implementation the principles of sustainable development. Innovation is key to foster green growth. Green innovation is a powerful instrument, combining reduced negative impact on the environment with a positive impact on the economy and society. Importantly, this kind of approach to addressing global development goals through green technologies requires support for innovation across all development contexts. Policy makers and the business community alike are experimenting with new ways to drive green innovation, while maintaining economic competitiveness. Government efforts to promote greener growth and green innovation have intensified in recent years. To face these challenges, the European Union has published inter alia an EU action plan on Eco-innovation, and allocates substantial funds to finance green innovation.

The aim of the article is on the one hand to sort out terminology related to green growth and green innovation (green innovation, eco-innovation, green growth, sustainable development), on the other – to present its role in development and actions and instruments of the EU in support of green innovation.

Keywords: green innovation, sustainable development, EU policy, EU funds

JEL Classification: F59, O10, O19, O25, O31, O38, O44

1. Introduction

Innovations connected with changes in production processes as well as in products and services being more environmentally friendly represent a new approach to global challenges by giving a practical dimension of the implementation of the principles of sustainable development.

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Green innovation is a powerful instrument, combining reduced negative impact on the environment with a positive impact on the economy and society. Government efforts to promote greener growth and green innovation have intensified in recent years. To face these challenges, the European Union has published, inter alia, an EU action plan on Eco-innovation, and allocates substantial funds to finance green innovation.

The aim of the article is, on the one hand, to sort out terminology related to green growth and green innovation (green innovation, eco-innovation, green growth, green economy), on the other – to present its role in the development, actions and instruments of the EU in support of green innovation.

2. Green innovation and economic growth

The relationship between innovation and economic growth has been highlighted in numerous theoretical and empirical studies. Significant advances in economics in the last three decades (mainly the New Growth theory) have highlighted that creativity and innovation are very important to achieving lasting economic growth. Countries in the innovation-driven stage, according to the World's Economic Forum Global Competitiveness Index, are considered to be the most competitive ones. In the times of major economic challenges at a global scale, innovation has been perceived as a way of overcoming difficulties, ensuring and preserving economic growth and, in consequence, addressing social problems more effectively. Nowadays, policy makers in order to address the new global challenges turn toward sustainable alternatives, green innovation or eco-innovation. According to many scholars, international organisations and think tanks (e.g. The Worldwatch Institute, 2008; Moody & Nogrady, 2010; The Natural Edge Project), these kinds of innovation will probably drive the next wave of innovation. Since the First Industrial Revolution, there have been at least six waves of innovation (Fig. 1), each shifting the technologies that underpin economic prosperity.

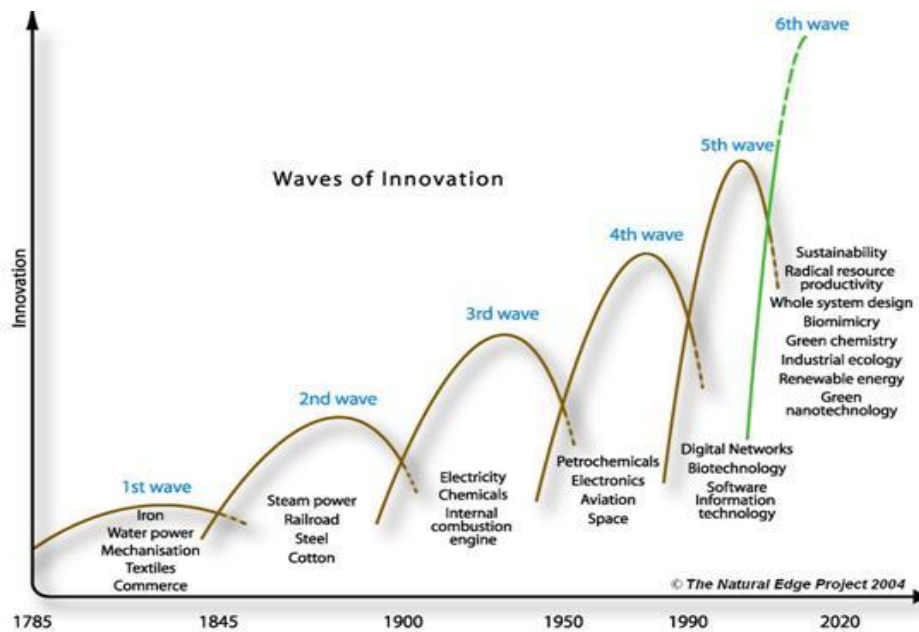


Fig. 1. Waves of innovation

Source: The Natural Edge Project, <http://www.naturaledgeproject.net/Keynote.aspx>

T. Schiedering, F. Tietze and C. Herstatt point to four terms related to innovation and environment: “green innovation”, “sustainable innovation”, “environmental innovation” and “ecological innovation”, with similar meaning (Schiedering et al., 2012). And indeed, literature provides evidence of the above by using these terms synonymously. For example, M. C. Cuerva, Á. Triguero-Cano, D. Córcoles write about the green innovation or environmental innovation, defined, inter alia, as “the introduction of new ideas, products, processes or behaviours to contribute to a reduction of environmental harms or to ecologically specified sustainability targets” (Cuerva et al., 2014). It is worth to point out that this kind of innovation may be developed with or without the explicit aim of reducing environmental harm (Beise & Rennings, 2005). In turn, the OECD points to eco-innovation, which should be connected with activities aimed at overcoming current and future environmental problems, decreasing energy and resource consumption and developing sustainable economic activity. It should be emphasised that this organisation does not distinguish between green innovation and eco-innovation (OECD, 2012). Some experts point to green innovation as “the technological innovation that ecological concept is introduced into various stages of technological innovation for entity industry, thus benefiting resource conservation and environmental protection” (Wei et al., 2015). The EU – Innovation Observatory defines eco-innovation as innovation characterised by a reduction in “the use of

natural resources and a decrease in the release of harmful substances across the whole life-cycle”, taking into account five elements: design, production, use, reuse and recycling (Eco-Innovation Observatory, 2011). T. Schiedering, F. Tietze and C. Herstatt identified six aspects (innovation object, market orientation, environmental aspect, full life cycle, impulse, new standard to firms) that are incorporated in the different definitions and found one key aspect that differentiates. According to them, eco-innovation is “the most precise and well-developed concept, whereas green innovation remains rather shallow” (Schiedering et al., 2012). The former term is concentrating more on the impact of resource consumption than the latter one. And green innovation is more strongly connected with environmental benefits than with environmental aim.

However, regardless of the clarification of definitional approach, in order to introduce this kind of innovation, one needs to simultaneously take into account activities in four areas: economy, environment, society and politics (Fig. 2).

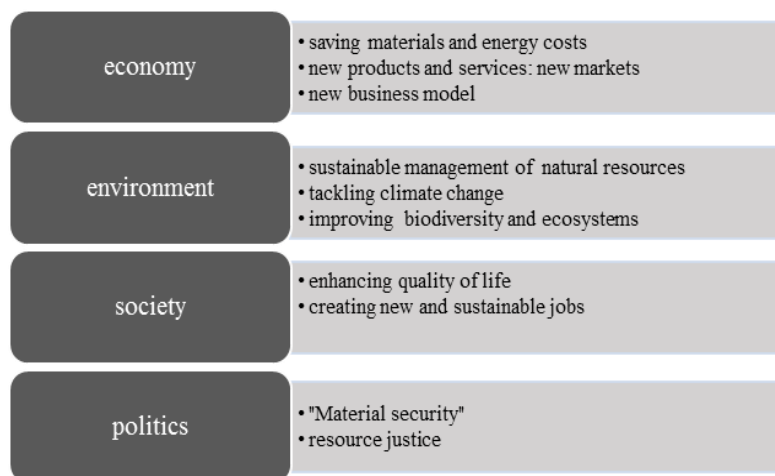


Fig. 2. The interdependence of the four areas in creating eco-innovation

Source: EIO and CfSD, 2013, Eco-innovate!, A guide to eco-innovation for SMEs and business coaches. Brussels, p. 8.

During the crisis of the real economy in 2008-2010, there have been intensified efforts to overcome the effects of the downturn and, at the same time, provide a new framework for socio-economical development. The inclusion of environmentally friendly investment projects was an important element of the anti-crisis plans adopted in many countries (Szyja, 2013). The European Economic Recovery Plan, announced at the end of 2008, stressed the need for “the shift towards a low-carbon economy”, which would enable the achievement of the following objectives: increase of energy security, research and development, mitigating the impacts of human activities

on the environment, maintenance of existing and creation of new jobs (Commission of the European Communities, 2008). A *low-carbon economy* is defined by a reduction in the emission of greenhouse gases (especially carbon dioxide), and in the energy consumption resulting from the combustion of fuels. One can also take into account the transition to less carbon-intensive operations (Levy, 2010). At the same time, literature puts emphasis on the term *green economy* (Fig. 3) – a term with broader meaning. It means not only carbon dioxide and other greenhouse gas emissions, energy efficiency but also “management of natural resources in a sustainable manner and with lower negative environmental impacts, an increase in resource efficiency and a reduction of waste” (UN, 2012). UNEP defines it as one that results in “improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (UNEP, 2011).

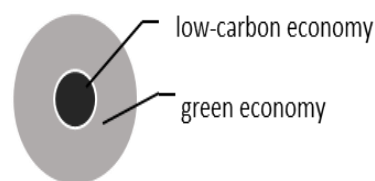


Fig. 3. Connection between green economy and low-carbon economy

Source: own work.

The following terms are related to this concept: low-carbon development, low-carbon growth and green growth (Tab. 1).

Table 1. Terms connected with green transformation in literature

Low carbon development	Development with minimal output of greenhouse gas emissions (Climate Action Network); Economy-wide decarbonisation. (Y. Mulugetta, F. Urban, 2010, p. 3)
Low carbon growth	Tends to focus on the production side of the economy in producing goods and services with lower carbon emissions through technological innovation and structural changes (Y. Mulugetta, F. Urban, 2010, p. 3)
Green growth	“Green growth is about fostering economic growth and development while ensuring that the natural assets continue to provide the resources and environmental services on which our well-being relies. To do this it must catalyse investment and innovation which will underpin sustained growth and give rise to new economic opportunities” (OECD, 2011, p. 9)

Source: own work and UNDESA, 2012.

A broader meaning should be attributed to the last concept, defined, according to the Global Green Growth Institute, as “the new revolutionary development paradigm that sustains economic growth while at the same time ensuring climatic and environmental sustainability. It focuses on addressing the root causes of these challenges while ensuring the creation of the necessary channels for resource distribution and access to basic commodities for the impoverished” (UNDESA, 2012). This concept was officially used for the first time in Europe in the Declaration on Green Growth of the Organisation for Economic Cooperation and Development: “We strengthen our efforts to pursue green growth strategies as part of our response to the current crisis and beyond, acknowledging that “green” and “growth” can go hand-in-hand” (OECD, 2009). Earlier, it was adopted in the Asia and Pacific Region, during the Fifth Ministerial Conference on Environment and Development (MCED) held in March 2005 in Seoul. Green growth involves shaping the economic growth by acknowledging the leading role of natural capital. Growth should be based on the rational use of natural resources. It is important to recognise that the environment is an asset that can serve as a basis for ensuring opportunities for economic development. According to the OECD “a key element of any green growth strategy is to set incentives that will boost innovation along a growth trajectory which diverts from inefficient patterns of the past” (OECD, 2011). In this regard, it is particularly important to develop investment projects, initiated by the state, in order to encourage enterprises to similar practices aimed at, on the one hand, environmentally friendly solutions and, on the other hand, ones that sustainably use the possibilities provided by the environment. Success in these ventures depends on the ability to seek new ways of shaping performance that would provide new competitive advantages, leading to new innovation opportunities connected with environment-related investment projects.

One of the key objectives of the green growth concept is to “improve the eco-efficiency of economic growth and enhance the synergies between environment and economy” (UNDESA, online). “Eco-efficiency can be interpreted as the ratio, or a causal relationship, between economic value creation and environmental impact added” (Möller & Schaltegger, 2005). It also highlights “a ratio between environmental impact and economic cost or value” (Huppes & Ishikawa, 2005). This term is connected with clean (or green) production through minimising the consumption of resources, reducing environmental burdens and limiting concomitant risks and liabilities (WBCSD, 1998). The issue is described more succinctly by Lu, Huang, Wang who

highlight the economic value of products and services – to environmental load ratio (Lu et al., 2014). The essence of the concept is to implement solutions, which would allow us to simultaneously obtain economic benefits and reduce human pressure on the environment – eco-innovation.

3. European Union support for eco-innovation

Government efforts to promote greener growth and green innovation have intensified in the recent years. The European Union has also moved in this direction. The Europe 2020 strategy, that is the Union's growth strategy for the coming decade, promotes structural change with a sustainability orientation. The EU 2020 strategy is about delivering growth that is: smart, through more effective investments in education, research and innovation; sustainable, thanks to a decisive move towards a green economy, resource efficient and competitive; and inclusive, with a strong emphasis on job creation and poverty reduction (EC, 2010). Moreover, the EU emphasises that the ability of the economy to adapt and become more climate change resilient and resource-efficient and, at the same time, to remain competitive, depends on high levels of eco-innovation of a societal, economic, organisational and technological nature. According to the EU, eco-innovation may provide valuable new opportunities for growth and jobs and enable the transition towards a green economy that takes into account the sustainable use of resources.

Europe's first major drive to boost eco-innovation came with the Environmental Technologies Action Plan (ETAP). Adopted in 2004, this Action Plan (Commission of the EC, 2004) focused on the further development and use of environmental technologies. This plan has created a Community framework for policies to encourage environmental technologies, including those of innovative character. The actions proposed fell into three main areas: getting from research to markets; improving market conditions for environmental technologies; and acting globally to promote sustainable development at the global level, particularly in developing countries (Commission of the EC, 2004). The Eco-innovation Action Plan – EcoAP (EC, 2011), launched by the European Commission in December 2011, is a logical successor to the ETAP. To a greater extent it focuses on issues of innovation – takes a broader approach to eco-innovation and provides more actions aimed at strengthening incentives and overcoming barriers to the implementation of innovative environmentally friendly solutions.

The EcoAP is a broad policy framework. It provides directions for eco-innovation policy and funding (Table 2). The need to support eco-innovation in the EU is emphasised in several

documents, including the Europe 2020 strategy, the flagship initiatives “Innovation Union”, “An industrial policy for the globalisation era”, and “Resource-efficient Europe”, the Eco-innovation Action Plan and the General Union Environment Action Programme to 2020. Until 2013, the eco-innovative projects were funded under the EU’s Seventh Framework Programme for Research and Technological Development; the Competitiveness and Innovation Framework Programme (CIP); and LIFE+, as well as structural and cohesion funds.

Table 2. EU support for eco-innovation 2014-2020

Action of Eco-AP	The idea	Funding
Action 1. Environment policy and regulation for promoting eco-innovation	- screening of the regulatory framework in the environmental area, identifying possible gaps; - reviewing existing rules and implementing new ones in order to provide a coherent legislative framework that promotes eco-innovation;	LIFE
Action 2. Demonstration projects and partnerships for eco-innovation	- demonstrating the market viability of eco-innovative solutions; - supporting partnerships implementing innovative technologies;	Horizon 2020, COSME
Action 3. Standards and performance targets for key goods, processes and services to reduce their environmental footprint	- labelling schemes indicating performance standards of a product to communicate the benefits of eco-innovation; - building on the standardisation package to ensure that new or revised standards result in strong incentives for innovation, and take resource efficiency, environmental and climate change concerns into account;	Horizon 2020, LIFE
Action 4. Finance and support services for SMEs	- access to finance for eco-innovative SMEs;	Horizon 2020, COSME, Cohesion policy
Action 5. International cooperation	- fostering the market for European eco-innovations abroad; - enhancing dialogue with third countries to put in place market and regulatory measures that foster eco-innovation globally;	Horizon 2020
Action 6. New skills and jobs	- matching skills supply with labour market needs, in particular in terms of newly-emerging and expanding skills such as those required by green and greener jobs;	Cohesion policy
Action 7. European Innovation Partnerships	- bridging the gap between a more resource efficient economy, ambitious environmental goals as well as business opportunities; - testing of green public and private procurement promoting eco-innovation.	Horizon 2020

Source: own work.

From 2014 to 2020, the main source of support is Horizon 2020, the framework programme for Research and Innovation for the 2014-2020 period. Horizon 2020 is the biggest EU research and innovation programme ever. Horizon 2020 is the financial tool to implement the Eco-Innovation action plan, in particular under the societal challenge “Climate Action, Resource Efficiency and Raw Materials”. It is expected that at least 60% of the overall Horizon 2020 budget (EUR 77,028.3 million) should be related to sustainable development and EUR 3,081 million was allocated for climate action, environment and resource efficiency initiatives (Regulation 1291/2013), which include eco-innovation. The aim is to foster all forms of eco-innovation that enable the transition to a green economy. Activities shall focus on “strengthening eco-innovative technologies, processes, services and products (...); supporting innovative policies, sustainable economic models and societal changes; measuring and assessing progress towards a green economy; and fostering resource efficiency through digital systems” (Regulation 1291/2013).

There are many barriers to the penetration of eco-innovative solutions to the markets. According to enterprises, the main market barriers are the uncertain demand from the market, lack of funds within the enterprise and insufficient access to existing subsidies and fiscal incentive (The Gallup Organization, 2011). The response to this challenge can be COSME – the EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises. It supports enterprises by improving access to finance in the form of loan guarantee and equity facilities, improving access to markets, improving framework conditions for business creation and growth, their competitiveness and sustainability (Regulation 1287/2013). COSME can encourage eco-innovation and sustainable production, help to find partners abroad to work on eco-innovative products, or to obtain support for innovation and technology transfer. The financial envelope for the implementation of the COSME programme is set at EUR 2,298.2 million for the 2014-2020 period.

Another EU programme that can be used to support eco-innovation is the LIFE programme. The general objective of LIFE is to contribute to the shift towards a resource-efficient, low-carbon and climate-resilient economy and to contribute to the implementation, updating and development of EU environmental and climate policy and legislation by co-financing projects with European added value (Reg. 1293/2013). The financial envelope for the implementation of the LIFE Programme for the period from 2014 to 2020 is set at EUR 3,456.7

million. As intended by the European Commission, LIFE should be a catalyst for changes in policy development and implementation by, among others, promoting innovative environmental and climate change technologies. The programme can contribute to the development and demonstration of innovative technologies to environmental challenges and innovative climate change mitigation and adaptation technologies, systems, methods and instruments that are suitable for being replicated, transferred or mainstreamed (Regulation 1293/2013).

Since 2014, the European Commission has mainstreamed eco-innovation in the cohesion policy, the EU's main investment policy. The cohesion policy focuses on the economic and social pillars of sustainable development by strengthening growth, competitiveness, employment and social inclusion. Some of the priorities of the cohesion policy contribute to the promotion of environmental technologies (including eco-innovations), of sustainable transport and energy systems, and also of investment project improving water, air and soil quality and addressing climate change problems. Cohesion policy has set 11 thematic objectives for the 2014-2020 period (Regulation 1303/2013), four of which may be associated with the support of eco-innovation: strengthening research, technological development and innovation; supporting the shift towards a low-carbon economy; promoting climate change adaptation, risk prevention and management; preserving and protecting the environment and promoting resource efficiency. Importantly, under the EU's 2014-2020 budget, the investments under the European Regional Development Fund should be concentrated ("thematic concentration") on four key priorities: research and innovation (including eco-innovation), the digital agenda, support for small and medium-sized enterprises and the low-carbon economy (e.g. energy efficiency, renewable energies, smart distribution grids, sustainable multimodal urban transport), depending on the category of region (less developed: 50%, transition: 60%, and more developed: 80%) (Regulation 1301/2013). Furthermore, some ERDF resources must be channelled specifically towards low-carbon economy projects (less developed regions: 12%, transition regions: 15% and more developed regions: 20%). Funding for cohesion policy in the 2014-2020 period amounts to EUR 351.8 billion. Around EUR 117.8 billion will be dedicated to thematic objectives: research and innovation, low carbon economy, climate change and risk prevention, environment and resource efficiency³.

³Own calculations based on European Commission data, Breakdown Of The Available Funds By Thematic Objective By MS For 2014-2020, <https://cohesiondata.ec.europa.eu> (2.04.2015).

In addition to financial support instruments, communication platforms (e.g. Eco-innovation Platform, Europe INNOVA, ECOPOL) also play an important role. They allow the exchange of good practices and cooperation in projects aiming at development of eco-innovation. Equally important are the activities of the Eco-Innovation Observatory – an initiative financed by the European Commission's Directorate-General for the Environment from the Competitiveness and Innovation Framework Programme (CIP). It aims to provide a much-needed integrated information source on eco-innovation for companies and innovation service providers, as well as provide a solid decision-making basis for policy development.

4. Conclusions

In the current economic crisis, eco-innovation is gaining ground within both industry and government as an effective way to tackle climate change and to foster green growth. European Union seems to share these views, allocating substantial funds from its budget to support this kind of innovation. International comparisons of innovative and eco-innovative potential (Innovation Union Scoreboard, Eco-Innovation Scoreboard) indicate that they are closely related, so we need to remember that the development of a specific area of innovation (like eco-innovation) without support of a general base for the knowledge-based economy can be ineffective.

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BULGARIA'S ECONOMIC GROWTH: SUPPLY-SIDE DIMENSIONS

Desislava Stoilova¹, Ivan Todorov²

Abstract

The objective of this paper is to identify the contributions of capital stock, labor input and technological progress to Bulgaria's economic growth under a Currency Board Arrangement. In order to accomplish the goal of the article, a growth accounting approach based on a two-factor Cobb-Douglas production function is employed. The results obtained imply that the total factor productivity and capital stock have been the main supply-side determinants of economic growth in Bulgaria under a CBA while the influence of changes in employment on the dynamics of real GDP has been weaker than the influence of the other two factors. The dynamics of the total factor productivity under a CBA has been rather chaotic, which is a result of the inconsistent development of the transition to a market-oriented economy in Bulgaria. The growth problems of Bulgarian economy are complex and difficult to solve. Their successful resolution requires a combination of short-term measures to stimulate aggregate demand and long-term actions to affect aggregate supply.

Keywords: Bulgaria, currency board arrangement, growth accounting

JEL Classification: O47

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1. Introduction

After a heavy financial and economic crisis, in July 1997 Bulgaria introduced a CBA, in order to restore the confidence in the national currency and bank system, to impose financial

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discipline and stabilize the economy. Bulgarian Currency Board proved to be a great success. It is a type of a hard currency peg that relies on automatic mechanisms to restore macroeconomic equilibrium, limiting severely the discretion of policymakers (Stoilova, 2010, p. 269). The state intervention in the economy was restricted, which may be considered “a fundamental precondition for the development of free market economy” (Patonov, 2013, p. 315).

The CBA adoption marked the beginning of a new stage in the economic history of Bulgaria. This stage is characterized by a gradual recovery of Bulgarian economy from the collapse in 1990-s and by unstable and uneven growth. After a period of a relatively high growth of 6-7% per annum before the global crisis, Bulgarian economy contracted by 5.01 % in 2009 and grew by less than 2% in the next years. The weak growth was accompanied by deflation trends in 2013 and 2014, which is a dangerous combination and requires a rapid and adequate response by Bulgarian macroeconomic policy-makers.

The objective of this research is to identify the contributions of capital stock, labor input and technological progress to Bulgaria’s economic growth in the period of the Currency Board Arrangement. The goal of the study has been achieved by the fulfilment of the following tasks:

- 1) Select and apply techniques for calculating the indicators whose values cannot be readily obtained from the National Accounts Statistics (Section 2);
- 2) Present and interpret research results (Section 3).
- 3) Formulate advisable macroeconomic policies for resolving the growth problems of the Bulgarian economy (Concluding section).

2. Assumptions and methodology of calculations

In this paper the impact of the changes in labor, physical capital and total factor productivity on the changes in real GDP has been investigated by means of the basic growth accounting equation

$$\Delta Y/Y = \Delta A/A + \alpha \Delta K/K + \beta \Delta L/L \quad (1).$$

According to this equation, the growth rate of real GDP $\Delta Y/Y$ is a sum of the growth rate of capital stock $\Delta K/K$ weighted by the share of capital in the gross income α , the growth rate of employment $\Delta L/L$ weighted by the share of labor in the gross income β and the growth rate of total labor productivity $\Delta A/A$. The way of defining the total factor productivity's contribution to economic growth (as a residual obtained by extracting from the output's growth rate the

contributions of the two basic growth factors), gives the term “total factor productivity” a specific broader meaning. The dynamics of the total factor productivity reflects the influence of all sources of real GDP growth which are not changes in employment and in physical capital accumulation, such as research and development and the formation of human capital.

There are three methodological problems related to the practical application of the growth accounting technique:

- 1) How to estimate the elasticity coefficients in the basic production function.
- 2) How to measure labor input.
- 3) How to measure the growth rate of capital stock.

2.1. Estimating the elasticity coefficients

A basic assumption of the economic equilibrium theory is that each production factor is awarded its marginal productivity. The shares of capital α and labor β in gross income (GDP) can be determined as $\alpha = rK/Y$ and $\beta = wL/Y$, where r is the real interest rate and w is the real wage. Hence, β is the share of labor income in GDP and α is the share of capital income in GDP.

In the original version of the growth accounting technique β was set equal to $(1-\alpha)$ in accordance with the assumption of constant returns to scale. However, in many recent empirical studies (Krueger, 1999; Senhadji, 2000; Ganev, 2005; Tsalinski, 2007) β was determined as the share of compensation of employees in GDP, and α was obtained as $\alpha = (1-\beta)$. The rationale of the new approach is that α ought to show the share of capital income in GDP, which can be calculated by dividing the sum of the net operating surplus and the net mixed income by GDP. However, defining α as a residual actually means that its value is increased by the share of the consumption of fixed capital in GDP and the difference between the shares of the net taxes on production and the financial intermediation services indirectly measured in GDP. Another reason for overvaluing α is the fact that a part of the net mixed income is in reality a labor income and should be added to the compensation of employees.

The original approach to calculating α and β and its contemporary modifications have their merits and demerits. This paper employs two approaches to estimating elasticities in an attempt to combine their strengths and increase the reliability of research results.

2.1.1. First approach to estimating the elasticity coefficients

The first approach was used by Raleva (2013). According to this approach, the coefficient β is calculated as the share of the sum of the compensation of employees and the net mixed income in GDP:

$$\beta = [CE + 1/3 (NOS + NMI)] / GDP \quad (2),$$

where CE is the compensation of employees, NOS is the net operating surplus and NMI is the net mixed income.

Assuming constant returns to scale, α is treated as a residual and equals $(1-\beta)$.

When the first approach is applied, both α and β are overvalued. β is overvalued because in the labor income is included the whole income of the non-corporate enterprises and α is overvalued because the other elements of the income structure of GDP are added to the capital income. The values of α and β derived in accordance with the first approach can be seen in Table 1. The average values of α and β for the period 1997-2013 calculated by the first approach are respectively 0.44 and 0.56.

2.1.2. Second approach to estimating the elasticity coefficients

The second approach was used by Raleva (2013) and returns to the original model construction of the growth accounting concept. According to this approach, α is calculated first as

$$\alpha = (NOS + NMI) / GDP \quad (3),$$

where NOS is the net operating surplus and NMI is the net mixed income.

β is treated as a residual and equals $(1-\alpha)$. The capital income is obtained as a sum of the net operating surplus and the net mixed income, which leads to overvaluation of α because the net mixed income contains some labor income. β is overvalued too because of its residual character. Both approaches restrict the distortion of the proportions between α and β caused by the different interpretation of the net mixed income. The values of α and β derived in accordance with the second approach are shown in Table 2. The average values of α and β for the period 1997-2013 calculated by the first approach are respectively 0.45 and 0.55.

2.2. Measuring labor input

Two indicators can be used to measure labor input L in the production function - the number of employed persons or the number of hours worked in an economy. In this paper the

first indicator is employed. The growth rates of the number of employed persons compared to the previous year are shown in Tables 1 and 2.

2.3. Measuring the growth rate of capital stock

The most complex methodological problem related to the practical application of the growth accounting approach is how to measure the growth rate of capital stock. Two different approaches can be used to solve this problem – the perpetual inventory method (Ganev, 2005) and the constant capital-output ratio approach (Minassian, 2008; Raleva, 2013).

In this paper the constant capital-output ratio approach has been employed. According to this approach, the growth rate of capital $\Delta K/K$ depends on gross investment I , the rate of depreciation d and the value of capital stock K in the base period:

$$\Delta K/K = I/K - d \quad (4)$$

I/K can be written as a proportion between the rate of accumulation I/Y and the capital-output ratio K/Y :

$$I/K = (I/Y) / (K/Y) \quad (5)$$

If I/K is substituted in Formula (4) with the right-hand side of Equation (5), then growth rate of capital $\Delta K/K$ can be calculated as

$$\Delta K/K = (I/Y / K/Y) - d \quad (6)$$

Like in many empirical investigations (Hernandez & Mauleon, 2003; Cororaton, 2002; Felipe, 1997 etc.), the assumed rate of depreciation d in this paper is 0.05.

The capital-output ratio K/Y is considered constant in economic theory. In empirical studies this ratio varies between 2 and 3. For Bulgaria the used values of the capital-output ratio are 2.5 (Minassian, 2008) and 2.3 (Raleva, 2013). For the purpose of this study the used value of the capital-output ratio is 2.2. It has been calculated as the average gross-capital-formation-to-change-in-real-GDP ratio for the period 1998-2008 (in accordance with the assumption of Harrod and Domar that the average and the marginal productivity of capital are equal).

The growth rates of capital stock are shown in Tables 1 and 2.

3. Results

The calculated results for the contributions of capital, labor and total factor productivity to economic growth in Bulgaria can be seen in Tables 1 and 2. Tables 1 and 2 represent two variants

of the calculated results corresponding to the two approaches to estimating the elasticity coefficients α and β . The two approaches to calculating the elasticity coefficients provide similar results: the average values of α and β for the period 1997-2013 are respectively 0.44 and 0.56 by the first approach and 0.45 and 0.55 by the second approach.

As a whole the dynamics of Bulgaria's output under a CBA has been positive (see Tables 1-2). For the entire period 1997-2013 the real GDP of Bulgaria decreased in three years only – in 1997, 1997 and 2009. However, the average growth rate for the whole period is not high – 2.78%. The standard deviation of growth rates of 3.92% implies that Bulgaria's economic growth under a CBA has been unstable and uneven. In 1997 the fall in real output was small (1.09%) but in 1999 and in 2009 it was disastrous (5.65% and 5.01% respectively). The main contributor to the serious drops in real GDP in 1999 and 2009 was the total factor productivity with respective falls of 4.70% and 7.57%.

The period 2000-2008 was characterized by a relatively high and steady economic growth with an average rate of 5.70% and a standard deviation of 1.01%. In the first part of this period (from 2000 till 2004) the total factor productivity was the main driving force of growth with an average contribution of 3.16%. However, in the second part of the period (from 2005 till 2008) the growth of real GDP was determined mostly by changes in capital stock, whose average contribution was 3.65%.

After the collapse in 2009 (a 5% decline in real output) the recovery of Bulgarian economy has been slow and weak. In the years 2010-2013 Bulgaria recorded a faint economic growth of less than 2% per annum and 1.05% on average. This weak growth has been determined mainly by capital stock, which has grown by an average rate of 2.09%.

The total factor productivity (with a standard deviation of 3.11%) has been the most volatile of the three growth determinants. Capital stock (with a standard deviation of 1.23%) has been the most stable contributor to Bulgaria's economic growth under a CBA.

The contribution of labor to economic growth was positive in 2002-2008 but negative in 1997-2001 and 2009-2013. The average contribution of employment to economic growth for the whole period 1997-2013 is negative (-0.18%). The comparison of the dynamics of output and employment demonstrates that positive changes in the labor market occurred after two years of high and steady economic growth. However, the response of labor market to poor output developments has been immediate.

The fluctuations of output and the total factor productivity show similar patterns. This fact is due to the specificity of the calculation of the change in total factor productivity as a residual obtained from the growth rate of output by subtracting the growth rates of capital stock and labor input.

The contribution of changes in capital stock to economic growth was positive in all years of the period 1997-2013 except for the years 1997 and 1998, when it was negative. The average contribution of capital stock to economic growth for the period 1997-2013 is 2.17%, which makes it the main contributor to Bulgaria's economic growth under a CBA. The peak contributions of changes in capital stock to economic growth were in the years 2003-2008 (an average of 3.11%). After the upward movements in 1997-2008, the impact of capital stock on economic growth decreased in 2009-2013 (an average of 2.39%, or a decline of 0.72% compared to the period 2003-2008). It may be inferred that the increase in capital stock in 1997-2008 resulted from an improvement of the business environment in Bulgaria. This improvement of the business environment was caused by the following events:

- 1) The introduction of the CBA in 1997, which led to financial and macroeconomic stability.
- 2) The increase in lending in 2003-2008, which was due to the purchase of Bulgarian banks by foreign banks and to the massive inflow of foreign capital to Bulgaria.
- 3) The accession of Bulgaria to the European Union, which increased the certainty for foreign investors in Bulgaria.

As a result of the global and domestic economic crisis and the slow recovery of Bulgarian economy from this crisis, the influence of changes in capital stock on economic growth fell in 2009-2013, when the uncertain political and economic environment led to a sharp drop in investment.

It can be inferred that capital stock has been the main supply-side determinant of economic growth in Bulgaria under a CBA while the influence of the total factor productivity and changes in employment on the dynamics of real GDP has been weaker. The dynamics of the total factor productivity under a CBA has been rather chaotic, which may be attributed to the inconsistent development of the transition to a market-oriented economy in Bulgaria. The ineffective use of labor resources has insignificantly contributed to lowering the growth rates of real GDP. This small negative impact of employment has been offset by rises in capital stock and total factor productivity. The fall in employment has been accompanied by increased influence of

scientific progress and organizational factors. Economic effectiveness has increased in the process of privatization and restructuring of the Bulgarian economy.

4. Conclusions

The results of this research provide evidence that capital stock and the total factor productivity have been the main supply-side determinants of Bulgaria's economic growth under a CBA, while employment has had an insignificant negative impact on growth. This inference implies that Bulgarian policymakers have to concentrate their efforts on encouraging investment and on raising productivity in order to stimulate economic growth.

Labor productivity per person employed and per hour worked in Bulgaria is 30-40% of EU average, which makes Bulgarian workforce the least productive one in the EU (Todorov, 2014b).

Bulgaria's experience has proved that investment activity is determined mainly by institutional and macroeconomic environment, while tax stimuli and other preferences have relatively weaker impact on investors' decisions. In spite of its low corporate tax rate of 10%, Bulgaria has attracted less investment than other transition economies from Central and Eastern Europe with higher corporate tax rates.

Bulgaria's institutional environment is characterized by high levels of bureaucracy and corruption and by sluggish and ineffective work of state administration. The lack of good legislation and quality institutions, the absence of quality infrastructure and the shortage of well-qualified and highly-productive labor force are the main obstacles to investment (local and foreign). Other factors, which impede investment, are the political instability and the absence of succession and continuity in macroeconomic policies of different governments.

Bulgaria may boost investment and increase productivity by:

- 1) Improving the quality of its legislation and institutions.
- 2) Building good public infrastructure.
- 3) Encouraging and investing in the formation of human capital.
- 4) Stimulating and investing in research and development activities.

Considering the slow and painful process of institutional transformation in Bulgaria, and the low share of investment in public infrastructure, human capital and research and development in Bulgaria's GDP compared to EU levels, the supply-side prospects of Bulgaria's economic growth cannot be good. Other factor such as the low saving rate, stagnant domestic consumption

and investment, underdeveloped financial markets and the real appreciation of the Bulgarian lev (Todorov, 2014a) may make the growth perspectives of the Bulgarian economy even worse.

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Appendices

Table 1. Contributions of capital, labor and total factor productivity to economic growth in Bulgaria (variant 1)

Year	$\Delta Y/Y$	α	$\Delta K/K$	$\alpha^* \Delta K/K$	β	$\Delta L/L$	$\beta^* \Delta L/L$	$\Delta A/A$
1997	-1.09%	0.46	-0.80%	-0.37%	0.54	-3.07%	-1.66%	0.94%
1998	3.46%	0.44	0.53%	0.23%	0.56	-1.03%	-0.57%	3.80%
1999	-5.65%	0.44	3.48%	1.52%	0.56	-4.32%	-2.43%	-4.74%
2000	6.04%	0.44	3.05%	1.36%	0.56	-2.38%	-1.32%	6.00%
2001	3.80%	0.44	3.67%	1.63%	0.56	-0.75%	-0.42%	2.59%
2002	4.48%	0.46	3.94%	1.80%	0.54	0.23%	0.12%	2.55%
2003	5.36%	0.46	4.23%	1.93%	0.54	2.96%	1.61%	1.82%
2004	6.56%	0.46	4.58%	2.09%	0.54	2.59%	1.41%	3.06%
2005	5.96%	0.46	6.44%	2.93%	0.54	2.70%	1.47%	1.55%
2006	6.47%	0.46	7.55%	3.46%	0.54	3.34%	1.81%	1.20%
2007	6.91%	0.46	8.41%	3.87%	0.54	3.18%	1.72%	1.32%
2008	5.75%	0.44	10.03%	4.39%	0.56	2.36%	1.33%	0.03%
2009	-5.01%	0.43	8.26%	3.58%	0.57	-1.71%	-0.97%	-7.62%
2010	0.66%	0.43	5.61%	2.40%	0.57	-3.88%	-2.22%	0.47%
2011	1.98%	0.44	4.73%	2.07%	0.56	-2.20%	-1.24%	1.15%
2012	0.49%	0.42	4.83%	2.03%	0.58	-2.50%	-1.45%	-0.09%
2013	1.07%	0.40	4.70%	1.87%	0.60	-0.43%	-0.26%	-0.54%
Average	2.78%	0.44	4.90%	2.17%	0.56	-0.29%	-0.18%	0.79%

Source: Calculated by the author on the basis of data from the website of the National Statistical Institute of Bulgaria, www.nsi.bg.

Table 2. Contributions of capital, labor and total factor productivity to economic growth in Bulgaria (variant 2)

Year	$\Delta Y/Y$	α	$\Delta K/K$	$\alpha^* \Delta K/K$	β	$\Delta L/L$	$\beta^* \Delta L/L$	$\Delta A/A$
1997	-1.09%	0.57	-0.80%	-0.46%	0.43	-3.07%	-1.31%	0.68%
1998	3.46%	0.47	0.53%	0.25%	0.53	-1.03%	-0.54%	3.75%
1999	-5.65%	0.43	3.48%	1.51%	0.57	-4.32%	-2.45%	-4.70%
2000	6.04%	0.47	3.05%	1.43%	0.53	-2.38%	-1.26%	5.88%
2001	3.80%	0.47	3.67%	1.71%	0.53	-0.75%	-0.40%	2.50%
2002	4.48%	0.47	3.94%	1.84%	0.53	0.23%	0.12%	2.52%
2003	5.36%	0.44	4.23%	1.87%	0.56	2.96%	1.65%	1.84%
2004	6.56%	0.44	4.58%	2.03%	0.56	2.59%	1.45%	3.09%
2005	5.96%	0.43	6.44%	2.77%	0.57	2.70%	1.54%	1.65%
2006	6.47%	0.44	7.55%	3.35%	0.56	3.34%	1.86%	1.26%
2007	6.91%	0.46	8.41%	3.87%	0.54	3.18%	1.72%	1.32%
2008	5.75%	0.46	10.03%	4.61%	0.54	2.36%	1.27%	-0.13%
2009	-5.01%	0.43	8.26%	3.54%	0.57	-1.71%	-0.98%	-7.57%
2010	0.66%	0.40	5.61%	2.27%	0.60	-3.88%	-2.31%	0.70%
2011	1.98%	0.44	4.73%	2.06%	0.56	-2.20%	-1.24%	1.16%

2012	0.49%	0.42	4.83%	2.04%	0.58	-2.50%	-1.44%	-0.11%
2013	1.07%	0.40	4.70%	1.88%	0.60	-0.43%	-0.26%	-0.56%
Average	2.78%	0.45	4.90%	2.15%	0.55	-0.29%	-0.15%	0.78%

Source: Calculated by the author on the basis of data from the website of the National Statistical Institute of Bulgaria, www.nsi.bg

IMPACT OF OPENNESS AND ECONOMIC FREEDOM ON ECONOMIC GROWTH IN THE TRANSITIONAL ECONOMIES OF EUROPEAN UNION

Yılmaz Bayar¹

Abstract

The globalization process has accelerated especially as of 1980s and the countries began to remove the obstacles on the flows of goods, services and capital. Hence substantial increases have emerged in both the global trade volume and cross border capital flows. Moreover countries have improved their institutional and legal infrastructure to achieve sustainable economic growth and attract foreign capital. This study examines the impact of trade and financial openness and economic freedom on economic growth in the transition economies of European Union including Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia during the period 1996-2012 by using panel cointegration test considering multiple structural breaks. We found that there was long relationship among the variables and both economic freedom and trade openness had positive impact on the economic growth, while financial openness had negative impact on the economic growth.

Keywords: trade openness, financial openness, economic freedom, economic growth

JEL Classification: C32, F43, O10, 040

1. Introduction

The countries began to remove the constraints on the movement of goods, services and capital with the increasing globalization as of Second World War. The trade and financial liberalization contributed to the increases in world trade volume and cross border capital flows. The world trade volume as a percent of GDP increased from 25.62% in 1960 to about 60% in 2013 (World Bank, 2015a). Also global capital flows including foreign direct investments, portfolio investment, reserves and other investments have increased substantially as of 1980s despite the significant contraction especially in Global financial crisis. Cross border capital flows increased to the about 20% of world GDP in 2007, but then decreased to the 5% of the world GDP in 2012 (James et al., 2014). In this regard, the new growth theories have emphasized that

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openness and institutional quality have positive impact on economic growth (see McKinnon (1973), Shaw (1973), Bencivenga & Smith (1991), King & Levine (1993), Fedderke (2002), Andersen & Babula (2008), Hye & Lau (2015)).

The transitional economies of the European Union (EU) implemented transition from centrally planned economies to market economies as of late 1980s and then participated to the EU in 2000s. During this transition process, they liberalized their trade and integrated to the global financial markets by opening their financial sectors to the external world and improved their quality of institutional infrastructure. This study will be one of the pioneering studies which investigate the impact of trade and financial liberalization and the economic freedom as an indicator of institutional quality on the economic growth in the transition economies of the EU. The rest of the paper is organized as follows. The next section overviews the theoretical and empirical literature on our topic. Section 3 presents data and the method and discusses major empirical findings. Finally the study is over with the Conclusion.

2. Literature Review

There have been a wide range of theoretical and empirical studies on the impact of trade openness, financial openness and economic freedom on economic growth in the literature. In this section, we will give a brief literature review in three subsections.

2.1. Trade Openness and Economic Growth

Trade openness is one of the important components in sustainable economic growth in the globalized world. Export-led growth hypothesis says that exports is a key role in the process of economic growth and this finding is also were supported by the growth miracles of Hong Kong, Taiwan, Singapore, the Republic of Korea in South-East Asia (see Balassa (1978) and Tyler (1981)). On the other hand import-led growth hypothesis states that import causes economic growth (see Thangavelu & Rajaguru (2004), Awokuse (2007), Awokuse (2008)). Also the endogenous growth theories provide a theoretical basis for the relationship between trade openness and economic growth by increasing spillover effects of information transmission (Romer 1990). Trade openness has impact on economic growth via knowledge spillovers, capital accumulation, factor price equalization (Hye & Lau, 2014)

There have been many empirical studies on the relationship between trade openness and economic growth in the literature and they have reached mixed findings on the nexus between two variables. Some studies such as Marelli and Signorelli (2011), Sakyi et al. (2012),

Mercan et al. (2013), Zakaria and Ahmed (2013) and Razmi and Refaei (2013) found that trade openness had positive impact on economic growth; while some studies such as Menyah et al. (2014) and Ulasan (2015) found that trade openness had no significant impact on economic growth. On the other hand some studies such as Kim (2011) and Hye and Lau (2014) found that the relationship between trade openness and economic growth could be positive or negative depending on level of development and duration.

2.2. Financial Openness and Economic Growth

There have been two major theoretical views on the relationship between financial openness and economic growth. One view stated that financial openness affects economic growth positively by allocating resources efficiently and providing more access to the foreign capital, improving risk sharing, contributing to the stabilization of the economy and development of financial sector. The other view says that the benefits of financial openness may not be realized or realized limitedly and also financial openness makes the national economy more vulnerable to the crises (Kim et al., 2014). In this process financial liberalization generally affects economic growth directly or indirectly by improving the financial development. But it should keep in mind that the frequency and severity of the financial crises have increased significantly together with financial integration.

The empirical studies have generally concentrated on the relationship between financial development and economic growth and most of these studies have shown that financial development had positive impact on economic growth (see Schumpeter (1911), King & Levine (1993), Levine (1997), Bayar (2014), Ben Jedidia et al. (2015)). On the other hand the empirical studies on the relationship between financial openness and economic growth have reached mixed findings. Some studies such as Bekaert et al. (2005), Ranciere et al. (2006), Garita (2009), Levchenko et al. (2009), Kim et al. (2014) found that financial openness had positive impact on economic growth, while relatively few studies such as Gine and Townsend (2004), Fratzscher and Bussiere (2004), Tswamuno et al. (2007) found that financial openness had negative or no significant impact on economic growth. On the other some studies have investigated the causality between financial openness and economic growth. Some studies such as Yapraklı (2007) found that there was unidirectional causality from financial openness to economic growth, some studies such as Kar and Pentecos (2000), Bas-Dinar et al. (2015) found that there was unidirectional causality from economic growth to financial openness.

2.3. Economic Freedom and Economic Growth

Economic freedom is a quality indicator of which the countries have institutions and legal structure. Institutional and legal structure becomes very important both for creating an investment environment and also attracting the foreign investment and capital in the globalized world. The discussions on the economic freedom extended to Adam Smith, but the concept of economic freedom has different meanings in according to the different economic thoughts. In this study, we used the economic freedom index calculated by Heritage Foundation. This index is based on four pillars which includes rule of law (property rights, freedom from corruption), limited government (fiscal freedom, government spending), regulatory efficiency (business freedom, labor freedom, monetary freedom) and open markets (trade freedom, investment freedom, financial freedom) (Heritage Foundation, 2015).

There have been a large number of empirical studies on the relationship between economic freedom and economic growth especially in two recent decades. Most of the studies have found that economic freedom has been generally had positive impact on economic growth (see Nelson & Singh (1998), Gwartney et al. (2004), Yun-Peng & Tuan-Yuen (2009), Paakkonen (2010), Peev & Mueller (2012), Piątek et al. (2013), Razmi & Refaei (2013) and Akıncı et al. (2014)).

3. Data, Method and Econometric Application

3.1. Data

We used the real GDP per capita growth as proxy for economic growth (dependent variable). On the other we used the sum of export and import as a percent of GDP as trade openness and Chinn-Ito index (KAOPEN) as financial openness and economic freedom index calculated by Heritage Foundation (2015) in the study. The data of economic growth and trade openness were obtained World Bank (2015a & 2015b), the data of financial openness was obtained from Chinn and Ito (2015) and the data of economic freedom was obtained from Heritage Foundation 2015. Our study period was dictated by data availability. The variables used in the econometric analysis and their symbols were presented in Table 1.

Table 1. Variables used in the study

Variable	Symbol	Source
Real GDP per capita growth	GROWTH	World Bank (2015b)
Trade openness (exports and import of goods and services as a percent of GDP)	TRAOP	World Bank (2015a)
Financial openness	FINOP	Chinn & Ito (2015)
Economic freedom index	EFR	Heritage Foundation (2015)

E-views 8.0, WinRATS Pro. 8.0 and Gauss 11.0 software packages were used for the analysis in the study.

3.2. Method

In this study, we investigated the impact of trade openness, financial openness and economic freedom on economic growth in the transition economies of the EU. Firstly we tested the cross-sectional dependence with bias-adjusted LM test of error cross-section independence developed by Pesaran et al. (2008) and conducted the stationarity of the series with PANKPSS (Panel Kwiatkowski, Phillips, Schmidt & Shin) test developed by Carrion-i-Silvestre et al. (2005). Then we analyzed the long run relationship among the variables with cointegration test developed by Basher and Westerlund (2009) and the cointegrating coefficients were estimated with panel Augmented Mean Group (AMG) analysis developed by Eberhardt and Bond (2009).

3.3. Cross-sectional Dependence Test

The cross-sectional dependence among the variables is very important for the determination of the tests used in the study. Therefore, we should test whether there is cross-sectional dependence in the series and the cointegrating equation. $CD LM_{adj}$ test by Pesaran et al. (2008) was used for the determination of cross-sectional dependence and the results were presented in Table 2. The results showed that the null hypothesis (cross-sectional independence) was rejected. Therefore, we should use the tests considering the cross sectional dependence.

Table 2. Results of adjusted $CD LM_{adj}$ test

Variable	Test Statistics	Prob.
GROWTH	6.334	0.000
FINOP	4.268	0.019
TRAOP	3.782	0.004
EFR	5.331	0.000

3.4. PANKPSS Unit Root Test

$CD LM_{adj}$ test showed that there was cross-sectional dependence. On the other hand there were possibly structure breaks during study period. Therefore we tested the stationarity of the series with PANKPSS unit root test developed by Carrion-i-Silvestre et al. (2005) which considers the cross-sectional dependence and multiple structural breaks. We selected the model which allows the structural breaks both in constant term and trend. The critical values were obtained by Monte Carlo simulations with 1,000 simulations. The results of the PANKPSS unit root test were presented in Table 3. The results indicated that the variables were not stationary at their level, but became stationary after first differencing. The findings showed that the test also determined the structural breaks successfully. Russian crisis, global financial crisis and the Eurozone sovereign debt crisis respectively emerged in 1998, 2008 and 2009.

Table 3. Results of PANKPSS unit root test

Countries	DGROWTH		DFINOP		DTRAOP		DEFR	
	p-value	Structural Break	p-value	Structural Break	p-value	Structural Break	p-value	Structural Break
Bulgaria	0.157*	1999, 2008	0.132*	1998, 2008	0.231*	1999, 2009	0.136	1998, 2009
Croatia	0.162*	1998, 2009	0.238*	1998, 2009	0.134*	1999, 2009	0.182	1998, 2009
Czech Republic	0.216*	1998, 2009	0.261*	1999, 2009	0.119*	1999, 2009	0.109	1999, 2009
Estonia	0.194*	2008	0.205*	2009	0.226*	2009	0.231	2008
Hungary	0.289*	2009	0.266*	2008	0.137*	2009	0.226	2008
Latvia	0.215*	2008	0.392*	2009	0.141*	2009	0.248	2009
Lithuania	0.138*	2009	0.246	2008	0.102*	2009	0.159	2009
Romania	0.275*	1997, 1998, 2009	0.207 *	1998, 2009	0.173*	1999, 2008	0.144	1998, 2009
Slovak Republic	0.119*	2009	0.178*	2008, 2009	0.168*	2009	0.152	2009
Slovenia	0.185*	2009	0.108	2009	0.217*	2009	0.180	2009
Panel	0.235*		0.268*		0.195*		0.163*	

* Stationary at 5% significance level

3.5. Panel Cointegration Test of Basher and Westerlund (2009)

We analyzed the long run relationship among the variables with the cointegration test developed by Basher and Westerlund (2009). Because this approach can test cointegrating relationship among the variables in case there is cross-sectional dependence and multiple

structural breaks and it allows maximum three structural breaks. We selected the model which allows structural breaks both in constant term and trend for the cointegration test by Basher and Westerlund (2009) and the results were presented in Table 4. The critical values were obtained by Monte Carlo simulations with 1,000 simulations. The results showed that there was cointegration relationship among the variables when the structural breaks were considered.

Table 4. Results of cointegration test

	Test Statistics	Prob.	Decision
Exclusion of structural breaks in the constant term and trend	3.887	0.021	There is no cointegration
Consideration of structural breaks in the constant term and trend	34.678	0.349	There is cointegration

3.6. Estimation of Cointegrating Coefficients

Panel AMG method considers the cross-sectional dependence and also calculates the average group effect by weighting the overall panel results and individual coefficients. Therefore it is more reliable than common correlated effects method developed by Pesaran (2006) in estimation of cointegrating coefficients (Eberhardt & Bond, 2009). So we estimated the cointegrating coefficients with panel AMG developed by Eberhardt and Bond (2009). We applied panel AMG method for the estimation of coefficients and the results of estimation were presented in Table 5. The findings demonstrated that trade openness and economic freedom had positive impact on the economic growth, while financial openness had negative impact on the economic growth.

Table 5. Estimation of cointegrating coefficients

Variables	Coefficient	Prob.
FINOP	-0.214	0.015*
TRAOP	0.326	0.002*
EFR	0.289	0.017*

* statistically significant at 5% level.

The endogenous growth theories proposed that trade openness has positive impact on economic growth via knowledge spillovers, capital accumulation, factor price equalization (Hye & Lau, 2014). On the other hand institutional structure is one of the key factors of the economic growth (Acemoglu et al., 2004). So our finding supported these propositions of the new growth theories. But the negative impact of the financial openness on the economic growth is not

consistent with the propositions of the endogenous growth theories. Kim et al. (2014) asserted that impact of financial openness on the economic growth depends on country specific factors including level of economic development, macroeconomic development and stability. So our finding could be arisen from the underdeveloped financial structures and institutional structure and insufficient and instable economic performance of the transition countries.

3.7. Short-Run Analysis

Short run relations among the variables were estimated by panel AMG and we found that the coefficients of error correction terms were negative and statistically significant. This demonstrated that the deviations among the series in the short run were eliminated and the series converged to their long term equilibrium values. This finding also verified that our variables were cointegrated. On the other hand the small coefficients of error correction terms showed that the equilibrating velocity of the variables was low.

Table 6. Short run analysis

Variables	Coefficient	Prob.	Coefficient of Error Correction Terms
FINOP	-0.193*	0.031	-0.083*
TRAOP	0.294*	0.004	-0.107*
EFR	0.286*	0.007	-0.091*

* statistically significant at 5% level.

4. Conclusion

The transitional economies of the EU transited from centrally planned economies to market economies together with the fall of the Berlin Wall in 1989 and then these countries have integrated to the EU. These countries liberalized their economies and improved their quality of institutional infrastructures during this process. This study examines the impact of openness and economic freedom on economic growth in the transition economies of European Union including Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia during the period 1996-2012.

In the context of the study the cross-sectional dependence among the series were tested by $CD\ LM_{adj}$ test and the stationarity of the series was tested by PANKPSS unit root test. Then we analyzed the long run relationship among the variables with cointegration test developed by Basher and Westerlund (2009) and the cointegrating coefficients were estimated with panel AMG. The

coefficients indicated that trade openness and economic freedom had positive impact on the economic growth in the long run, while financial openness had negative impact on the economic growth in the long run. Our finding about the positive impact of trade openness and economic freedom on the economic growth supported the propositions of the endogenous growth theories.

On the other hand the impact of financial openness on the economic growth could be changed depending on the factors such as economic development, macroeconomic stability and institutional infrastructure. Therefore, the negative impact of financial openness on the economic growth in the transition economies of the EU can be arisen from underdeveloped institutional and financial structures and insufficient and instable economic performance of the countries in our study.

The findings of the study imply that trade openness and economic freedom foster the economic growth, while financial openness slows down the economic growth. Therefore it is important for the less developed countries to liberalize their trade gradually and increase their economic freedom by improving the four pillars of the economic freedom which are rule of law, limited government, regulatory efficiency and open markets.

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MACRO-LEVEL EFFICIENCY OF THE EU NATIONAL QUALITY INFRASTRUCTURE BY DATA ENVELOPMENT ANALYSIS ASSESSMENT

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Abstract

National Quality Infrastructure (NQI) incorporating standardization, accreditation and metrology is vital for each economy as it provides tools which prove that products and services meet specified requirements that can be recognized both on national and international levels. Existing literature confirms that NQI is not only crucial for enterprises enabling them access both to national and international markets and consumers but it has a positive impact on productivity, international trade, innovation and competition as well. This article highlights that this positive impact is achieved through decrease in transaction costs that may be regarded as a transmission mechanism. Relying on existing literature the research provides a much needed examination of NQI relative performance of 25 European Union member states concerning transformation of NQI components (inputs) into macroeconomic variables (outputs) with Data Envelopment Analysis. Differentiation of technical efficiency among the EU member states is the main research implication providing a starting point for further investigation of NQI differences in the EU member states. In terms of practical implications the paper gives hints how performance of NQI in inefficient states could be improved.

Keywords: National Quality Infrastructure, standardization, accreditation, metrology, transaction costs, Data Envelopment Analysis

JEL Classification: C67, M11, O11, O33, O38

1. Introduction

Quality infrastructure (QI) is depicted as “a system of activities which jointly ensure that products and processes meet predefined specifications. It aims at providing technical support to companies so they can improve their production processes and at ensuring compliance with

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regulations or international requirements” (Gonçalves & Peuckert, 2011). A broader definition explains that QI is “the totality of the policy, legal, regulatory, administrative frameworks and the institutional arrangements (public and/or private) required to establish and implement Standardization, Metrology (scientific, industrial and legal), Accreditation and conformity assessment services (inspection, testing and product or system certification) necessary to provide acceptable evidence that products and services meet defined requirements, demanded either by authorities (e.g. in the case of technical regulation) or the marketplace (e.g. contractually or inferred)” (Kellermann & Keller, 2014). There are different approaches to national quality infrastructure (NQI) building blocks (for comparisons see: Frota et al. 2010; Guasch et al. 2007; ISO & UNIDO 2009). In this paper Sanetra’s, Marbán’s (2007) approach to NQI is employed which covers Standardization, Metrology, Testing and Quality Management which comprising Certification and Accreditation.

In general research on the impact assessment of NQI is carried out on macroeconomic, sector and firm levels. It is dominated by investigation of single components of NQI, especially standardization. Comprehensive studies of the whole NQI system are rare. Concerning methodology, scholars employ pure descriptive methods in form of case studies based on reports and interviews. Statistical and econometric analyses are also performed on the grounds of correlation, regression and growth models. This analysis is based on Data Envelopment Analysis (DEA) evaluating NQIs macroeconomic efficiency of 25 EU member states.

2. Model of NQI influence on economy

There are numerous functions performed by subsequent elements of NQI. All have impact on macroeconomic performance through reduction of transaction costs appearing when goods and services are exchanged (there are still difficulties to define transaction costs, see: Wang, 2003; Coase, 1961; Stavins, 1995; Williamson, 1985). Reduction of transaction costs is claimed to be the main channel transforming functions of NQI into positive macroeconomic outcomes: increase in productivity, volume of international trade, competition and innovation activity. A model of NQI influence on economy is presented in figure 1.

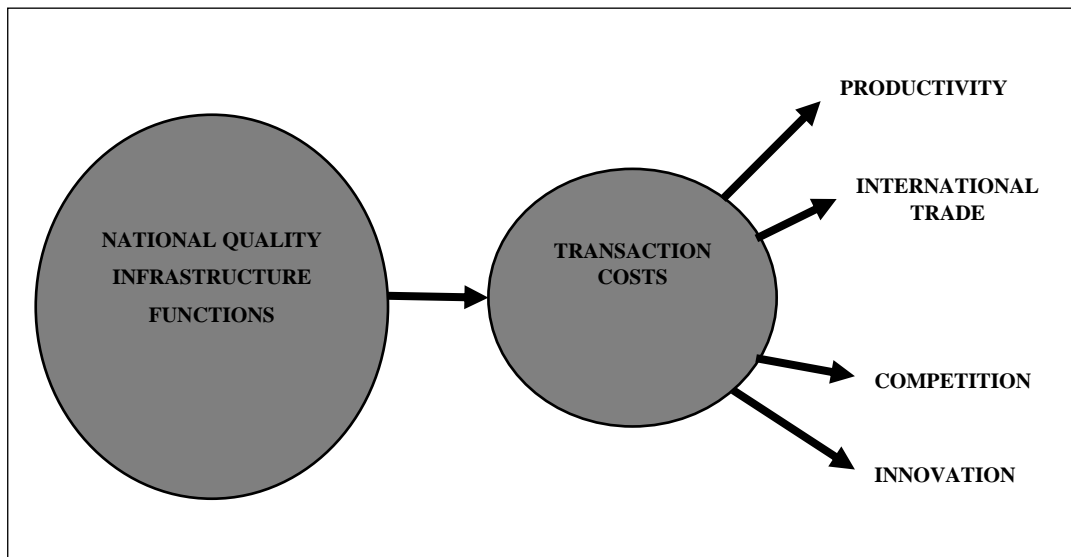


Fig. 1. Impact of National Quality Infrastructure on economy

Source: own work.

Transaction costs are related to the costs of acquiring information. Due to information asymmetries buyers experience difficulties in ascertaining attributes of goods and services. Therefore buyers seek for information which is costly. Moreover in case when buyers are not able to assess the quality “bad-quality” providers can enter the market and drive out the “good quality” providers (Nayyar, 1990). Standards, accreditation related to certification and other parts of NQI can serve as a remedy to information asymmetry problem. They make information less asymmetric and less incomplete, reduce search and information costs as well as bargaining costs thus contributing to curtailing the transaction costs.

All components of NQI, especially standards, accreditation and metrology contribute to trust building what is notably important as far as international trade or innovations are concerned. Trust can be defined as “one party’s confidence that the other party in the exchange relationship will not exploit its vulnerabilities” (Dyer & Chu, 2003). Bromiley and Cummings (1995) claim that trust reduces transaction costs. According to them more trust reduces the costs of the control systems. Beccerra and Gupta (1999) acknowledge that trust minimizes agency and transaction costs especially within an organization. First of all transactors will spend less time on ex ante contracting because they are confident that payoffs will be fairly divided. Trust lowers as well monitoring and enforcement costs. Trading partners will spend less time and resources to ensure that agreements are fulfilled. Trust will also reduce the amount of time and resources

needed to solve problems that may appear in course of transacting. The supplier who trusts the buyer will be more willing to share confidential information, such as on production costs or on product design and process innovations. Finally, a buyer with a “truth worthy” reputation in exchange relationships should have lower transaction costs, which in turn should translate into better profit performance.

3. Methodology and data description

Choi et al. (2014) note that currently there is no systematic mechanism to measure performance of a national standards system covering testing, certification, accreditation and metrology. Empirical research on the field can be divided into two streams: qualitative (see: Frenz & Lambert, 2012; Guasch et al., 2007) and quantitative (see DIN, 2000; Blind et al., 2011; AFNOR, 2009; DTI, 2005; Haimowitz & Warren, 2007; Frenz & Lambert, 2013; Sampaio et al., 2009; Gerundino & Weissinger, 2011, 2012; Choi et al., 2014). Correlations between QI and economic performance measures (exportation, innovation, competitiveness and income) to evaluate NQI efficiency in 53 countries was carried out by Harmes-Liedtke and Oteiza Di Matteo (2011). This is a background for this study investigating in more details mechanisms beyond revealed correlations.

This study offers measurement of the NQI performance with DEA basing on the model outlined above which assumes that NQI through reduction of transaction costs has a positive impact on productivity, international trade, competition and innovation. DEA is a non-parametric frontier methodology developed by Charnes et al. (1978). A detailed description of DEA and its application can be found in Coelli et al., 2005; da Cruz & Marques, 2014; Golany & Roll, 1989; Cooper et al., 2011; Chien & Hu, 2007; Tong, 1997; Cook et al., 2014.

In this paper technical efficiency will be analyzed. Technical output efficiency reflects the extent to which the output levels of the DMU (decision making unit) concerned can be raised through improved performance and no additional resource while maintaining its output mix. Technical input efficiency illustrates the extent to which the input levels of the DMU concerned can be lowered through improved performance and no output reduction while maintaining its input mix (Thanassoulis, 2001). In this study 25 EU member states will be analysed, the smallest member states: Cyprus, Luxembourg and Malta were excluded as being not homogenous with bigger member states. As there is no justification for constant returns to scale model (CRS), the

variable returns to scale model (VRS) will be developed. As proposed input variables illustrate the characteristics of NQI, output oriented VRS model will be applied in the analysis.

Input variables selected for the DEA model represent activities of national bodies involved in NQI. Standardization activities are coordinated by national standardization bodies which are involved in works of international bodies like ISO. ISO is an independent, non-governmental organization made up of members from the national standards bodies of 165 countries. ISO standards are developed by groups of experts, within technical committees (TCs). TCs are made up of representatives of industry, NGOs, governments and other stakeholders, who are put forward by ISO's members. Each TC deals with a different subject. Number of TCs in which particular countries participate may be a proxy of national standardization bodies activities in terms of standards' development. Activities of national metrology institutions are very difficult to grasp. Poposki et al. (2009) claim that the number of CMCs (calibration and measurement capabilities) could be used as a proxy for the public spending for the provision of the publicly financed national measurement standards. As far as accreditation is concerned most countries have a single national accreditation body issuing accreditation which recognizes that an organization or a person is competent to carry out specific tasks. A greater number of accredited bodies, the more active accreditation body is. All input variables: participation in ISO TCs, number of CMCs and a number of accredited bodies are presented in a form of indices which takes into account the size of economies represented by GDP.

Output variables comprise measures related to these areas of economy that according to the model are affected by the NQI. Productivity of national economies is measured by capital productivity. Exports which is influenced by standards shows importance of international trade for particular EU countries' economies. Performance regarding innovation is covered by turnover of new or significantly improved products, either new to the firm or new to the market. The indicator captures both the creation of state-of-the-art technologies (new to market products) and the diffusion of these technologies (new to firm products). Competition is not included into analysis due to difficulties in finding an appropriate measure and a small number of DMUs that does not permit for larger number of variables.

If it is possible the time lag between input and outputs is respected. Most recent data that are available were selected. A detailed presentation of input and output variables is covered in table 1.

Table 1. Input and output indicators for DEA analysis

Indicator name	Description	Source
INPUT VARIABLES		
TC	Number of ISO Technical Committees in which a National Standardization body participates per 1 bln GDP, current situation	ISO
TAB	Number of total accredited bodies per 1 bln GDP, 2010 or current situation	Harmes-Liedtke and Oteiza Di Matteo (2011); own calculations for Estonia, Latvia, Lithuania, and Slovenia
CMC	Total number of Calibration and Measurement Capabilities per 1 bln GDP, 2010	BIPM and own calculations
OUTPUT VARIABLES		
Productivity	Gross domestic product at 2010 market prices per unit of net capital stock :- Capital productivity (AVGDK), 2012	AMECO database, European Commission, DG Economic and Financial Affairs
Innovations	Sales of new-to-market and new-to-firm innovations as % of turnover	Innovation Union Scoreboard 2014
Exports	Exports of goods and services as a percentage of GDP, 2013 or most recent year available	Global Competitiveness Report 2014-2015

Source: own work.

4. Results and discussion

Table 2 presents output efficiency of 25 EU member states under assumption of variable returns to scale. 16 member states are technically efficient and together they define the best practice or efficient frontier. The remaining countries have the score bigger than 1 which means that they are technically inefficient.

Table 2. Output efficiency scores under VRS

DMU	Score	Benchmark (Lambda)	Times as a benchmark for another DMU
Italy	1	Italy (1.000000)	1
Belgium	1	Belgium (1.000000)	6
Denmark	1	Denmark (1.000000)	6
Estonia	1	Estonia (1.000000)	0
France	1	France (1.000000)	0

Germany	1	Germany (1.000000)	0
Greece	1	Greece (1.000000)	0
Ireland	1	Ireland (1.000000)	0
United Kingdom	1	United Kingdom (1.000000)	0
Latvia	1	Latvia (1.000000)	3
Lithuania	1	Lithuania (1.000000)	3
Netherlands	1	Netherlands (1.000000)	0
Poland	1	Poland (1.000000)	1
Romania	1	Romania (1.000000)	1
Slovakia	1	Slovakia (1.000000)	8
Spain	1	Spain (1.000000)	5
Hungary	1.035066	Belgium (0.460088); Denmark (0.037720); Lithuania (0.137506); Slovakia (0.364686)	0
Czech Republic	1.071919	Belgium (0.409666); Slovakia (0.520834); Spain (0.069499)	0
Finland	1.07981	Denmark (0.622147); Slovakia (0.048431); Spain (0.329423)	0
Slovenia	1.114148	Belgium (0.609163); Latvia (0.225381); Slovakia (0.154209); Spain (0.011248)	0
Croatia	1.159201	Denmark (0.218218); Lithuania (0.003698); Poland (0.390018); Romania (0.346341); Slovakia (0.041725)	0
Austria	1.206082	Belgium (0.394558); Denmark (0.260734); Italy (0.244051); Spain (0.100657)	0
Portugal	1.237001	Denmark (0.019138); Latvia (0.090355); Slovakia (0.243552); Spain (0.646955)	0
Bulgaria	1.427625	Belgium (0.118926); Slovakia (0.881074)	0
Sweden	1.604433	Belgium (0.212144); Denmark (0.662371); Latvia (0.043224); Lithuania (0.069507); Slovakia (0.012754)	0

Source: own work.

To discriminate 16 efficient EU member states methodology applied by Kumar and Gulati (2008) was employed. For discrimination purpose the frequency in the “benchmark set” is

used. The frequency which an efficient country shows up in the benchmark set of inefficient countries represents the extent of robustness of that country relative to other efficient country. It is an indication of exemplary operating practices. Efficient countries that appear seldom as a benchmark are likely to possess very uncommon input/output mix. Efficient country with zero frequency in the benchmark set is termed as “efficient by default” because it does not have characteristics which must be followed by other inefficient countries (Kumar & Gulati, 2008). Table 3 illustrates discrimination of efficient EU member states.

Table 3. Discrimination of efficient EU member states

Highly robust countries	Marginally robust countries
Slovakia (8)	Latvia (3)
Spain (5)	Lithuania (3)
Belgium (6)	Italy (1)
Denmark (6)	Poland (1)
	Romania (1)
	Estonia (0)
	France (0)
	Germany (0)
	Greece (0)
	Ireland (0)
	United Kingdom (0)

Source: own work.

Slovakia, Spain, Belgium and Denmark may be regarded as global leaders of the EU. There are 6 countries (Estonia, France, Germany, Greece, Ireland and the United Kingdom) which may be regarded as “efficient by default”.

5. Conclusion

Existing literature proves that there is a link between NQI and macroeconomic performance. Through a reduction in transaction costs which are the main transmission channel, development and smooth functioning of NQIs contribute to an increase in macroeconomic performance grasped by productivity, international trade, innovation and competition that ultimately enhance economic growth. Based on this finding, relative efficiency of NQIs 25 EU member states was evaluated with DEA.

DEA analysis reveals that on average EU NQIs are efficient, more precisely 16 out of the 25 countries are technically efficient under the VRS output oriented model. 9 countries are

inefficient with the scores ranging from 1.04 to 1.6. There are areas for improvement in these countries: adjustment of their overall output levels and adjustment of levels of particular inputs and outputs that enable them to achieve efficiency.

Although the number of efficient countries seems to be high, discrimination analysis shows that only four: Slovakia, Spain, Belgium and Denmark are highly robust while 6 (Estonia, France, Germany, Greece, Ireland and the United Kingdom) are “efficient by default” which means that they are not benchmarks for another EU member states.

The following lessons may be learned from the study:

- deeper investigation of Slovak, Spanish, Belgian and Danish NQIs should be carried out in order to identify best practices allowing these countries to serve as benchmarks for a relatively large number of inefficient countries,
- incorporation of best practices by member states with worse performing NQIs would contribute to supporting their economies in terms of increase in productivity, international trade, innovation and competition,
- as QI may be regarded as a public good, a strategic national policy on NQI is essential for a faster adoption of new standards, new technologies as well as a better protection of intellectual property rights.

One should however remember that the results obtained in this analysis should be treated with caution. First, the proposed DEA model should be possibly verified and checked against alternative variable measures. Second, it would be very difficult to formulate policy detailed recommendations for particular countries.

This research supports findings identified in the literature on importance of NQI not only for the business sector but also for the whole economy. Its added value lies in efficiency differentiation among the 25 EU member states and identification of countries whose NQIs should be investigated in a more detailed manner.

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Chapter III – CORPORATE SOCIAL RESPONSIBILITY AND GREEN ECONOMY

CORPORATE SOCIAL RESPONSIBILITY AND SOCIAL DIALOGUE IN HUMAN RESOURCES MANAGEMENT IN THE BANKING SECTOR IN GREECE: A CASE STUDY OF ELDER BANK EMPLOYEES

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Abstract

Corporate Social Responsibility constitutes a powerful tool for Greek Banks for the development and formulation of their public image. However, many times this does not conform to socially accepted practices in the management of their human resources. In this current phase of economic crisis and restructuring in the banking sector some crucial issues have emerged. A major one is the problem of supporting and encouraging the employment of elder employees in a framework of practices, principles and values, which embed internationally accepted standards emanated from CSR and HR management. Balancing the public image of banks in relation to a difficult social reality regarding the issue of elder bank employees goes through the formulation of a consultation and social dialogue system with all social factors engaged. In this article we propose the development of a structured system for public consultation and social dialogue based on a primary research on a weighted sample of elder employees and managers of banks and trade unions. This system will comprehensively address the issue of active ageing in the banking sector by proposing effective actions and solutions by policy area: awareness, using awareness indicators, maintaining employment and supporting career pathways, combating stereotypes related to age, etc. The proposed consultation system aims to increase transparency, collegiality and quality in decision making processes. The consultation system is governed by the general principles, stages, fields and levels of social dialogue and takes into account the conditions for the development of social dialogue mechanisms. The authors believe that the proposed system is applicable also in other branches (given the necessary adaptations); therefore it provides a useful tool for applied policy dealing the worsening of labour relations in the frame of current circumstances.

Keywords: Corporate Social Responsibility, HR management, active ageing, social dialogue

JEL Classification: J52, J53, J71

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1. Introduction

Managing human resources at a time of demographic ageing is one of the main challenges developed countries are facing today. According to the United Nations, ageing of the population from the vantage point of an increase in average life expectancy is a positive fact on which the recent term “active ageing” is based. According to the World Health Organization (WHO), active ageing is “the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age”. In this context, the term “active ageing” implies that older people can participate in economic, social, spiritual, cultural and political activities in addition to their capacity to do physical activity or work.

A normal professional life plays an instrumental role in promoting active ageing. As a result, occupational health and security contribute decisively to ensuring active ageing through a better and longer-lasting professional life. Working in the best possible conditions also promotes cooperation between younger and older generations.

Undoubtedly, the issue of active ageing is multifaceted to the extent that it concerns the processes of and the time frame within which people are entitled to retirement from professional life, their state of health, their ability to respond to laborious tasks, their income status and living standards, their social participation and their relationships with their extended family and social environment. Enactment of generous legislative provisions and implementation of programmes designed for early retirement as well as lack of motives for older employees so that they can continue their working lives have inevitably had adverse consequences on public finances, particularly during the current period of economic crisis. On the other hand, there are moral implications involved in all this in regard with maintaining stereotypes and discriminations.

Statistics published by European organizations bear proof to the fact that Europe is ageing. According to Eurostat's latest set of population projections, the comparison of age pyramids for 2013 and 2080 shows that the EU-28's population is projected to continue to age. In the coming decades the high number of baby-boomers will swell the number of elderly people. More specifically, the EU-28's population is projected to increase to a peak of 525.5 million around 2050 and thereafter gradually decline to 520 million by 2080. This ageing is visible in the development of the age structure of the population and is reflected in an increasing proportion of older people and a declining one of younger – at working age – people in the total population and the labour market as well. The EU employment rate for those aged 55-64 rose from 50.1% in

2013 to 51.8% in 2014. Sweden recorded a very high employment rate in this age group (74.0%), followed by Germany (65.6%) and Estonia (64.0%). Greece is among the countries with the lowest employment rates for people aged 55-64 (34.0%). As a result of the population movement between age groups, the EU-28's old-age dependency ratio is projected to almost double from 27.5% in 2013 to 51.0% by 2080. The total age dependency ratio is projected to rise from 51.1% in 2013 to 77.9% by 2080.

It is no coincidence then, that in Europe the importance of ageing of the population and, as a result, that of work force has been acknowledged since the beginning of the 20th century. Successive European Councils (Nice, Stockholm, Gothenburg, Laeken, Lisbon) have acknowledged the need to deal with the consequences of ageing of the population for European social models. The European Commission makes certain recommendations based, inter alia, on the revised Lisbon Strategy for Growth and Jobs, so that the EU can benefit as best as possible from the opportunities offered by the extension of lifespan and also inaugurate a demographic renewal and solidarity among generations, which constitutes Objective 3 of the Strategy. Active ageing is a substantial element in the Europe 2020 Strategy, the success of which depends – to a large extent – on the provision that elderly people have the capacity to make a full contribution in and out of the labour market. Elderly people should be enabled to remain active as working people, consumers, caretakers, volunteers and citizens. In this context, the European Commission implemented the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) in 2011; this partnership attracted a wide range of interested parties who agreed on a coordinated attempt to deal with the problem of ageing population. The European Partnership has set the goal to increase healthy life expectancy of EU citizens by two years until 2020 and it aims to achieve a triple benefit for Europe:

- Improvement of health and quality of life for elderly citizens.
- Increase in sustainability and efficiency of social and healthcare systems.
- Creation of opportunities for businesses development.

It is, therefore, important for businesses to adopt adequate solutions in order to implement ageing management measures – particularly ones which promote active ageing thus enhancing the presence of elder employees in respective jobs. In order to address the challenges of demographic change, managers as well as specialized professionals' main mission should be to design, communicate and realize suitable strategies on active ageing and knowledge

dissemination among different generations of employees within their respective companies. Managers also play a highly significant role as the ones who develop strategies aiming at improving the quality of work conditions.

Besides, what reforms are really meant for is to provide businesses with incentives so that they can adjust to the changes in the economic climate – incurred by the economic and fiscal crisis – thus allowing closer alignment between salaries and productivity (at industry level), enhancing price competitiveness and promoting labour redistribution. The industrial relations system – or, at least, some of its elements – has therefore become central in reforms thus constituting ground for consultation and social dialogue. The notion that industrial relations constitute a significant ground for social consultation amidst the ongoing economic crisis goes side by side with the belief that by improving working conditions and keeping employees satisfied a company can succeed in pursuing a socially sensitive profile.

The turbulent times, incurred by the economic crisis, could not spare the Greek banking sector which – during the period preceding the crisis – was characterized by the emergence of new, non-traditional forces. Those forces were primarily strengthened by a series of strategic agreements with groups both inside the country and abroad which were ratified in the form of mergers and acquisitions thus leading to substantial changes in the working environment; changes to which human resources had to adjust. Issues such as the institutional liberation of the banking system, enhancement of the growth rate of the Greek economy, readjustment of the guidelines and the supervision of Credit Institutions as well as technological advances in the field of informatics and communications systems have helped transform the Greek banking system to its current shape.

However, when the economic and fiscal crisis hit the country, new restructuring and adaptation needs emerged, since domestic systemic banks were impelled to proceed to successive mergers as well as shrinkage practices through the introduction of voluntary redundancy schemes. These changes have given birth to a substantial percentage of human resources forced to early retirement thus fostering all those conditions which render application of ageing management measures and promotion of active ageing in the Greek banking institutions imperative.

Therefore, in the context of measures taken to deal with the consequences of the economic and fiscal crisis and in light of “corporate social responsibility”, the issue of changing human resources management systems has become more timely than ever before (Kotsiris, 2003).

This article endeavours not only to analyze the existing situation regarding the phenomenon of active ageing in the Greek banking sector, but also to make suggestions as to how to develop a comprehensive consultation system with the aim of promoting transparency in decision making processes as well as their collegiality and quality. The main objective is for the consultation system to be governed by general principles, stages of social dialogue as well as fields and levels, taking into consideration the conditions for the development of social dialogue mechanisms in addition to the aspirations of Greek bank administrations to demonstrate their socially responsible role.

2. CSR in the financial sector – The case of Greek Banks

Dealing with the issue of Corporate Social Responsibility (CSR) – a concept which ever more increasingly is associated with the image of businesses – seems timely now that the international adverse circumstances render business competitiveness susceptible to evaluations on the basis of quantitative and economic criteria as well as criteria related to corporate attitude to major social issues (e.g. unemployment, pollution).

CSR strategy serves the principles of sustainable development while creating benefits for the entire society, the environment and the business itself (Elkington, 1994). Specifically, CSR functions as an evaluation tool of business practices through a multifaceted assessment of their economic, environmental and social activities and operations (Werther & Chandler, 2006). These constitute the “triple bottom line” (3BL) of a business, which is defined as “business solutions and choices, while being socially responsible, environmentally sound and financially viable” (McIntosh et al., 1998).

By adopting socially responsible practices, albeit seemingly costly, the company image is boosted and its efficiency is enhanced in the long run (Pamboukis, 2007), since the business thrives in a prosperous society. Some people would argue that CSR is a gimmick of businesses, a marketing tool which will help improve their reputation or attract socially conscious institutional investors and consumers (Belidis & Kargidis, 2009).

We site the example of the Italian “Banca Etica” which, amidst the economic crisis, managed to increase its revenue by 30%. It is a financial institution governed by moral values, which functions in terms of social awareness through funding projects and activities driven by social and environmental values. Reservations increase drastically when among those supporting

CSR are companies which are not reputed to be compliant with labour or environmental legislation.

Corporate Social Responsibility as concern for the improvement of the working environment and employee satisfaction is expressed in adopting measures for a fair compensation system, exploitation of skills and initiatives, respect and solidarity, health and security at the workplace, achievement of a work-life balance, etc.

Discussions about Corporate Social Responsibility in the banking sector date back to 2002 when the European Banking Federation in cooperation with the banking unions European Saving Banks and European Association of Cooperative Banks and the trade union UNI – Europa Finance (Banks) took the initiative – in the context of a wider dialogue – to promote CSR in the banking sector through special actions, since it is clear that the mission of a really viable bank cannot be exclusively determined in terms of maximizing shareholder value and satisfying customers; indeed, it should incorporate broader sustainability objectives (Gelder, 2006).

The organizations which operate in the banking sector have eagerly introduced social responsibility practices in their business activities, thus cooperating with a wide range of NGOs, agents, associations, etc. A research conducted by the Labour Institute of the Hellenic Federation of Bank Employee Unions has shown that Greek Banks are reputed to have been particularly responsible corporations within the Greek community, which is proved by their socially responsible practices, their awards, their participation in domestic and international initiatives, the disclosure of social reports and their substantial donations to charity and projects of public benefit (Lidorikis, 2006).

These “socially responsible practices” include investments in human resources, health and security, as well as change management (Kotsiris, 2003). Given the importance of “human resources” to competitiveness of businesses, Greek banks are taking a series of initiatives in order to improve the conditions in which their employees work and live (Pamboukis, 2006). More specifically, domestic financial institutions are striving to become “first choice” employers for new entrants in the labour market by offering career prospects based on merit, but also by promoting education and lifelong employee training programmes. Special reference is made to fringe benefits and compensation packages as well as performance-related remuneration schemes. It is generally accepted, though, that the above mentioned initiatives are much more an effort on the part of businesses to promote staff loyalty and, as a result, increase productivity than a

rational application of social responsibility practices in human resources. This particular estimation is corroborated by the type of educational modules such as the formulation and application of codes of conduct for the staff as well as internal communication processes.

However, the conditions which have recently been created in the business environment of the banking sector, as a consequence of the fiscal crisis, have altered both the intensity and the type of SCR practices applied by Greek banks. The prevalence of a business model oriented towards maximizing shareholder value and intensification of competition have impelled banking organizations to adopt new models of management and human resources reward (e.g., setting of targets), which have proved to have particularly adverse effects on the physical and mental health of employees.

It is worth noticing that, while the majority of Greek banks mention the role of trade unions and/or collective agreements in their social reports, in reality only a few of them make extensive reference to the matter placing emphasis on a wider range of trade union related issues such as:

- employee participation in “managing change” (e.g. in the case of restructuring),
- adherence to collective bargaining and agreements,
- the operation of European Employee Councils,
- participation of employee representatives in committees and the Board of Directors of the bank.

The rest of the measures regarding human resources management which appear in social reports of banks bear relevance to CSR to a varying degree, ranging from initiatives aiming at promoting volunteerism to commitments guaranteeing equal opportunities and work diversity. Rarely, however, do they make any reference to actions of crucial importance such as measures targeted at ensuring work-life balance. Finally, extensive reference is made to health and safety issues and the self-evident compliance of banks with the existing regulatory framework (Efsthopoulos, 2009).

It is worth mentioning, though, that the economic and fiscal crisis have contributed to a rapid decrease of phenomena according to which CSR in all business sectors used to function mainly as a marketing and public relations tool in the past, since consumers now appear to have much more acute intuition for “corporate hypocrisy” (Klara, 2011; Quelch & Jocz, 2009). On the other hand, however, the view that CSR is a “redundant” flexible expense has become common

belief nowadays, since businesses are being faced with serious liquidity problems and even have to struggle for survival. In general, recession has led to the prevalent tendency of reducing the budget for CSR initiatives, especially at a time when demand for these very actions has increased considerably. Amidst crisis, therefore, businesses adopt a more conservative and defensive strategy (Ellis & Bastin, 2011; Harwood, Humby & Harwood, 2011; Yelkikalan & Köse, 2012). Njoroge (2009) finds out that, due to the crisis, CSR initiatives or policies, mainly in their social dimension, decrease in number and range, are postponed or even cancelled.

3. The dynamics of restructuring in the Greek banking sector and the issue of bank employee ageing

Globalization - over the last few decades in particular - has impelled the banking sector to proceed to intense restructuring and reforming. Furthermore, due to rapid developments in technology (Moerou, A. 2013) resulting in internationalization of economic transactions, there have been noticed changes in the international banking system which now plays a primary role in the modern financial system. Changes in our life style and purchasing habits, changes in the way banks operate now and changes in the market as well have imposed on Human Resources Management highly important competences, since – after all – it is human resources that are being reformed. Every bank should set the objective of making the most out of their human resources in order to improve competitiveness, create successful leaders and provide the organization with the competitive advantage of their human capital. According to Broker (2009), Greek banks will be able to cope with these new developments at a European level only if they apply new organizational methods, reduce operational costs and mainly improve the quality of their human resources. Due to the fact that the financial system presents increased difficulties as far as operations and products/services are concerned, it is imperative that employees be constantly trained in order to be equally competitive with their counterparts in other European countries. Prosperity and progress of banking employment depend upon factors such as expansion of the banking system into new markets and human resources adaptation to new prospects.

Modern employees should possess specialized knowledge and be able to take on responsibilities and take initiatives when it is needed. Employees have ceased being passive clerks only responsible for following orders and have now turned into active members of the Organization's dynamics. Their attitude is determined by the mission, the vision and the values of

the Organization but also, on some occasions, by customer expectations (Grensing-Pophal, 2006). It is also typical that advances in technology themselves determine different models regarding job description. Some posts have been altered due to the use of technology tools and are being re-evaluated in order to be in compliance with the demands imposed by the new reality (Britt, 1995).

On this basis, participation of financial sector employees in procedures related to the administration and operation of the bank as well as its capital and gains is emerging as a modern institution bearing social and economic value. Respect for the institutional rights of bank employees during the production process, the process of transference or merger of banking institutions as well as the process of public bid submission for the acquisition of a banking institution contributes to improving the quality of their working environment as well as to increasing bank productivity, and it does it in a creative way. Equally important is of course considered the degree to which bank employees participate in decision making processes of the administration as well as in developments of social dialogue with the European Employee Councils and trade unions. All this is considered to be an additional contribution to increasing the quality of services rendered and to restoring bank-customer relations which have been disrupted due to the recent fiscal crisis.

According to a study conducted by the Labour Institute of the Hellenic Federation of Bank Employee Unions (2007), the most important characteristics of takeovers and mergers in the Greek banking sector are the following:

- in most cases there appeared serious problems in “domestic takeovers” (mid 1990s), privatizations of state concern banks and their mergers with private banks which acquired them without any significant participation of foreign capital or foreign banks whatsoever in the whole process.
- in the new “surge” of buyouts – the dominant part of which concerned cross-border and in some cases hostile takeovers – employees had to face some serious problems such as job losses which resulted in significant reduction in employment (approximately 25% of the original human capital of the acquired bank) mainly in domestic banks³, “voluntary redundancies” after takeovers and mergers in some other

³ For example, ALPHA BANK after taking over Ionian Bank showed a reduction in employment by 12.9% in 2002, in comparison to the human resources of both banks in 1998. Former Ergasias Bank (was taken over by E.F.G.

banks, insecurity for the employees regarding the terms and prospects of retaining their jobs, authoritative behavior on the part of executives of the acquiring bank to the staff of the acquired one; all this resulted in weakening sectoral and collegial consciousness.

It is worth mentioning that voluntary redundancy is a programme for managing human resources in the context of the obligations imposed by the restructuring plan recently approved by the DG Competition of the European Commission. The ongoing economic crisis and mergers have forced domestic systemic banks – one after another – to introduce voluntary redundancy schemes. By reducing their staff Greek banking institutions are striving to confine their operational costs to about 40% of their revenue by 2018. Further objectives of voluntary redundancy schemes concern staff renewal, reduction of average employee age by 8-10 years (the figure reflects the situation in four systemic banks), further modernization of banking transactions and operations (shift to new products and activities).

Examining the parameters of voluntary redundancy schemes which have already been implemented by four (4) banking institutions one can come to the conclusion that:

- the right to take advantage of voluntary redundancy schemes applies to all members of staff with indefinite contracts. The only exception to the rule is the National Bank of Greece (NBG) which has drawn out four (4) different programmes to accommodate four different categories of staff based on criteria such as age, the right to retirement because of old age, profession, etc.
- the intended severance pay for voluntary redundancy applies to all types of schemes and concerns a) statutory compensation, b) additional incentives based on age, marital status, length of service, etc. c) other benefits (e.g. hospital care, counselling, etc.). It is worth noticing that in the case of National Bank of Greece additional incentives are only foreseen for the two of the four programmes, while in none of them there are arrangements for bank loans to the staff, in contrast to the rest three banking institutions.

The figures themselves reflect the situation in the labour market of the banking sector highlighting the clear tendency for staff reduction. To elaborate on this, according to the Labour

Eurobank) reduced its initial human resources by 32%, former Cretan Bank (was taken over by E.F.G. Eurobank) by 29% respectively, former Macedonia-Thrace Bank (was taken over by Piraeus Bank) by 16.5% respectively

Force Survey conducted by the Hellenic Statistical Authority (EL.STAT.) on a quarterly basis, the number of staff employed in the financial and insurance sectors during the fourth quarter of 2014 was 84.2 thousand, whereas for the same quarter of 2012 it stood at 101.5 thousand, which reflects the clear tendency of Greek banks to reduce their staff. As for the age distribution of those employed in the financial and insurance sectors, in the fourth quarter of 2014 employees aged 45-64 accounted for 35.6% of the total number of staff, whereas for employees aged 30-44 the respective percentage mounted to 57.8%.

The number of bank employees who are over 45 years old is estimated to have drastically decreased in 2014 through the introduction of voluntary redundancy schemes by systemic banks, which strengthens the will or desire of employees to switch to other employment environments in the broader financial sector and – quite often – even out of the labour market. In this specific environment of rapid changes, and witnessing the developments in industrial relations in the banking sector, the Interbanking Training and Documentation Centre has taken the initiative to carry out a project titled “Encouraging active participation of elder bank employees in employment”.

In recent years and in the context of an overall apprehension over the issue of demographic ageing of the population in Europe, greater emphasis has been given on issues regarding the position of elder people in the 55-64 age group in the labour market and generally, their participation in the socio-economic life.

Active ageing policy aims at creating greater employment opportunities for elder citizens in the European Union. To achieve this it is imperative that working conditions be improved, employees be better informed and retrained as well as lifelong training programmes be designed. At the same time, it is necessary that taxation and benefit systems be revised so that elder individuals are encouraged to work for a longer period of time.

The object of the above-mentioned project was to initiate support actions for elder citizens who often face a series of problems such as work-related stress, risk of losing their jobs as a result of continuous mergers and changes in proprietary, reduction of benefits and salaries, etc.; these problems need to be addressed so that the position of elder citizens in the labour market is strengthened through a number of actions aimed at educating/training them, certifying their skills and competences and facilitating their mobility in the broader financial sector.

In order for these objectives to be achieved a primary research was carried out among those directly involved in the banking sector, that is, bank employees, Human Resources Managers in Greek banks and representatives of first-level bank employee associations. During the primary research 70.3% of the respondents were working in banking institutions. At the same time, a particularly large percentage of them were taking advantage of the voluntary redundancy scheme introduced by their banks. Only 3.8% of the respondents had either been dismissed, or taken a sabbatical or were already out of work.

The most important findings of the primary research carried out in bank employees are the following (Interbanking Training and Documentation Centre, 2014):

- As for the importance of individual needs of bank employees in the 50+ age group, 46.2% of the respondents stated that banking institutions were taking into consideration these needs to a varying degree, ranging from adequately to highly.
- About 38% of male samples sustained that there should be more favourable terms in their current jobs, whereas 44% of female samples said that they would wish to stay on their jobs under the existing terms.
- The overwhelming majority of the respondents (73%) were opposed to the likelihood of working part-time until retirement age. This pattern remains the same for both male and female samples.
- Finally, bank employees in the 50+ age group stated that they would wish to receive certified training – provided by Interbanking Training and Documentation Centre Support Structures – so as to remain in the labour market (15.7%), whereas 12.4% of the respondents expressed their need to attend continuing vocational training programmes. Moreover, other services were also desirable such as support programmes for employee mobility in and out of the banking sector (9.7%), information about new employment opportunities (8.1%) as well as counselling (8.1%).

When it comes to factors which hinder participation of bank employees in the 50+ age group in training programmes, the respondents made particular reference to the following:

- Lack of motivation, since the seminars offered are either not subsidized, not recognized, or do not lead to certification.
- The timetable of seminars.
- Lack of free time, considering that most elder employees have family commitments.

- Primary research has made known the notion that elder employees can respond to the demands of their work to a high degree, a fact which, on the other hand, comes partly in contrast to the trends prevailing in the conditions of the labour market in the banking sector; according to these trends, the average age of bank employees is low on one hand and on the other, the number of employees participating in voluntary redundancy schemes is big. This fact reflects and corroborates the findings of the secondary empirical research according to which no significant attempts are made to retain elder employees in the labour market of the banking sector.

However, the most significant element that derives from primary research and concerns bank employees themselves is the fact that the overwhelming majority of the samples did not attend any continuing vocational training programme whatsoever in the last three years (from 2012 to 2014). This is corroborated by a number of inhibitors such as lack of interest on the part of employees themselves to upgrade their qualifications and lack of time. On the other hand, banking institutions themselves or bank employee trade unions do not run training programmes tailor-made to the needs and peculiarities of elder employees, neither do they make any attempt to motivate them to participate in such programmes.

4. Proposal for active ageing policy implementation in the Greek banking sector – facilitation through a structured social dialogue and the involvement of CSR

Despite the magnitude of the problem in Greece, the issue of active ageing appears on the national political agenda basically via the European political agenda. It is estimated, however, that for Greece as well as other EU member states managing active ageing, that is, supporting and maintaining employment of elder work force is particularly important in order to sustain economic growth, social protection systems and the standard of living in general.

In today's situation and on the basis of the characteristics of the Greek labour market, the first priority of employment policies is obviously to reduce unemployment regardless of age and to better exploit human resources in general. In a long-term perspective, however, increasing participation of elder employees in the labour market presupposes significant policy changes in many fields such as education, the labour market, mechanisms securing equal opportunities and the organization of the social security system. If banking institutions adopt such measures, this may contribute to confining or even eliminating the causes which lead employees of the target age group out of the work force.

However, it is worth noticing that adopting measures aiming at managing active ageing effectively should in no case be done in a discontinuous or occasional manner, nor should it last for only a short period of time; on the contrary, it is a continuous process which – in order to bring successful results – calls for constant monitoring and evaluation, valid designing and implementation and, most importantly, full support of all the parties involved (the administration of the company, the Human Resources Management, executives of other departments as well as employees themselves).

In order to enhance active ageing by providing better and longer lasting careers to elder employees several reforms are needed:

- Change of mentality which, in turn, will help shape a fair and proper treatment of elder employees.
- Reform of the management practice followed in order to enhance and exploit the advantages of elder employees.
- Reforms in the working life which will create an amicable working environment for all generations of employees.
- Retirement reforms which will take into consideration the big individual differences among elder employees thus providing flexible retirement eligibility age limits as well as financial incentives in order for employees to prolong their working life.
- Organizational reform in order to improve cooperation of various agents and factors which influence the quality level as well as the extension of working life.
- Reforms in health care services in order to strengthen proactive and preventive occupational health services.

Age management practices applied at the workplace in Europe reflect the fact that businesses address ageing issues either in the concept of “problem solving” or in that of “prevention”. Because of poor information about ageing issues, businesses deal with the situation on a pretty tight budget and by lowering job requirements for elder employees (“problem solving” approach). Through perceiving ageing more as a challenge or opportunity, companies which opt for prevention take care so as to reinforce the development of individual resources in their staff and facilitate transgenerational learning. In the best case scenario, in the context of age management, a lifelong approach is adopted and equal opportunities for all generations are created (IImarinen, 2012).

Lack of relevant literature corroborates the fact that no active ageing management measures are being taken in the banking sector, either by employee associations, or by banking institutions. On the contrary, banking institutions take discontinuous measures primarily aiming at contributing to a harmonious work-life balance for their employees and/or guaranteeing health and safety conditions at the workplace regardless of the age group the latter belong in.

Therefore, initiatives to implement projects related to the issue of active ageing - through a multifaceted approach with regard to actions taken and target groups – are not only a prerequisite for the maturation of integrated strategies in the particular sector, but also suggest that the development of a model for social dialogue among all parties involved (government officials, social partners, employees) should be opted for with the view to promoting regulations and initiatives to manage elder employees effectively.

At times of growth there are often cases of consensus, good practices and mutually beneficial social dialogue, which is absolutely anticipated, since for as long as there are gains to share, the cases of win-win negotiations appear more frequently. On the contrary, at times of crisis trade unions often raise the issue of allocating losses, costs and loss of benefits (concession bargaining) in order to secure or even spare employment in the respective sector.

As it is further elaborated in a report on Social Dialogue good practices in the banking sector (Georgakopoulou, 2012) – carried out in the framework of the project Di@logos.net – in countries where the tendency for staff redundancies due to restructuring pre-existed, trade unions have already gained significant experience in making interventions in order to prevent or minimize layoffs through social dialogue. However, at times of prolonged crisis when employment is under strong pressure combined with high unemployment rates and restructuring efforts in the banking sector, the conditions created are particularly adverse; in fact, they constitute a potentially explosive mixture, as it happens in the cases of Spain, Greece and Portugal.

In these countries, the same as in Belgium and Italy, employment protection has always ranked high in the priorities of trade unions which have strived to succeed in reaching balanced and consensual agreements through social dialogue procedures in order to limit adverse consequences on bank employees.

In most countries the banking sector has traditionally been characterized by high levels of stable employment and low rates of flexible employment forms (e.g. temporary or occasional employment, etc.) in contrast to other sectors of the economy. Today, under the current

circumstances imposed by the fiscal crisis, we witness a clear trend for employment destabilization in connection with reduction in investments, the ongoing or impending restructuring in the banking sector and, in some cases, with direct government interventions in order to weaken labour legislation in issues of mass redundancies and introduction of flexible employment schemes. Equally important is the pressure exercised in order for labour mobility - both internal and external - to increase; these pressures can become particularly intense on the occasion of takeovers and mergers and are combined with the promotion of international activities and procedures aiming at outsourcing operations.

In parallel, bank administrations, in their attempt to reduce labour and operational costs in general, are introducing measures aiming at restructuring working time as well as salary development policies through expanding labour cost variables at the expense of constants (e.g. by setting individual quantitative targets and arranging salary rates based on performance, etc.)

In this context, bank employee trade unions are opposed to these developments claiming weighted solutions in managing structural changes and addressing employment problems. At times of crisis there is an increased need for centralized agreements (at sectoral and/or interprofessional level) aiming at applying long-term, weighted solutions in dealing with unemployment, solving core economic/social problems, etc.

In the time preceding the onset of the crisis social dialogue in the banking sector underwent through several stages. For decades there was strong government intervention in the sector combined with absence of an institutionalized negotiating counterpart of the Hellenic Federation of Bank Employee Unions at sectoral level, which led to industrial relations becoming heavily subjected to political interference. The attempt to resolve any labour and insurance problems was generally based on direct dialogue or quite often on trade union confrontation with the government or even government intervention in negotiations.

Despite the serious problems related to shedding government dependence in the decade from mid 1990s to mid 2000s, several common bargaining grounds between the Hellenic Federation of Bank Employee Unions and the administration of banking institutions were found. At that time there were several innovative interventions such as the study and pilot implementation of a 35-hour working week in the banking sector, an approach to issues such as gender equality, bank security, problems related to modernization of the banking system, education as well as the bilateral Sectoral Labour Observatory, which functioned as a statistics

service of the sector in matters of employment and industrial relations. Unfortunately, this Observatory operated for a short period of time.

Around mid 2000s and as a result of the first surge of buyouts, mergers and privatizations in the sector, all the above-mentioned interventions gradually weathered and stopped, since the state de facto lost its role as the prime employer in the banking sector and, consequently, the role of the privileged counterpart of trade unions in negotiations as well as its power to influence directly and decisively decisions made by private banks. Meanwhile, private banks, which now dominated the sector, were not interested in investing in any procedure whatsoever of meaningful dialogue at sectoral level.

Today there are three (3) basic dimensions in the national industrial relations systems (Georgakopoulou, 2012):

1. Collective bargaining levels

In recent years there has been a clear tendency for decentralizing collective bargaining at industry level on the grounds that in this way a “better and faster adaptation of employment to the real needs of businesses and markets” is achieved, particularly when the latter are being pressed by the crisis and function under a state of deregulation. Decentralization in Greece is promoted by the Government unilaterally with the view to eliminating sectoral agreements to the benefit of collective agreements at industry level, or to establishing the general prevalence of individual agreements, which has been pursued by certain employers in the sector over the last few years⁴.

2. Union density

Trade union density in Greece rises to 85%, also due to a successful attempt on the part of the Hellenic Federation of Bank Employee Unions to set up trade unions in all banks. In long-established, traditional big banks, mainly those ones with a former state character, union density reaches 100%. However, in private and in particular, foreign banks union density is significantly lower. Trade unions themselves strive to attract new members, but also to retain their credibility among existing members who, due to the ongoing crisis, feel particularly in need of union protection. Therefore, the bigger the protection trade unions provide to their members (through satisfactory Collective Employment Agreements and

⁴ In Greece the principle of favouring convergence between Collective Agreements at sectoral and industry level was abolished at the end of 2011 by law effective until the end of the Support Programme EU-ECB-IMF in 2015. This accommodated a number of Collective Agreements at industry level in the banking sector, on the basis of which salaries can decrease without generally impacting minimum sectoral rates.

effective interventions in all areas), the bigger the possibility they have to retain already existing members and have new ones enrolled thus increasing union density.

3. Percentage of sectoral collective coverage

In our country sectoral Collective Employment Agreements cover at least 70% of employees, a percentage which extends to 100% by decree. That was the case until the end of 2011 when the possibility of sectoral CEAs to extend was suspended until 2015.

In the Greek banking sector collective bargaining is mainly carried out at national level; employers are represented by the Greek Bank Association, despite the fact that they deny their role as employers, whereas employees are represented in negotiations by the Hellenic Federation of Bank Employee Unions. Collective bargaining and collective agreements at industry level, which are concluded between the most representative individual trade union and the respective employer, until the end of 2011 had only a role supplementary to the sectoral CEAs and regulated issues such as:

- Additional fringe benefits not foreseen by sectoral CEAs depending on employee position in the bank, specialization, special conditions or job requirements (e.g. tellers, dealers, computer scientists, etc.)
- Fringe benefits for bank employees in relation to issues such as holidays, family support, etc.
- Additional service recognition (in relation to sectoral CEAs), training, team bonuses and (rarely) systems for performance evaluation, promotion and career advances to executive level.
- Certain absolutely necessary exceptions to sectoral (institutionalized) working time scheme, which only concerned some individual branches and executive services on the basis of the minimal frameworks and rules set by the sectoral Collective Employment Agreement of 2006-2007.

Consultation mechanisms have been developed and consolidated in the banking sector both at sectoral and industry levels. Of course, now that the sector is being adversely affected by the economic crisis, participation in social dialogue procedures has decreased whether it concerns formal or informal ones. Formal procedures, for example, include voting for the selection of representatives at various levels of union representation as well as direct voting on highly

significant matters. Informal procedures include active participation of employees in work meetings, training groups, cultural issues, planning, etc.

Although there is an institutional distinction between formal and informal participation, these two types are interdependent, and moving from one type to the other is absolutely permissible and often deliberate in order to create a meaningful consultation culture. In order to duly understand and promote the consultation culture, one needs to perceive employee participation as an overall strategy, which functions the same as a network or system; a mere change in one element can bring about changes in a number of coordinates. Similarly, exclusion of one group of employees can change the relationships among all other groups.

In the context of collective bargaining, active ageing promotion strategy is reflected in adopting regulations and implementing actions which enhance employment of elder employees and protect them against labour exclusion. These measures are mainly related to the following axes:

- elimination of direct and indirect age discrimination practices in recruitment, dismissal or professional development of employees;
- work restructuring and improvement of working conditions for elder employees;
- provision of information and counselling services to Human Resources Managers on ageing management issues;
- implementation of actions targeted at training and improving employability of elder staff.

An integrated Social Dialogue process for the preparation of the above-mentioned programmes is imperative, following the stages precisely described in guidebooks and methodology textbooks. In total, there are **seven typical stages** which, ideally, run almost every participation procedure. They can also be used as a check list by those who are burdened with the coordination of the procedure in order to monitor if all elements have been considered or whether some other parameters should perhaps be taken into consideration.

Stage 1: Preparation – Clarifying social dialogue mechanisms

It is the first stage of the procedure and the one which will eventually define the quality and the dynamics of the final result. It is very important to precisely determine all participants on the basis of their representation and the degree of their involvement in the subject of the consultation.

Stage 2: Communication with potential stakeholders

It includes targeted communication with agents who would potentially become involved in social dialogue procedures. This targeted updating is the key to success of consultation, since it lays the foundations so that everybody can participate in decision making processes. Particularly important is to inform employees, since their elected representatives have a lead on this matter.

Dissemination of information, however, is more than a mere technical process. The way information is conveyed and disseminated configures the perception of every view to be tabled in the next stages of the process thus laying the foundations for trust and opportunities emanated from it. Information has of course one more peculiarity: it can exist on its own. Information per se can have its own value and it does not need to be connected to the next stages of participation process.

Stage 3: Implementation of social dialogue mechanisms

Such mechanisms include the operation of working groups, meetings, open and/or closed discussions, open consultation events, etc. The expertise of participants is collected both orally and in writing and is directly discussed through periodic meetings or steady working groups as well as through the internet. Before every consultation, however, the viewpoints and information to be passed on to participants at the outset should be checked.

Stage 4: Decision making

It is logical to think that consultation results will be evaluated by the Federation in order for the latter to take the final decision.

Stage 5: Employee information

The decision must be followed by informing employees of all ideas and suggestions presented, both those which were actually accepted and those which were eventually rejected, justifying the reasons why those decisions were taken.

Stage 6: Implementation of the decision

Implementation of the decision should start immediately. Actually, in many cases the role of employees should not be restricted to that of the recipient of the decision, but it should be extended to decision implementation.

Stage 7: Evaluation – Completion

This stage includes evaluation and symbolic completion of consultation. This practice gives the appropriate importance to everything that has been achieved so far and prepares the ground on which problems and shortcomings arisen during decision implementation can be identified and assessed.

The basic challenges most trade unions in the sector are facing today and are worth constituting **fundamental modules in consultation** are the following:

1. **Employment protection for elder employees** while, in parallel, **boosting the necessary solidarity** among different **generation employees** in the sector. In this context, it is imperative to seriously consider the necessity of implementing reliable diagnostic systems, identifying and meeting the needs of the target group as well as guaranteeing their equal opportunities to accessing training.
2. **Management of working time of elder employees.** Asserting a more balanced and amicable working time scheme for employees without unauthorized time extension, or unpaid overtime is undoubtedly the concern for all parties involved in the programme. Employers, however, raise the issue of flexible working time management as a means to spare jobs. This flexibility when used systematically and massively in order to reduce labour cost and prevent dismissals (destabilization – individualization of working hours, reduction in working time, which results in salary decrease, staff availability, job rotation, etc.) has serious consequences on the total revenue of employees as well as their personal, family and social times, which are being destabilized and need to be organized.
3. Education and training of elder employees. **Proper education and training as well as reliable career management systems as a means of providing elder staff with a multitude of skills thus safeguarding their employment during the crisis** is a self-evident challenge. Investing in employees, guaranteeing continuous and reliable training support for all of them through the use of suitable systems which can diagnose and respond to their needs as well as certify their competences is a fundamental priority for trade unions. In many cases (e.g. Italy, Belgium, Portugal) this issue has repeatedly been the object of social dialogue resulting in specific frameworks and institutions.

4. Revenue protection and salary flexibility for elder employees. The **issues of guaranteeing employee income** in relation to the cost of living, austerity measures and policies for freezing or cutting salaries are the concern of most partners. Direct legislative government interventions in order for banks (the majority of state-owned, but private ones as well) to cut salaries - contrary to what has been set by collective agreements – constitute a serious challenge and lead to friction.
5. Enhancement of **issues concerning Health and Safety** in the workplace.
 - **Full implementation of the European and national legislation** for employee protection.
 - **Dealing with work-related stress** and factors which aggravate it (e.g. job insecurity, pursuit of targets and additional income (bonuses), etc.)
6. The role and **scope of collective bargaining** in the sector against government interventions, which either change data radically, or cause tensions and serious problems in the social dialogue (mainly in Greece) over issues which concern active ageing management. Social dialogue should be promoted to the upper sectoral level so that long-lasting, overall solutions, suitable frameworks, criteria and principles in dealing with any specialized business problem can be guaranteed. Furthermore, a crucial parameter in promoting social dialogue is the existence of a steady, institutionalized negotiating counterpart of the Hellenic Federation of Bank Employee Unions at sectoral level, which will guarantee systematic consultation of the sector's issues.

5. Conclusion

The dialogue between managers and employees should be a continuous procedure, since managers are those who organize production and work processes as well as the work tasks of every employee. They take all the decisions which concern changes in work organization. Managers are also responsible for health and safety issues including evaluation of dangers and risk assessment.

Adapting work to the skills, competences and health status of an employee should be a continuous and dynamic process based on the adequate risk assessment involved. In the case of elder employees, adapting work to their health status and their needs should not be an additional burden on managers' shoulders. This is the reason why awareness of managers and supervisors on issues concerning employee age should improve.

In addition, public authorities and all partners involved should contribute to taking such measures. Those who are responsible for policy design at all hierarchy levels and ranks should realize the urgency of the situation and adopt an approach senior age oriented, for example, by supporting those companies which adopt policies in their internal practice amicable to elder employees or by laying the foundations for best practices sharing among economic factors. Trade unions, NGOs and social partners can also play a role by focusing on how to improve collective awareness of the consequences of demographic challenge in society and by mobilizing social groups concerned.

The aforementioned can highlight the socially responsible character of Greek banks. Based on this character and through actions of social dialogue focused on active ageing issues we can increase human resources satisfaction and improve the working environment. Nevertheless the proposed system is applicable also in other branches (given the necessary adaptations); therefore it provides a useful tool for applied policy dealing the worsening of labour relations in the frame of current circumstances.

In conclusion, a socially responsible institution has the capacity to attract and retain specialized work force, to take lifelong training action, to concede competences and powers to employees, but also to keep them as best informed as possible regarding its course and targets.

Moreover, a banking institution socially responsible to its human resources strives to promote a better work/family/free time balance, workforce diversity, equal compensation and career prospects for all, naturally for women employees as well, profit sharing as well as systems providing equities of share capital. It also concerns itself with issues regarding employability and guarantees the principles of non-discrimination and non-exclusion. Finally, managing change includes measures for socially responsible restructuring balancing the interests and concerns of all those who are afflicted when a business proceeds to staff redundancies, merges or closes down. All this concerns the internal dimension of CSR, in contrast to its external one which applies to the relationships of a business with its customers, suppliers, people in general, management of natural resources and protection of the environment.

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THE SOCIAL RESPONSIBILITY IN ROMANIAN BUSINESS AREA: MECHANISM AND PATHWAYS FOR ORIENTATION TO A SUSTAINABLE SOCIETY

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Abstract

The evolution of current society towards sustainable development is a priority, propagated rapidly, with interest on the business area. Perceived initially as a purely conceptual approach, the sustainable society has become, in Romania too, a major point of interest. More and more companies became interested to sustain the actions that lead, simultaneously, to economic competitiveness and social welfare. The objectives of this paper are: incursion into evolution of social responsibility and sustainability concepts with applicability in Romanian companies, the identification of modalities for motivation to become more socially responsible, assessments of responsibility ways. We will analyze: the mechanisms and pathways by which the companies are determined to act responsible related to society that they shape and the factors that represent the impetus of this reorientation. The paper is based on analysis of data gathered by official statistical reports, national database, indirect research and results of surveys among Romanian companies. The results of research consists in a hierarchization of companies, by various sizes and profiles, depending on the orientation towards social responsibility and a synthesis of the most effective ways and mechanisms which determined actions for orientation to a sustainable society. The conclusions will indicate the importance and necessity of corporate social responsibility assumption in Romanian companies and will highlight the socio-economic development prospects in this new reorientation.

Keywords: responsibility, sustainability, society, business, companies

JEL Classification: I31, O10, Q01

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1. Introduction

The evolution of current society towards sustainable development is a priority, propagated rapidly, with great interest on the business area, too. The sustainable development concept has determined an increased interest for researchers, and also for business entities. For this reason, we consider necessary to approach complementary the issues related to sustainability and dynamics of business environment, while the sustainable society is identified as a common point of interest for the two directions mentioned.

The sustainability concept is refers to various methods and development strategies, new and modern, needed to ensure the equilibrium between economic growth, social stability and rational use of natural resources. The companies which intend to operate from the eminently sustainable development perspective aim to focus it's currently actions by approaching of long-term consequences.

For these reasons, we have outlined a set of goals of this paper, as: incursion into evolution of social responsibility and sustainability concepts with applicability in Romanian companies, the identification of modalities for motivation to become more socially responsible, assessments of responsibility ways. The paper is based on analysis of data gathered by official statistical reports, national database, indirect research and results of surveys among Romanian companies. The results of research consists in a hierarchization of companies, by various sizes and profiles, depending on the orientation towards social responsibility and a synthesis of the most effective ways and mechanisms which determined actions for orientation to a sustainable society.

According with the appreciation of specialty literature and studies that have inclined intensely on the concept of sustainable development, from the perspective of business environment involvement in the transition from theory to the practice of sustainability, we identified some ways by which the business environment can contribute to creating a sustainable society. One of these ways is, certainly, the Corporate Social Responsibility (CSR) which will represent the fundament of this work approaches. CSR concept is associated with managerial concerns to support the actions oriented toward two directions apparently different, but with

common future interests: improving the welfare of society and consolidating the company's interests. In fact, besides the responsibility to lead the company in order to obtain profit, the managers assumes the social responsibility for the society in which it operates, for employees, consumers, environmental resources, etc. Currently, it achieved a socio-economic development level which demonstrates that it is not enough to aim only the profit goals.

The presence of CSR concept in the literature is relatively recent, one of the first appearances being in 1980: "A series of obligations that lead to policies, decisions and lines of conduct consistent with the objectives and values of society" (Bowen, 1953). In fact, the social responsibility it refers to the actions of a company sustained in order to protect the social interests alongside of strictly financial interest and exceed the company's obligations, according to law, being based on voluntary and optional actions, which are related rather to convictions and values of the company, nowise to the socio-economic and legislative constraints.

2. The significance of CSR and sustainable society theories in the business practice

The literature contains numerous examples, concretes and clear, by which we can identify the attitude and interest of companies for the social responsibility.

The World Business Council for Sustainable Development has defined the CSR as "the commitment of businesses environment to contribute at sustainable economic development by cooperation between employees, their families, local community and society as a whole or to improve their life quality" (Holme & Watts, 2000). The European Commission has defined in 2010 the CSR as "a concept whereby the companies decide voluntarily to contribute to a better society and a cleaner environment". To establish a functional link between CSR concept and practical implementation mechanisms at the company level, we consider that the specialist's opinions that have "tested" this mechanism are highly relevant.

From the information studied, we observe that the international literature is rich and often inciting on this subject and we understand that the social responsibility is manifested on four components: economic, legal, ethical and philanthropic, which together form *the pyramid of social responsibility* of the company. Each component of social responsibility has a clear direction and good defined goals, as follows:

- *Economic* responsibility: **is oriented to** obtain profit, which is considered the fundament of other responsibilities.
- *Legal* responsibility: is focused on compliance of laws and regulations.

- *Ethical* responsibility: is focused on justice and correctness and try to limits diverse damage and deviations from ethics.
- *Philanthropic* responsibility: improves the quality of life for society's members and contribute with diverse material and spiritual resources to the community welfare.

The economic development and prosperity creation are possible only in an exchange relationships system based on trust and credibility. The societies with a decreased level of trust in institutions and businesses environment cannot achieve a sustainable progress.

According to performed studies (Kotler & Lee, 2005), among the most active and effective social programs implementable in any company, regardless of the profile and dimensions are:

- *Cause bounded* marketing: involves the establishment of interaction with consumers from many perspectives: rational, emotional, moral.
- *Corporate Social Marketing*: is a CSR program through which the company proposes to change the negative behaviour or to persuade the public to adopt a positive behaviour.
- *Socially Responsible Business Practices* are initiatives by which a company improves voluntarily, the operating mode, so as to contribute to the general welfare of the community and to the environmental protection.

From the point of view of social responsibility concept the application within business practice, the companies could act in order to protect and increase the welfare of society on the following directions: promoting high ethical standards in business; ensuring a higher quality of working conditions for employees; ensuring safety and health of employees; protection of employees' rights; participation to the environmental protection; consumer protection; support the arts, educational institutions, healthcare; programs to help the elderly; training programs for the unemployed, etc. Despite the recognition of benefits attainable for society, which in this way becomes eminently sustainable, most of entrepreneurs are wondering in which manner the social responsibility influences the performance of the enterprise and, especially if determines the financial performances. Thereby, from studies in this field results some answers to this question:

- Orientation of the current activity of the company in terms of CSR does not occur without costs, but these are covered by future financial performances.

- The social responsibility ensures indirectly a motivational profit, because even if you do not win strictly in financial plan, the social involvement determines a very favourable image that supports the demarches to achieve the goals proposed and leads to financial results stable on the long term, especially by creating a high level of confidence among members of society who are, essentially, the consumers.

Table 1 presents, synthetically, a balance of *pro* and *contra* opinions for assuming the social responsibility by companies, in terms of creating a sustainable society.

Table 1. Pro and contra opinions of business area about the utility of CSR adoption

Opinions <i>pro</i> CSR	Opinions <i>contra</i> CSR
The company respond to the needs of society, for which produce goods and services	The companies may not have the social abilities, because are oriented to other aims and interests
Obtaining the profits on long term	The costs with CSR can decrease the profitability
Assumption of ethical obligations, based on moral values	It can do not cover the costs with social actions
Create a positive public image, useful in the commercial and social demarches	The lack of directly hierarchical responsibility for social actions
Discouraging the retentions and fears facing to juridical regulations	Orientation to other objectives than those financial can destabilize the main goal of business

Source: own work based on specialty literature.

A study of the Centre for Sustainability and Excellence (2009) about the financial investment in CSR, for the question if “the budget invested in CSR will affect positively on long-term the company performance?” the answers were: yes (87%), not (4%), not sure (9%). Although the opinions related on supporting or limiting interest in CSR are diverse and multiple, the specialized studies and specialized publications clearly indicate that the orientation of companies, which compose the complex assembly of business environment, to the social responsibility is more intensive and extended.

3. The interest for CSR and sustainable society in the world and in Romania

The Romanian economy, subject of many changes and transformations in the last 20 years, has recorded during this period positives and negatives result in some directions, respectively unsatisfactory results in others, at that is adding the oscillations of results in economic, social and environmental area. The CSR is a new and modern concept met in Romanian economy and has been adopted with great interest by national companies which operate on national market. Among the most significant changes that determine the establishment

of direct correlation with CSR we present: activation of the entrepreneurial environment on the extensive scale, expansion of cooperation relations with other countries, structural changes in demographic trends, the level of culture and education modification, changes in consumer behaviour, increased levels pollution, massive deforestation, low level of reforestation, reducing the green spaces simultaneously with building area extension, etc. The implementation of specific models in order to assume the CSR is a consequence of needs to solving the economic, social and environmental problems. In condition which the development of economic activities determine some special social consequences and produce a negative impact on environment, we consider that is normally and ethical that the social responsibility have been part of economic development projects. But, a lack felt in the concept implementation is refers to the mechanisms and pathways by which the companies are determined to act responsible related to society that they shape and the factors that represent the impetus of this reorientation.

Another significant aspect noticed from reports and international studies show the significant differences of interest between countries economically more developed than developing countries. Referring to Romania, we notice that the interest for CSR and building of a sustainable society is in an inchoate stage. Perceived initially as a purely conceptual approach, the sustainable society has become, in Romania too, a major point of interest. More and more companies became interested to sustain the actions that lead, simultaneously, to economic competitiveness and social welfare.

The International Publication “Ethical Corporation” conducted various studies and reports on attention accorded by Romanian companies to the social responsibility and guarantying the sustainability in our society. The report “The State of Sustainability” (2015) gives some vital information in order to shape a suggestive image of the social responsibility and sustainability involvement in business and activities of companies. For this purpose were interviewed over 1,500 executives and experts in sustainability, worldwide, from whose opinion we have outlined the following conclusions (EthicalCorp Report, 2015):

- 89% of respondents responsible for sustainability in companies where working said that the guidance to sustainability is an increasing component for the business strategy;
- from the perspective of awareness of the sustainability importance in business, the leaders believe that it could be imposed by external factors: consumers demand, supply chain issues, legislation;

- 57% of interviewed responsible for CSR have a team up to 10 people with tasks only in the field of sustainability, while only 16% have a department with more than 30 employees;
- almost 50% of corporate respondents said they had engaged an external expert who helped to elaborate a CSR strategy, while taking into account the answers to all organizations it observed that only 28% of respondents have resorted to an external consultant;
- 77% of corporate respondents consider that the responsible for CSR should define the sustainability strategy, and 73% think that they have to implement it;
- 9% of corporate respondents said that they have CSR budgets allocated to the CSR departments over \$ 2.5 million, while about 20% say that they have allocated budgets for CSR from 100,000 to 500,000 dollars;
- 33.4% of respondents expected to increase their sustainability budget by at least 5% during 2015, 32.3% have no this intention, 34.3% do not know yet what decision will be taken;
- 78% of respondents understand that sustainability influence both internal structures and the organization mode on departments and division of responsibilities;
- 70% of surveyed consider that the supply departments, marketing and communication are those on which the activity of responsible for CSR has the greatest impact.

The report's authors have analyzed the economic, social and environmental performances of 830 companies from 42 countries and 59 different industries, but they included only the top 235 in the rankings (15%). In Table No. 2 is presented a synthesis of the classified leaders by RobecoSAM in 2014 in the field of sustainability, by category of interest.

Table 2. The leaders of the world in the sustainability area by activity domain

Domain	Leader company	Domain	Leader company
Airlines companies	Air France, KLM	Financial services	ING, Groep, NV
Communications equipment	Alcatel, Lucent	Auto components	Pirelli & C. SpA
Beverages	Coca-Cola, HBC, AG	Pharmaceutical	Roche Holding AG
Domestic equipment	Electrolux	Electrical equipments	Schneider Electric
Food products	Unilever	IT/internet services	Wipro Ltd

Source: own work processing by The report on most sustainable companies in 2014 (RobecoSAM).

From data report results that companies performances on sustainability have improved by 0.4% in 2014 to 2013. The region with the best performance in the field of corporate governance is North America. In terms of economic and environmental protection, the greatest progresses were registered in supply chain management and in social terms the progress is visible to attract and retain the performing employees. By data and references presented or studied previously, it observe that Romania does not appear in official information and reports from international entities as one of the countries where the concern for sustainability through CSR manifestation is very active or obvious. This observation is confirmed by analyzing of data and information from current literature, to which is added the results of a market investigations, which indicate that in national companies, especially these of small dimensions, the main interest is oriented rather to ensuring the profitability.

Based on available information regarding the interest and orientation of Romanian companies to shape a sustainable society, we chose to focus our study in the trade sector companies. The data of the European Commission indicate that the trade sector covers about 11% of EU GDP, and in Romania, in 2013, were opened more than 250 supermarkets. From the point of view of the responsible in sales, the factors that contribute to the sustainability of Romanian society are: local acquisitions, ecological products, engagement in community life. From the information submitted by food retailers is noted that when referring to the concept of sustainable development, the retailers are turning their attention primarily towards initiative as involvement in community life, which is more towards social issues. The most frequents initiatives: organizing the competitions for business and social activities financing, waste collection campaigns, donations, events etc. From studies conducted on the Romanian market of food products commercialization, revealed that the most responsible food retailers in Romania are Auchan, Kaufland and Mega Image (Azores, 2014).

- Auchan approaches professional and equilibrated the concept of sustainable development, and take into account all three basic conceptual dimensions: economic, social and environmental, utilizes the relevant indicators for assessment and presentation of performances registered. Some conclusive aspects: not uses the paper catalogs to promote products (saving 2,500 tons of paper/year), 90% of suppliers are local, has harnessed 4,800 tons of waste collected in its stores.

- Kaufland, very involved in specific activities of environmental objectives proposed for sustainable development, has succeeded to reduce its CO₂ emissions by 3.905 tons/year.
- Mega Image has funded 10 community projects with a total amount of 100,000 lei.

Currently, in Romania, the companies which give increased importance to sustainable development are, at least for now, the multinational companies which implement the requirements and policies set out by head office. The most significant mechanisms and directions by which it can act in order to boost the companies to become socially responsible are: financial mechanisms, consumers' involvement in purchasing decision, appropriate educational systems, legislative mechanisms, European standards, volunteering etc. In essence, the companies' responsibility is transposed into responsibility of all people from company, starting from management team, with the direct involvement of all staff.

4. Conclusions

From studies performed and specialty reports, is observed that more responsive to the CSR and sustainable development concepts, respectively more interested to their transposition into practice, are the large enterprises that activate by a longer period of time and has succeeded to form a strong organizational culture. In Romania, as in all emerging economies, CSR, sustainability and public-private partnerships are in an incipient stage, the dominant opinion being that the CSR initiatives are only one managerial indicator of excellence and only very profitable companies have available the social resources. The treating, at the companies' level, of subjects on CSR, sustainable and equilibrate development in the suggestive triangle company – environment – society is for the moment quite superficial. In this context we mention that the European Parliament has adopted the Directive 2014/95/EU which will require the big companies to report non-financial information since 2017. Thus, the social, environmental, anti-corruption practices, respecting human rights shall be reported by all companies with over 500 employees.

A company can make changes in order to adopt the socially responsible practices, that facilitate to shape a sustainable society, in areas as: design of locations in which it operates, improving the production processes, the withdrawal of products that may be considered harmful (or illegal), choice of production and packaging materials that can protect the environment, provide the objective information about products, development programs which are focused on

welfare of society, the adoption of responsible marketing policies – particularly in respect of children, etc.

Given the assembly problems with the Romanian society is facing currently and, especially, to attenuate their negative effects that cause repercussions on next generations, the majority of companies are required to act completely in according with European standards and practices of social responsibility. In consequence, it will be possible to achieve some of the goals of sustainable development by: developing public-private partnerships, collaborations between companies and communities, identification of sustainable solutions.

The business environment is directly responsible for the future of nations and can contribute directly to social welfare provide, to improve the life quality and ensure a sustainable future. Thus, by favourable functional systems, the business environment can bring the significant benefits not only for active companies on the market, but also for society and its citizens. In conditions which the CSR will not remain only at the concept stage for Romanian companies, we are convinced that an improvement of living standards and change the perception mode of surrounding factors are just two of the main objectives that will be achieved in the Romanian society, too. Thus, we promote the idea according to regardless the company size, its profile and entrepreneurial aims pursued, each company must manifest a more advanced or incipient form of social responsibility. A strictly orientation tendency to profitability and gain area is neither sustainable nor healthy for the company and the citizens. In essence, any company social responsible, sets its goals and priorities, and the common point of interest is represented by ensuring the concordance between the own strategy of company and the principles of a sustainable development.

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SOCIAL AND SOLIDARITY ECONOMY: TOWARDS INCLUSIVE AND SUSTAINABLE DEVELOPMENT

Rana Eşkinat¹

Abstract

The Social and Solidarity Economy (SSE) is a phenomenon that has gained growing economic, social, political visibility in recent times and that in practice allows us to think about actions that envisage the aspects making up the integrated approach to development.

The (SSE), which International Labor Organization (ILO) defines as a concept including organizations and enterprises producing goods, services and knowledge while pursuing social and economic objectives, emerges as a response to the need for innovation within the current model of production and consumption.

During recent years a great deal of legislation has been adopted concerning (SSE). This legislative activity and institutional recognition of the (SSE) on an international level is characterized by efforts to incorporate economically dynamic and socially innovative aspects into the joint construction of public policies that aim to promote greater cohesion and inclusion.

This paper offers you the opportunity to share (SSE) experiences from different parts of the world and learn about the contribution made by the (SSE) to inclusive and sustainable development.

Keywords: social and solidarity economy, sustainable development, innovation, social capital

JEL Classification: 011; 013; 035

1. Introduction

1980s and 1990s were periods when social development put on the back burner. Things began to change after the mid-1990s. The emphasis on integration of economic, social and environmental aspects opened up a space to highlight the integrative potential of SSE. The Rio+20 process prepared the ground for United Nations Conference on Sustainable development in 2012. This conference, emphasized the need for a more integrated approach to development.

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Urgent action to mainstream sustainable development at all levels, integrating economic, social, and environmental aspects and recognizing their linkages highlighted as a result of the discussions.

SSE was the terrain of economic activity where organizations, enterprises, networks and movements addressed economic, social, environmental, rights-based and participatory dimensions of development objectives highlighted in the Rio+20 process. While this movement comprises different organizational forms and perspectives on development priorities, it has common features. These features are in accordance with the approach of “High Level Panel on the sustainable development goals (SDGs)”.

This paper focuses on SSE experiences from different countries of the world and tries to understand the contribution made by the SSE to inclusive and sustainable development.

2. Social and Solidarity Economy

Recent financial and food crises, climate change, persistent poverty and rising inequality have led to a profound questioning of conventional growth and development strategies. Increasingly it is being recognized that business-as-usual cannot address major contemporary development challenges. There is a need to “mainstream sustainable development at all levels, integrating economic, social and environmental aspects and recognizing their inter-linkages” (ITC “ILO”, 2014: 191).

The SSE, is a term used to refer to an alternative economic model and framework based on a number of values and principles, including mutualism and cooperation, equity, social welfare, social and economic democracy, pluralism and diversity, and sustainability (Allard & Matthaei, 2008; Miller, 2010). Individuals and groups espousing this framework see it as an economic framework that is transformative of the prevailing economic values and institutions. This comprises the experiences of millions of producers, workers, citizens and communities worldwide that seek to enhance livelihood security, realize their rights and transform production and consumption patterns through various forms of cooperation, solidarity and democratic self-organization. SSE also emphasizes the place of ethics in economic activity. Many governments are also acknowledging the need to democratize economic and governance systems, recognizing the roles not only of public and private actors but also of community and collective organizations and institutions, as well as the importance of cross-sectoral partnerships.

SSE is characterized by organizations, enterprises and networks that are diverse in nature but share common features in terms of development objectives, organizational forms and values. These features point to a model of development that contrasts with the profit-maximization and often corporate-led approaches that have prevailed in recent decades. SSE seeks to mobilize and redistribute resources and surplus in inclusive ways that provides resources for people's essential needs. Furthermore, SSE promotes environmental protection and the economic and political empowerment of the disadvantaged and others concerned with social and environmental justice. While profitability is a feature of many types of SSE enterprise, profits tend to be reinvested locally and for social purposes. SSE is an economic approach that favors decentralization and local development and is driven by ethical values such as solidarity, fair trade, voluntary simplicity and the principle of living in harmony not only with different people but also with Mother Earth. SSE is a holistic approach. SSE organizations, enterprises and networks simultaneously pursue some combination of economic, social, environmental and emancipatory objectives:

- The economic sphere of SSE provides opportunities including job creation, access to markets, provision of financial intermediation, and economies of scale.
- The social sphere offers better protection as it is built on principles of mutuality, solidarity and reciprocity, and advocates for comprehensive social protection and redistribution.
- The environmental sphere promotes environmental justice and seeks to ensure that economic activity enhances rather than depletes natural capital.
- Political empowerment besides economic dimension is one of important aims. SSE facilitates a voice and representation through self-organization, participatory governance and collective action at multiple levels.

This multifaceted approach distinguishes SSE from other forms of social organization and enterprise associated with the public, private and informal economy sectors. The field of SSE typically includes diverse forms of cooperatives; mutual health and insurance associations; certain types of foundation and service-delivery NGO; microfinance or solidarity finance groups; self-help groups; community-based organizations; and new forms of social enterprise producing goods and services that address unmet needs, mobilizing unused resources, engaging in collective provisioning and managing common pool resources.

Different definitions of SSE highlight different features (ITC “ILO”, 2014:192):

- The OECD (Organization for Economic Co-operation and Development), notes that SSE organizations are located between the market and the state. They can be defined on the basis of their legal status (mainly cooperatives, mutual and other associations, and foundations) or on common principles such as the primacy of social objectives over profit, as is the case with social enterprises.
- RIPESS (International Network for the Promotion of the Social Solidarity Economy) underlines the fact that SSE includes not only organizations and enterprises but also citizen movements geared to democratizing and transforming the economy.
- MBM (Mont-Blanc Meetings) adds the notion of limited profit-making and fair redistribution of surpluses.
- The ILO (International Labor Organization) adopts a broad view whereby SSE organizations and enterprises are specifically geared to producing goods, services and knowledge while pursuing economic and social aims and fostering solidarity.

While this movement comprises different organizational forms and perspectives on development priorities, its common features can be listed as follows. These features are in accordance with the approach of “High Level Panel on the sustainable development goals (SDGs)”:

- Leaving no one behind.
- Putting sustainable development at the core.
- Employment-centered economic transformation.
- Participation and good governance.
- Global partnership that upholds principles of “universality, equity, sustainability, solidarity, human rights, the right to development and responsibilities shared in accordance with capabilities”.

In recent years there has been a significant expansion of SSE in terms of the scale of economic activities, and the number of people involved and types of SSE organization. While the current crises have renewed the interest of policy-makers and the general public in SSE, it should not be understood as a residual to be taken into account as a quick fix or an emergency actor. SSE aims to be a full agent of inclusive and fair economic growth, while also fostering social cohesion.

3. Potential of SSE for Socially Sustainable Development

Various studies on SSE, illustrate the potential of SSE through the lens of eight areas which are central to the challenge of socially sustainable development in the early 21st Century. These include: transition from informal economy to decent work; greening of economy and society; local economic development; sustainable cities; women's well-being and empowerment; food security and smallholder empowerment; universal health coverage; transformative finance.

Below, the capacity of SSE, in solving difficulties and finding solutions to the problems emerged in these eight different areas of economic, social and environmental activity will be evaluated respectively:

3.1. Transition from Informal Economy to Decent Work

The prevalence of informal employment in many parts of the world not only affects the current living standards of the population but is also a severe constraint that prevents households and economic units from increasing their productivity and finding a route out of poverty.

SSE offers another means of tackling vulnerable employment and of bridging the transition from the informal to the formal economy under conditions of decent work. Within an enabling policy and institutional environment SSE can play a key role in realizing the goal of decent work, along with its constituent elements of employment generation, social dialogue and labor standards associated with both workers' rights and social protection. The organization of informal economy workers and producers in various forms of association and cooperative can play an important role in addressing market failures. Such organizations can facilitate access to finance, market information, inputs, technology, support services and markets, and enhance the capacity of producers to negotiate better prices and income. While not necessarily amenable to the poorest sectors of the population, SSE initiatives can reduce power and information asymmetries within labor and product markets and enhance the level and regularity of incomes. From an aggregate point of view, cooperatives are among the largest employers in many countries in both the global North and South. Solidarity microfinance institutions and self-help groups often facilitate access to those resources that are essential for starting and developing income generating-activities.

3.2. Greening of Economy and Society

Economic transitions that are both green, fair and inclusive provide a major opportunity for SSE to develop, not simply as a response to crisis and insecurity, but also for structural

reasons. Addressing climate change requires improvements in energy efficiency and reductions in emissions on a scale unlikely to be achieved by those types of economy and business that need continually to develop new products and markets, and to survive and compete on the basis of externalizing social and environmental costs (Jackson, 2009) Since SSE organizations are not structured in this way, but rather aim to provide members and communities with goods and services and are often community-led or -owned, they are potentially well placed to meet the challenges of both climate change and poverty reduction.

As public awareness of environmental issues has increased, so too have markets and demand for environmental goods and services. SSE organizations and enterprises are well placed to meet such demand through activities associated with recuperation and recycling of waste and materials, renewable energy and production and services associated with agro-ecological organic agriculture (Lewis & Conaty, 2012) Cooperatively owned energy generation is a vibrant and growing sector in European countries such as Denmark, Germany and the United Kingdom and is already well consolidated in the United States.

3.3. Local Development

The notion of local economic development relates to a participatory development process that involves private, civil society and public stakeholders engaging in strategies to create jobs, income and productive capacity by basing an activity in a specific location and making use of local resources. Local economic development and SSE are seen as complementary tools, both of which strive for participatory governance, partnership, empowerment and social and economic inclusion. They are particularly important in depressed rural settings where youth and others have little, if any, incentive to engage in farming activities or take up long-term residence (IFAD, 2010). This process not only affects local income but also the potential for reinvesting surpluses in local social and economic infrastructure.

Local governments, and processes such as decentralization, can play a key role in providing the enabling environment needed for local economic development, variously through health, education and other areas of social policy; technical support services; building-up of infrastructure; public procurement; and facilitation of farmers' markets. In several Latin American and European countries such enabling roles are particularly apparent. But as in the national policy-making arena, it is essential that SSE actors are organized and capable of participating effectively in policy dialogue and decision-making processes. Democratic decision-

making and adherence to social and ecological criteria provides SSE leaders with a degree of legitimacy for participating in local governance and the co-construction of public policies.

3.4. Sustainable Cities

Cities are potentially sites where access to infrastructure, services and employment can allow human beings to satisfy their basic needs and realize their ambitions and aspirations. However, cities can also be overwhelming, especially when prosperity is absent or unequally distributed (UN-Habitat, 2012-2013). Inefficient use of, and unequal access to, public services challenge the ability of cities to become sustainable (UN- DESA, 2013). Crime, waste, pollution and high carbon production and consumption patterns associated with cities are other core elements of the sustainability challenge; hence the need for integrative and sustainable models of development for cities.

Social enterprises and community-based organizations can play a key role in building sustainable cities and human settlements more generally. Important in this respect are activities that promote local culture, proximity services (including healthcare, education and training), urban and peri-urban agriculture (FAO, 2014), community renewal, access to affordable accommodation and common goods, renewable energy, waste management and recycling, low-carbon forms of production and consumption, and broader livelihood security, amongst others. The SSE can also foster mutually beneficial rural-urban linkages through, for example, agricultural value chains and food systems, trade networks, transport and other services (IFAD, Nd.) Urban community organizations and social enterprises can offer citizens affordable and accessible social services whenever such services are not provided by the public or private sectors, as is often the case.

3.5. Women's Well-being and Empowerment

Various forms of SSE initiatives lend themselves to tackling issues relating to women's well-being and empowerment. Women often make up the core of the membership of agricultural self-help and credit and saving groups, as well as of community forestry initiatives.

Employment in SSE organizations can be particularly important for poor women facing labor market discrimination and work-family conflict. In addition to providing employment, SSE organizations and enterprises often facilitate flexibility in time management, providing opportunities for paid work that can be managed alongside responsibilities associated with unpaid care work. Moreover, much of the rise of social enterprise has centered on provision of care and

other services that impact on women's wellbeing. By shifting the responsibility for care away from the individual provider and the household, SSE childcare centers, for example, can facilitate the participation of women in the labor force and other economic activities.

Beyond the aspects of social well-being and women's economic empowerment, the organization of women in SSE organizations and networks is important for women's emancipation and political empowerment. Through such organizations and participatory roles, women can gain voice, as well as networking and advocacy skills, allowing them both to renegotiate traditional gender relations and to access and make demands on more powerful institutions.

3.6. Food Security and Smallholder Empowerment

Around the world millions of rural workers and producers, often women, are organizing in self-help groups and cooperatives in ways that bode well for food security and smallholder empowerment. By organizing economically in, for example, agricultural cooperatives, and politically in associations that can engage in policy dialogue and advocacy, SSE organizations and enterprises can address both market failures and state failures that underpin such problems. Furthermore, their tendency to employ low-input, low-carbon production methods and respect the principles and practices of biodiversity bodes well for sustainable agricultural intensification. Small scale farmers, often organized in some form of cooperative and practicing agro-ecology, are increasingly important actors in food systems. Some governments, for example Bhutan and Cuba, have put in place laws and extensive programs mandating or actively promoting aspects of agro-ecology which is a key dimension of certified fair trade.

A prominent strand within SSE includes fair trade and alternative food networks that connect rural producers and urban consumers on more favorable terms related to both price and quality of produce, and promote collective provision of food and community urban agriculture, as well as support for community projects. In Europe and North America, such trends partly relate to cultural shifts in which the middle classes are searching for more environmentally and socially friendly and community centered ways of living. In the United States, local multi-stakeholder food councils have proliferated throughout the country to promote local food security, environmental protection and community health.

3.7. Universal Health Coverage

In a context in which political and resource constraints have often limited public provision of healthcare, SSE organizations are emerging as important partners in both health

service delivery and health insurance. While any reduction in state responsibility for healthcare provision needs to be viewed with caution, and while SSE initiatives should not be perceived as substitutes for state provision of healthcare, SSE organizations are nonetheless well placed to play a complementary role in health service delivery, given their proximity to their members and the communities they serve. When organized as social enterprises and cooperatives, they also retain a financial motive for efficiency (Robertson, Andrew, 2012).

Beyond the provision of healthcare services, SSE initiatives play a central role in addressing the social determinants of health, not only through their contribution to economic empowerment and food and livelihood security for the people and communities involved, but also through their capacity to make demands on local and national public authorities for social services. Given their multiple social and development objectives, there is growing attention to the role of cooperative banks in strategies that simultaneously aim to improve health and reduce poverty and inequality, as well as supporting financial systems that are less prone to periodic crises.

3.8. Transformative Finance

In addition to the need to restructure patterns of production, trade and consumption, it is imperative to transform finance. Two critical challenges apply here: first, that of democratizing access to finance for low-income groups and small producers and enterprises; and second, that of transforming financial systems so that they are not prone to periodic crises and do not misallocate capital to sectors associated with jobless growth and exploitation of finite resources. The SSE can play an important role in both respects.

Around the world, complementary currency systems suggest that they too can also be a tool for sustainable development, being particularly efficient in times of economic instability owing to various attributes. First, since their use is constrained within a specific space, they can reinforce local economic development and local democratic governance; second, they can revitalize and stimulate production and exchange; and third, they can modify values and social relations. Complementary currencies have proved their worth in funding community-led initiatives, creating a community through currency use, which engenders cooperative behavior, favors social inclusion, and fosters local and participatory governance.

4. Spread of the SSE Initiatives between Different Countries

Solidarity economy (SE) initiatives constitute a worldwide phenomenon that is today at the very heart of numerous economic and social debates. Indeed, the current crisis, as well as the

state and market failures in developed and developing countries, lead us to interrogate the societal role played by such organizations. Development studies needs to analyze the ability of such economic initiatives to produce goods and services while, at the same time, responding to social and environmental needs.

SE today, in Brazil as well as in Latin America in general, represents a social movement. Its construction as a political actor led in turn to the emergence of specific public policies. It represents a new phenomenon of institutionalization for these practices in people's neighbourhoods. Generally, the literature on SE defines these initiatives according to their economic characteristics: being autonomous and of private nature and whose purpose is not to maximize profits but to provide services to their members or to the community.

The oldest foundation root of SE, and the most important in terms of number of initiatives, which has emerged from the 'popular world', excluded from the mainstream sectors of the economy, be these public or private, is the so-called people's cooperativism. Under the legal status of cooperative, association or as informal groups, these collectives of workers coming from the lower classes focus on improving their living conditions.

After the industrial crisis in the 1990s, a second formative root of SE appeared in Latin America, originating this time from the formal economy. Here, one finds cooperatives founded by the trade union movement, inter alia as a response to the bankruptcies of companies and their recovery by the unemployed workers who transformed them into cooperatives. Other developments took place in the 1990s, such as the people's banks and the exchange clubs (Lemaitre; Helmsing, 2012, p. 751).

The increasing mobilization of grassroots organizations recorded during the crisis of the neoliberal model and the recognition by the state of the capability of the popular sector to generate its own employment and promote social inclusion laid the foundations for a new model of social policy (Caruana; Srnec, 2013, p. 730). Unlike the neoliberal approach and its practices (focused on the poorest, with a handout mentality and limited to social instruments), these new policies have attempted to solve social issues through work and the empowerment of the popular sector, combining social and productive instruments.

National governments have developed different approaches toward SSE, reflected in some cases in their legislations and national constitutions and, in other cases, in their legislations and public agencies. These regulations not always accompany the status of the social, political and

economic relations of SSE practices. However, they represent a significant progress toward a full recognition of the heterogeneous universe of SSE and the formalization of new forms of organization linked to SSE's practices and their work relations. On the other hand, in Latin America, SSE has achieved constitutional status in three countries – Bolivia, Ecuador and Venezuela – and its recognition is gradually growing in other countries of the region, which means it is gaining its own space both in the economic sphere and in society as a whole.

The SE is a social movement, in the eyes of the actors of the field who recognize and identify themselves as such and in terms of a number of generally accepted criteria. It is about an intentional gathering of various actors who, through cooperation, networking and joint mobilization, embody a project of social change. They explicitly intend to carry out a universal cause in the public sphere and to influence the forms of social life, notably through contacts with public bodies in the form of political claims (composing the 'Platform of struggles'). Joined together around a common identity and common values (the 'Charter of principles'), the activists are opposed to capitalism (the social adversary, developing thus a confrontational dimension). They defend, in a militant way, a 'new' mode of production, consumption and wealth distribution, an alternative model of development, generating social benefits. Much more than a given set of existing practices, for the actors involved, SE is a project of society. Through the cooperative, the workers mention that they gradually realize their capabilities. Beyond the professional training, they are also trained in citizenship, notably by NGOs. They become aware of their reality of economic, social and political exclusion. They progressively consider themselves as citizens, as social actors with duties and with entitlements for which they begin to militate together. They see themselves as 'multiplier agents', as having a mission to empower other people through encounters and exchanges.

Activists of SSE, are often individuals who pursue and maintain international connections and are very involved in global networks. At the same time they focus their work on domestic and local issues and bring the ideas, lessons, and experiences of like-minded activists abroad back home and engage in a process of translation to make ideas, models, and practices from abroad relevant for and practicable in local settings.

As mentioned above, when IMF policies tore away safety nets in Latin America, people turned to each other, and coops and solidarity economy initiatives were launched. The idea came from below as a response to structural adjustment programs.

The U.S. Solidarity Economy Network (SEN) was formed following a series of meetings held at the first U.S. Social Forum (USSF) in the summer of 2007 with the support of other actors in the global solidarity economy movement (Shawski, 2013, p. 141). But the movement is much stronger in Latin America and Quebec – the U.S. is a latecomer. In the U.S. the context for the emergence of solidarity economy was deindustrialization and plant closings. Since 2008 the financial crisis, breaking up unions, spending cuts, etc. made the situation in U.S. similar to that in other countries.

The neoliberal economy was creating similar problems in different places. What holds the global movement together is the quest to find alternatives and a set of principles that include: dignity, non-exploitative and non-hierarchical work, local economy, and sustainability. The commonality that all groups share is their common enemy, a system run by corporate and financial capitalism. The big issue for the solidarity economy movement is the question of what kind of economic relations provide jobs, dignity and non-exploitative and non-hierarchical work. In other words, what unites the global solidarity economy movement is both the opposition to neoliberal capitalism and the recognition that there are alternative practices and institutions already in place that can bring about change.

SSE represents a unique economic culture in which firms and social and ecological needs are dependent on each other. Other initiative of SSE, is the SEA Basel (being the first of its kind in Switzerland) immediately began to cooperate with other similar attempts and likeminded organizations in Germany, France, and Luxembourg in starting the “Institute for Social Economy” (Walliman, 2014, p. 54). Some activities were joint efforts; for others the SEA Basel was acting alone. The purpose was to:

- Inform the public about social economy and its potential in handling present and future problems of development.
- Offer public courses and conferences on issues pertaining to SSE.
- Advance professional, economic, political, and cultural skills of individuals involved in the SSE.
- Provide assistance through research and consulting for establishing SSE networks and financial tools.
- Give interviews and offer statements on SSE to mass media and encourage research and publications concerned with SSE and its development.

- Document the course of SSE development in conjunction with surrounding economic and social events at the local, national, and international level.

The next operative step occurred in 1998 when SEA (Social Economy Association) founded the Social Economy Network Co-operative starting with already existing worker self-managed firms and civil society movement organizations. In terms of growth, the Social Economy Basel and its network co-op is kept in an organic growth pattern that does not depend on outside funding. The Social Economy Network Co-operative aims to:

- Enhance the social, economic, and political cohesion among network members.
- Build a local platform for moving towards local, social, and ecological sustainability, and politically to mobilize social, economic and political forces towards this goal.
- Promote the exchange of goods and services among members of the network.
- Promote the exchange of goods and services between the network and firms, organizations and individuals outside the network.
- Locate new markets and social movement spaces and to establish new businesses and civil society organizations.
- Organize collateral guarantees for bank loans to federation members.
- Make micro loans for federation members, small co-op start-up businesses, and new civil society organizations.
- Engage in sustainability-enhancing investments.
- Issue alternative currencies.

Social cohesion and SSE development is enhanced by a newsletter, the SSE fair, time-based exchange circles, and a Swiss Franc-backed alternative currency. In 2002 the Swiss Franc-backed alternative currency BNB was launched. In a pilot phase it was first tried only among members of the Social Economy Network Co-operative. Subsequently, it went public in 2005 to include individuals, businesses, and NGOs outside the co-op network. Some 120 firms and non-profit organizations presently accept the BNB. Properties of BNB can be listed as follows:

- Locally and democratically controlled money.
- Does not leave town or the region.
- Cannot be used for speculation.
- Helps in fighting undesirable global competition.

- Provides identity for those interested in local development towards sustainability, and allows them to display this identity.
- Serves as a general symbol for local development and the transition towards sustainability.
- Strengthens social movement energy for local development towards sustainability.
- Supports local business and NGOs ideationally and commercially as they support local development towards sustainability.
- Can consciously be spent in support of Social Economy Basel efforts to bring about sustainability.
- Generates funds for loans to federation NGOs and businesses working for local development towards sustainability.
- Generates funds for new start-up federation NGOs and businesses working for local development towards sustainability.
- Generates funds for investments in local renewable federation co-op energy production.
- Entails and teaches an alternative understanding of the nature and role of money.
- Stands for an economy embedded in society, not for a society dominated by the Economy.

5. Enabling Social and Solidarity Economy

Examination of the potential role of SSE in addressing several of today's major development challenges suggests that policy-makers in government and intergovernmental organizations should be paying far more attention to forms of economic activity that are inherently inclusive and holistic. Such an approach resonates with the broader post-2015 challenges of:

- Better integration of economic, social and environmental objectives.
- Poverty reduction, decent work, gender equality and equitable development.
- Addressing the structural causes of global crises linked to finance, food and energy.
- Building up resilience for coping with crises and external shocks.

But numerous constraints and tensions can still impede progress in this regard. SSE organizations, enterprises and networks often start with a very weak asset base, which

undermines their consolidation and sustainability. Core labor standards may not be upheld within some SSE organizations and enterprises. Within SSE organizations, the significant presence of women as members is often not reflected in leadership positions. Such limitations relate to broader societal issues such as traditional conceptions of gender roles; limited access to education and training, land and property rights; and control over household income and assets. And as they grow, social capital or bonds that bind SSE members in relationships of trust can weaken.

As SSE expands, it tends to interact more closely with the state, private sector actors and market forces. While such expansion and connections may facilitate access to much needed resources, markets and technologies, they can also undermine the autonomy of SSE, prioritize efficiency over equity, and cultivate institutional or managerial cultures that are more hierarchical and less democratic and inclusive. In short, they may divert SSE organizations and enterprises from some of their core values and objectives. Recent splits within the fair trade movement point to the difficulties of consolidating a cohesive SSE movement in the context of market integration, where the interests and priorities of smallholder producers and agri-food business stakeholders may diverge. Governments are becoming more proactive in supporting SSE but may instrumentalize this field as a tool for poverty reduction, for employment generation or for subcontracting social service provisioning, rather than seeing SSE as a transformative approach to development, involving quite different patterns of production, consumption and distribution of income and surplus, as well as different social and workplace relations.

Given these concerns and challenges, what should governments be doing? A number of important policy implications emerge from the perspectives outlined in this paper.

First, trends associated with solidarity and cooperation at the level of SSE organizations need to be matched by solidarity and redistribution generated through social, fiscal, credit, investment, industrial, procurement, training and other policies at different levels of government. It is known that governments and international development organizations can do far more to create the type of enabling policy environment in which the potential of SSE can be realized. Since the turn of the millennium in particular, numerous legal, policy and institutional reforms have been adopted in numerous countries at federal, state and local levels. They include, for example, legal reforms in France, the Philippines and Quebec; creation of SSE related ministries or departments in Colombia and Luxemburg; national or regional development programs promoting SSE in Kerala, Nicaragua, South Korea and Uganda; local government initiatives to

support SSE organizations in Spain and Colombia; sectoral (e.g. health) programs in West Africa; and comprehensive policy support in Brazil and Ecuador. Cross-country learning *via* policy dialogue needs to take place to generate and disseminate knowledge of policies conducive to SSE and the institutional and political contexts that facilitate effective policy design and implementation. This occurs for example in various forms of South-South cooperation in Latin America and elsewhere. Much can be gained from inter-governmental and multi-stakeholder learning and dialogue regarding such experiences.

Second, the dynamism and innovation associated with SSE derives in good measure from its autonomy from states. An enabling policy environment must also reinforce the conditions for safeguarding this autonomy through rights-based approaches that ensure, for example, freedom of association and information, as well as channels and fora for effective participation of SSE actors in policy processes. Participatory governance innovations and institutionalization of mechanisms for effective joint construction of policy design, implementation and review are crucial in this regard.

Third, the discussion suggests a need for policy-makers to reflect on recent shifts in development priorities associated with economic empowerment and social protection. More specifically it is important to guard against narrow interpretations and to broaden the focus:

- beyond the capabilities of the individual producer or entrepreneur towards those of groups, communities and collectivities;
- beyond private sector development centered on the profit-maximizing firm, with its tendencies to externalize social and environmental costs, towards “profit-mutualizing” or “less-for-profit” organizations and enterprises that balance economic, social and environmental objectives;
- beyond a focus on social protection via safety nets towards more comprehensive social policy and universal social protection;
- beyond economic empowerment towards political empowerment and the realization of rights.

Fourth, while a strong case can be made for the potential of SSE in sustainable and rights-based development, the evidence base on the performance and sustainability of SSE remains highly underdeveloped. Members and observers of the UN Inter-Agency Task Force for SSE emphasize the need to:

- Enhance the recognition of the role of SSE enterprises and organizations in sustainable development.
- Promote knowledge of SSE and consolidate SSE networks.
- Support the establishment of an enabling institutional and policy environment for SSE.
- Ensure coordination of international efforts and create and strengthen partnerships.

6. Conclusion

Negative impacts of rising inequalities and the limits of the MDGs process in addressing multiple dimensions of poverty and in achieving several of the goals emphasized the need for a more profound transformation in thinking and policy making. Many countries are lagging behind with respect to MDGs. The post 2015 development agenda promises to take on the MDG's unfinished business, while adding objectives related to: inclusion; sustainability; employment; growth; governance; cooperation

Development institutions have improved the quality of projects by generating knowledge in strategic development areas. Evidence – based policy making by country institutions have supported by international development society. Sharing development lessons between countries is the main strategy. Financing a transformative development agenda will require cooperation among, governments, donors, private sector, policies and institutions that facilitate more efficient use of existing resources and attract new and diverse sources of funding. Firms must go beyond minimum corporate social responsibility standards to help advance human well-being and environmental sustainability.

New approaches are needed now to guide us through problems and to restructure society into a socially and ecologically sustainable pattern.

When acting today, it is imperative to include those who have been socially or ecologically hurt by present institutions. When acting, institutions can be created that are prepared to manage the severe bottlenecks and social and ecological problems yet to come. In sum, today already new institutions are needed for a sustainable, predominantly regional, more labor intensive socio-ecological system.

In many ways the SSE approach can contribute towards such goals:

- It does not aspire to keep pace with the growth-driven 'industrialism' of multinationals; it rather seeks to get away from it. It will seek more qualitative over quantitative growth.

- It is more labor intensive and pays lower wages; it aims at building communities, making individuals independent of those with concentrated privately owned capital.
- It does not seek to abolish the market economy, but rather to find relative protection from it and build resilience against its blackmail and extortions.
- It emphasizes resources – not deficits – people have, particularly in those who have been labelled as lacking resources by traditional labor markets.
- It does not seek to divide up communities but to expand them by pooling resources for mutual use.
- It aims not for a short-term, but for a long-term synergetically derived existential security for an ever increasing number of people.

If SSE is to achieve these goals, it must ascertain that those working in its organizations have a stake in the assets as they build them. In addition, democratic structures must ensure that assets gained are not unconditionally privatized or ‘autocratized’ due to a lack of social control over them. In addition, if SSE is to be successful, it must recognize its adversaries and seek to deal with detractors through permanent open discourse.

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GREEN SUPPLY CHAIN MANAGEMENT AS AN ORGANIZATIONAL INNOVATION

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Abstract

Green Supply Chain Management (GSCM) is a relatively new add-on to management science. The companies start to understand that external stakeholders require more focus on sustainability. The growing interest in this field both by practitioners and academics has led to many different approaches to this innovative organizational change. Hence, a lot of research has been carried out resulting in multiple frameworks for integrating environmental issues into organizational strategies. The objective of the paper is to review the recent literature on GSCM. The analysis of adoption and implementation of GSCM practises will be based on secondary data leading to determination of further research directions. Special attention will be given to drivers and barriers of GSCM practices.

Keywords: Green Supply Chain Management, EMS, sustainability

JEL Classification: L90, M10, R40

1. Introduction

The new logistics concepts are based on several important factors which create new conditions of management. They consider the flow of real processes as an integrated system of partial operations subordinated to a corporate strategy. Integral approach to logistics functions along with enterprise business strategy manifests itself in many basic problems, and includes in particular (Ruben, 1994):

- consistent orientation of business operations towards market needs,
- application of the principle of material flow integration process in an enterprise,
- joint consideration of material and information flows which is the essence of enterprise logistics processes,
- top management commitment in implementing the logistics concept,

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- elimination of thinking and acting in a segmental way and adapting comprehensive and constant readiness to implement technical and organizational innovations.

As one can see, thinking about logistics activities in the supply chain is mainly focused on economic aspects and efficiency. However, thinking in terms of organizational innovation, makes you look more broadly at whole supply chains and additionally taking into account other issues, such as environmental ones.

2. Supply Chain Management as a result of integration

All supply chains are to a certain extent integrated. The objective of greater integration is to coordinate resources and needs of the chain members to optimize the results of the entire chain. The integration process requires appropriate management skills, processes and technologies. Integration is a continuous process and should not be treated as the ultimate goal. Factors contributing to integration are (National Research Council Staff, 2000):

- increasing cost competition,
- shorter product life cycles,
- faster product development cycles,
- globalization and mass customization,
- higher quality.

The perception of supply chains as a set of integrated processes rather than separate businesses and functions can help to improve performance. Hence complex activities can be coordinated, and those that do not add value, can be eliminated. The integration of key processes produces the best results.

Trust and commitment are most often mentioned in the literature as a distinguishing strength of the relationship between businesses. Trust is essential when we talk about further cooperation and sharing of information. Without it, it is impossible to adapt supply chain management approach. From an economic point of view, trust seems to be the result of analysis of the perceived cost against the perceived (economic) benefit from the interaction. Trust can limit opportunistic behavior (Williamson, 1979; 1993). The commitment increases the chances of successful implementation of supply chain integration relationships. Such actions cause greater involvement and increase the durability and strength of ties between the companies. Maintaining partnerships and cooperation between companies is not easy. Companies look for the benefits of cooperation, but also appreciate the advantages of freedom of choice. If, therefore, relationships

with other companies are to last, the benefits arising therefrom must be greater than the costs of their maintenance and the potential value of other missed opportunities (Coulson-Thomas, 2005).

It is clear that the scope of a term “supply chain management” has undergone changes over the years. Initially regarded as a kind of an operational technique it gradually started to be regarded as a philosophy of a company covering an increasing number of tasks. Despite the lack of consensus on a uniform definition of SCM, there is no doubt that it is one of the key terms in both the theory and business practice in recent years. Cooper, Lambert and Pagh stated that there is definitely a need to integrate operations in the supply chain that go beyond logistics. SCM understanding evolved from the integration of logistics in the supply chain to integration and management of key processes in the chain (Cooper et al., 1997). At the present time supply chain management is gaining a new dimension. In addition to a logistics aspect in supply chain management (e.g. supply synchronization, integrated production planning) one can talk about quality, design, environmental relationships (greening of supply chains). It should be noted that in contrast to the traditionally understood environmental management, the concept of green supply chain covers all stages of the product life cycle, from the extraction of raw materials, then design, manufacturing and distribution phase, product usage until its final disposal at the end of the product life cycle.

3. Green Supply Chain Management

Goleman notices that the supply chain of such a simple product which is a glass jar, consists of 1,959 links. To finish its production 659 chemical substances are needed, and each has an impact on the environment and humans. 220 of them are emitted to the atmosphere (Goleman, 2009). This example shows the increasing importance of Green Supply Chain Management (GSCM). There are many variations in terminology characterizing the concept of GSCM, some of them are enlisted here (Sarkis et al., 2010):

- sustainable supply network management;
- supply and demand sustainability or corporate social responsibility networks;
- supply chain environmental management;
- green purchasing and procurement;
- environmental purchasing;
- green logistics and environmental logistics;
- sustainable supply chains.

The common thing linking these terms is taking ecological issues into consideration when performing any inter-firm activities. GSCM has become a management approach decreasing environmental risks and increasing ecological efficiency along the supply chain (Van Hock & Erasmus, 2000). Thus GSCM has become an important innovation helping to develop win-win strategies that make organizations achieve profits and other objectives. The major differences between traditional SCM and GSCM are presented in Table 1. Conventional SCM concentrates more on final products. The harmful environmental effects are not always taken into consideration when planning and executing production and distribution. Companies rather focus on economic performance. Ecological requirements should be new criteria for manufacturing and distribution and as a result it can bring benefits of financial character. One of the most often identified practices necessary for successful implementation of GSCM is supplier collaboration and commitment in green purchasing. Green purchasing means buying materials meeting specific environmental criteria. There is a wide range of opportunities in creating innovations in this area as there is not much research on this topic.

Table 1. Differences between the Green Supply Chain Management and Conventional Supply Chain Management

	Characteristics	Green Supply Chain Management	Conventional Supply Chain Management
1	Objectives	Ecological and Economic	Economic
2	Ecological Optimization	High Ecological Impacts	Integrated Approach Low ecological impacts
3	Supplier Selection criteria	Ecological Aspects Long term relationship	Price Switching suppliers quickly Short term relationship
4	Cost Pressure	High	Low
5	Flexibility	Low	High
6	Speed	low	High

Source: Luthra, S., Kumar, V., Kumar, S., Haleem, A. (2011). Barriers to implement green supply chain management in automobile industry using interpretive structural modeling technique: An Indian perspective. *Journal of Industrial Engineering and Management*, 4(2), 231-257.

Green Supply Chain Management can offer multiple benefits but it can also be very challenging. Abbasi and Nilsson (2012) proposed major challenges facing GSCM and they were: costs, complexity, operationalisation, mind-set and cultural changes, as well as uncertainties. Most often identified drivers of Green Supply Chain Management are: environmental pressures

(Lamming & Hampson, 1996; Zhu & Geng, 2001; Zhu & Cote, 2004; Zhu et al., 2005; Kushwaha, 2010), government policy (Lamming & Hampson, 1996; Zhu & Cote, 2004; Zhu et al., 2005; Kushwaha, 2010), customer pressures (Lamming & Hampson, 1996; Zhu & Cote, 2004; Zhu et al., 2005; Kushwaha, 2010), competitiveness (Zhu & Cote, 2004; Zhu et al., 2005; Kushwaha, 2010; Carter et al., 2000; Walker et al., 2008) and financial performance (Rao & Holt, 2005).

Seeing all the potential benefits which can be achieved by firms of different size and type one could expect a huge interest in green practices. But different companies expect different results and their approaches to this issue are based not only on advantages but also barriers and relationships between supply chain members. According to Testa & Iraldo (2010) the three most diffused strategic approaches that favour the adoption of GSCM practices by companies are the following:

- “reputation-led”: starting co-operative “green” activities with suppliers (i.e. leading to reduction of transport emissions) and making the audience aware of this can significantly contribute to positive corporate image;
- “efficiency-led”: reduction in the use of raw materials can lead to cost savings and enables offering a cost-competitive product to the market;
- “innovation-led”: GSCM can also be perceived as the result of an innovation leader’s strategy. Innovative GSCM-related practices can create an opportunity to strengthen leadership and create a gap with respect to their competitors.

Innovativeness is organisation’s willingness or ability to change their processes, products and management systems and is usually a result of future orientation. Supply Chain Management itself can be called an innovation because still many firms find it difficult to accept this collaborative approach. Organizational innovations can be seen at different levels and can also be an adoption of ecological or sustainable issues on an inter-firm level. And more and more firms are aware of it. According to a report from 2013 prepared by Handfield et al. (2013) sustainability pressure has emerged as a very serious trend. More than 55% of studied companies stated that green issues are part of their logistics strategy. And there is a great deal of uncertainty in the implementation of GSCM, especially in terms of measurement systems. There are benefits of environmental management systems (even financial ones) stemming from adoption of systems such as ISO 14000 (Fura, 2013) and companies believe that what brings benefits for a single company can certainly yield more synergy benefits for the whole group of firms (supply chains).

In another report only 10% of surveyed managers say their companies fully tackle GSCM practices and 40% report that their organisations are largely addressing them (MIT Sloan Management Review and The Boston Consulting Group, 2013). Hence one can expect a growing interest in this form of an innovative solution. But apart from advantages there are many difficulties in implementation of GSCM strategies.

Most often identified barriers for Green Supply Chain Management are: initial investments (Yen & Yen, 2012; Mathiyazhagan et al., 2013; Muduli et al., 2013; Giunipero et al., 2012), top management commitment (Muduli et al., 2013; Giunipero et al., 2012), lack of sustainable guidance (Mathiyazhagan et al., 2013; Muduli et al., 2013; Giunipero et al., 2012) and economic uncertainty (Mathiyazhagan et al., 2013; Giunipero et al., 2012).

One can try to sort out the barriers according to their type. These types of barriers are (Khushbu & Shah, 2014): organizational barriers, informational barriers, customer barriers, technology barriers, government barriers, financial barriers, cultural barriers and others. Yet another distinction can be internal and external barriers. Walker et al. proposed five barriers to GSCM implementation (organisational factors, regulation, customers, competitors and society). They were categorized as internal and external ones (Walker et al., 2008). Internal barriers are barriers related to the organization, including: cost of implementation, existing facilities, investment, and information systems, information dissemination and communication, lack of government regulations, and lack of management commitment. External barriers are the ones related to external environment (especially suppliers and customers) including: relationship with suppliers, lack of information, resources, and expertise, lack of trust, and products and customers' perspective (Khiewnavawongsa & Schmidt, 2013).

All these barriers have a negative impact on adoption of Green Supply Chain Management. GSCM as a new idea can be accepted but for many companies the usage of this knowledge might be limited by their organizational culture or lack of learning orientation.

4. Conclusion

Green Supply Chain Management (GSCM) is a relatively new add-on to management science. The companies start to understand that external stakeholders require more focus on sustainability. The growing interest in this field both by practitioners and academics has led to many different approaches to this innovative organizational change. Hence, a lot of research has been carried out. Integrating environmental issues into organizational strategies is of a great

importance but barriers of GSCM practices can be major obstacles limiting the adoption of this approach.

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CHARACTERISTICS OF BEHAVIOUR OF THE ORGANIC FOOD CONSUMERS

Tomasz Hermaniuk¹

Abstract

Since the early nineties in the international arena began the interest in the issues of sustainable consumption and production. One of the courses of action in this matter are efforts to increase consumer interest worldwide products and services, the impact of which on the environment would be as weak as possible. One important category of products, which have a significant impact on the environment are food products. Intensive agriculture focused on performance and reduce manufacturing costs leads to destructive actions that have adverse effects on the environment are very measurable. The aim of the paper is to present the results of consumer research on attitudes, opinions and attitudes towards organic food products. In a society growing awareness of the importance of organic production for society, but the interest in organic products appears to be relatively small. On the one hand, it is certainly related to the availability and the level of prices for organic products, on the other hand may be due to lack of information a large part of consumers.

Keywords: organic food, quality, marketing of food products, food industry, consumers' attitude

JEL Classification: L90, M10, R40

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1. Introduction

Since the beginning of the nineties of the last century global interest in the issues of sustainable production and consumption is continuously growing. One of the more important branches of industry, which has a significant impact on the environment is the food production sector. The contemporary intensive agriculture is primarily focused on productivity improvement and the reduction of manufacturing costs. This consequently leads to destructive actions that have measurable adverse effects on the environment and society in general. In recent years in many

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countries, especially in the developed economies, activities are carried out, which are aimed at the reduction of negative results of the relationships between economic growth and resulting from it harmful environmental effects of the production and consumption. One of the possible solutions of this problem could be the development of the organic agriculture. This kind of agriculture is aimed to promote and enhance ecosystem health, including biological cycles and the biological activity of the soil. This approach is gaining more and more interest from consumers each year. People all over the world are realizing benefits resulting from the consumption of ecological food products. They would like to consume more organic food. However, there are some significant factors limiting the demand and supply of this kind of food.

2. The organic food market

Organic agriculture is a production management system that aims to promote and enhance ecosystem health, including biological cycles and the biological activity of the soil. It is based on minimizing the use of external inputs, and represents a deliberate attempt to make the best use of local natural resources. Methods of production are selected to minimize pollution of air, soil and water. Synthetic pesticides, mineral fertilizers, synthetic preservatives, pharmaceuticals, genetically modified organisms (GMOs), sewage sludge and irradiation are prohibited in all organic standards (Food and Nutrition in Numbers, 2014).

Consumer interest in organic food is constantly increasing worldwide. The value of the organic food market in the world in 2011 was estimated at 62.9 billion dollars. For comparison, in 1999, it was only 15.2 billion USD. This means a more than fourfold increase in the reported period (www.organic-world.net). The growing interest in organic crops, livestock, and forest and fish products is mainly driven by health and food quality concerns, although the primary aim of organic production is to ensure that food production and processing methods respect the environment. The natural response to the growing demand is the increase in supply. The area of agricultural land intended for the production of organic food increased worldwide from 11 million hectares in 1999 to 37.2 million hectares in 2011. In 2011 the whole world registered 1.8 million organic producers. More than three-quarters of them operate in Asia, Africa and Latin America. The country with the greatest number of producers is India (547,591), followed by Uganda (188,625) and Mexico (169,570) (Willer, 2013).

These numbers indicate that there are significant differences in the level of development of organic production in different parts of the world. Also in Poland the organic food market is

growing systematically for many years. The first legislation in this regard introduced the law on organic farming in 2001. Since 2004 Poland has implemented the Community rules regulating issues connected with organic farming. In recent years there can be observed a systematic increase in the importance of organic production throughout the European agricultural sector. Despite the difficulties, the number of organic agricultural producers in Poland increased between 2004-2012 from 3,705 to 25,944, which means a sevenfold increase. At the same time, the number of organic processing plants increased from 55 to 312. These figures testify to the rapid acceleration of growth processes taking place in organic agriculture in Poland after 2004 (Zdrojewska, 2013).

In comparison, the European Union, by 2012, registered over 239,000 ecological farms. The majority of them were located in Italy (43,852), Spain (30,462) and Poland (25,944). Besides them there were about 36,000 food processing plants. Most of them were located in Germany (9,183), France (8,957) and Italy (5,873). In 2012, in the European Union countries, the area of organic agricultural land occupied more than 8.7 million hectares. The largest areas of organic farmland were located in: Spain (1,593,197 ha), Italy (1,167,362 ha) and France (1,032,939 ha) (Zdrojewska, 2013). Between 2012 and 2013 was also noticed an increase in organic agriculture's share of farming in the region. Organic agriculture share of agricultural land increased by 1.5 percentage points in the EU other and EFTA group and 0.9 percent in European Union (Central and Eastern), while Central Asia and South Eastern Europe showed more modest increases (FAO Statistical Yearbook, 2014).

Important and slightly alarming may be the fact that contemporary agricultural sector of organic production is becoming progressively dominated by corporate entities that may not share the intangible benefits of ecological philosophy. Corporations are beginning to understand more clearly the need of focusing more on protecting their reputation and that their products should provide a social benefit (Hollender, 2010). Companies are realizing that they can earn profit and competitive advantage by providing the customers with the value they need and expect. To get more successful in future years, the food companies' product portfolio will have to include the offer of ecological products. This means that in the foreseeable future can be expected an increase in the supply of organic food. In the developing organic food market can be found products that are increasingly complex and highly processed. This puts an additional burden on authorities operating the system of certification, control and traceability of organic products. To

ensure the authenticity of the food labeled and sold as organic, it is necessary to ensure a robust and precise control system.

In 2010, a global Green Brands Survey concluded that “consumers plan to spend the same or more money on green products in the coming year, with more than 70 percent of consumers in China, India and Brazil saying they will spend more”. A strong global demand for greener products was indicated by over 60 percent respondents in all countries surveyed, indicating that they want to purchase products from environmentally responsible companies (www.cohnwolfe.com). This survey demonstrates the growing desire of consumers for more sustainable products. It is striking that an interest in the environment and sustainability appears to be on the rise in markets all across the world. Support for organic farming should be strictly linked to the level of organic food market supply. Therefore, a rapid increase in the number of organic farms requires a series of parallel activities aimed at stimulation of the development of the internal market for organic food. Otherwise, its high growth rate will not lead to adequate growth of the food market and its products (Łuczka-Bakuła, 2013).

3. Results of the research

The aim of the study was to investigate attitudes, opinions and behaviour of consumers of the organic food products. The study was conducted in November 2014 on a sample of 377 respondents. The method of research was a survey, a questionnaire was used as the tool. The study sample consisted of 373 people and was composed of 234 females (62.73% of respondents) and 139 men (37.27%). In the group of participants 54.69% lived in towns with over 100 thousand residents, 12.87% lived in cities the size of 20-100 thousand residents. Cities up to 20 thousand represented 11.80% of participants and 20.64% lived in rural areas. When it came to the level of affluence, the largest group, 70.24%, identified it as average and 17.69% estimated it to be high or very high. Low and very low levels of income reported total 12.07% of respondents. The structure of the survey sample reflects a group of consumers showing interest in organic food consumption. This type of food is purchased primarily by residents of large cities, with secondary and higher education, being in a good financial situation (Hughner, McDonagh, Prothero, 2007).

In the first part of the survey, respondents were asked to declare the frequency with which they buy different kinds of organic foods. The results are shown in Table 1.

Table 1. Frequency of purchase of various types of organic foods (1 - means “never”, 4 - means “each time”)

Specification	Average	Standard deviation
Fruits and vegetables	2.88	0.71
Honey and sweeteners	2.79	1.04
Bread	2.70	0.83
Dairy products	2.56	0.83
Juices and beverages	2.45	0.86
Meat and cold cuts	2.43	0.82
Fats, oils	2.39	0.93
Pasta, groats, rice	2.34	0.91
Coffee and tea	2.10	0.94
Fish and fish products	2.05	0.85
Snacks	1.77	0.81
Mayonnaise, ketchup, mustard, sauces	1.70	0.76
Sweets	1.70	0.81

Source: Developed on the basis of own studies.

As may be concluded from the data presented in the Table 1, the most frequently purchased organic food products were: fruits and vegetables (2.88 with the lowest standard deviation - 0.71), honey and sweeteners (2.79), bread (2.70), and dairy products (2.56). In turn, the least frequently purchased by consumers organic products turned out to be: snacks (1.77), condiments (mayonnaise, ketchup, mustard, sauces), and sweets (1.70). Such a distribution of results can indicate the preferences of consumers for types of organic foods. This may of course result from the availability of different categories of products in the market. Among all products indicated, fruits and vegetables seem to be the easiest accessible products.

Currently prevailing fashion for ecology and living in harmony with nature means that almost everything that has in its name the word “organic” or its derivatives, enjoys greater interest of consumers. Many entrepreneurs operating in food business take advantage of this situation by continuously extending their offers of organic products. These products are offered not only in, emerging at an impressive speed, specialty stores, but also on the shelves of almost every store. However, among this range can also be found products which are only pretending to be organic products (UOKiK, 2014).

Sale of organic food takes place through several distribution channels. These include: traditional direct sales, specialty stores, general stores and the Internet. Until recently, organic food producers sold their products mostly directly or through specialty stores. These stores offer an average of about 300-500 of organic products (Łuczka-Bakuła, 2009). However the forms of distribution of organic food are evolving. Currently, many large retailers have introduced to their offerings organic products. They can be found increasingly often even in the discount stores.

The next question of the questionnaire related to sources of supply of organic products. The results are shown in Figure 1. In this question, respondents could choose several answers.

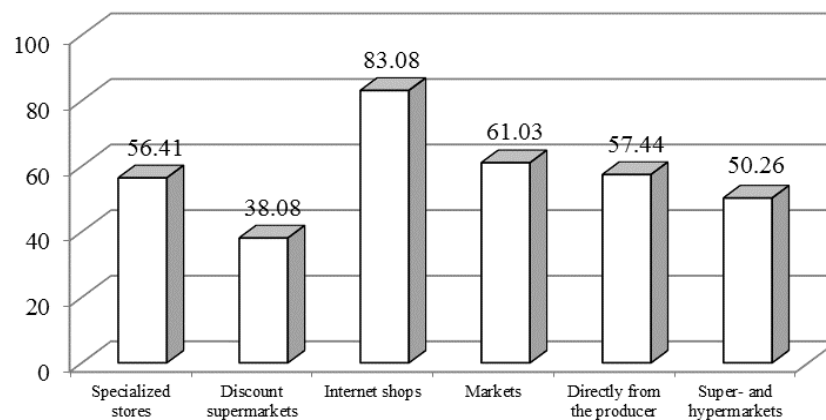


Fig. 1. Places of purchase of organic food

Source: Developed on the basis of own studies.

Among the respondents purchasing organic food, 83.08%, declared that they buy it on the Internet. In second place for purchases were traditional markets (61.03%). In third place for purchases in terms of frequency, 57.44%, was the direct channel – the farmer. A little less important (56.41%) appeared to be specialty shops. Fewer respondents (50.26%) buy organic food in supermarkets. The fewest amounts of respondents buy it in discount supermarkets. Presented results allow one to conclude about consumers' routines related to purchasing. The results clearly show the large role of the Internet as a channel of sale of organic food. They also indicate places in which should be concentrated marketing activities aimed at stimulation of demand.

The greatest driver for developing greener products is when the marketplace demands it. When the customer asks for products that have lower environmental impacts, the company should notice it and prepare proper offer.

In the survey respondents were asked whether they would like to consume more ecological food. The results are shown on Figure 2.

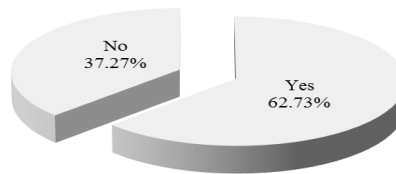


Fig. 2. Willingness of more frequent consumption of organic food

Source: Developed on the basis of own studies.

As is apparent from the data presented in Figure 2, the vast majority (62.73%) of respondents declare their willingness for more frequent consumption of organic food. This demonstrates that in the future can be expected an increase in demand for this type of food. To actually be able to increase sales of these foods, it seems necessary to fulfill several conditions. The first element is the increase of consumer awareness. An important factor limiting the consumers' interest in organic food is also the relatively high purchase price compared to conventional food. In addition, the range of certified organic products is relatively small. It seems that changing these elements could give a chance to run greater demand.

The level of consumer awareness about organic food is an important factor increasing the demand for it. Therefore, in the next question, respondents were asked to assess their own level of knowledge about organic food. The results are shown in Figure 3.

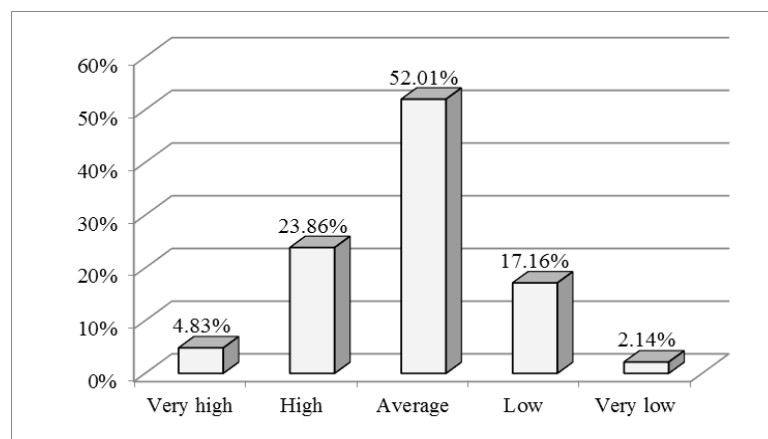


Fig. 3. Self-assessment of consumers own knowledge about organic food

Source: Developed on the basis of own studies.

As was indicated earlier, the level of knowledge and consumer awareness is one of the elements that may play an important role in development of the organic food market. The data presented in Figure 3 indicates that the majority of respondents (52.01%) assess their knowledge concerning organic foods at an average level. Nearly a quarter of respondents (23.86%) assess their knowledge at a high level. Nearly 5% of participants declared a high level of knowledge. On the other hand, 17.16% of respondents felt that their knowledge in this area is low and 2.14% considered it to be very low.

The obtained results allow one to conclude that the level of knowledge of surveyed consumers is not at a very high level. Therefore, it seems necessary to take appropriate actions, which will give a chance to change the status quo. However, to carry out an effective information campaign, it is necessary to have knowledge of the reliable media from which the consumers derive their knowledge. Therefore, in the next question, the respondents were asked to indicate the sources of information they use most often. The results are shown in Figure 4.

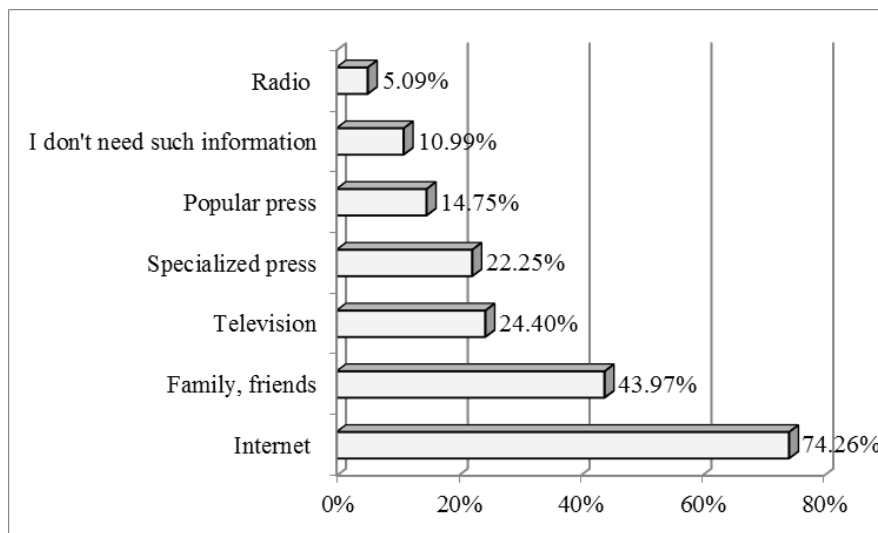


Fig. 4. Sources of information on the organic food products

Source: Developed on the basis of own studies.

The results presented in Figure 4 illustrate clearly the most frequently used sources of information. The most important of them (74.26% of answers) is the Internet. As an universal and common medium it allows almost unlimited access to much valuable information. The second most frequently indicated source (43.97%) was found to be people directly from the consumers' own environments (family and friends). As the marketing experience indicates it is the most

reliable source of information. Although it has no mass character, its strength stems from the trust that people usually have for these groups. The third in terms of relevant sources of information was a television (24.40%). Slightly fewer people declared that they seek information in the specialized press (22.25%). The least group of respondents (5.09%) declared that they obtain such information from the radio.

The presented results allow us to conclude the possible effective ways of delivering to consumers the information they seek. Special attention should be paid to the Internet. Its universal character and constantly growing range allows the effective reach of a very wide group of customers representing various social groups.

Consumers that have knowledge on organic products will seek relevant information on the product packaging. This is a very important source of many important information that can significantly improve consumer decisions. Therefore, in a subsequent question, respondents were asked to indicate what kind of information they usually seek on food packaging.

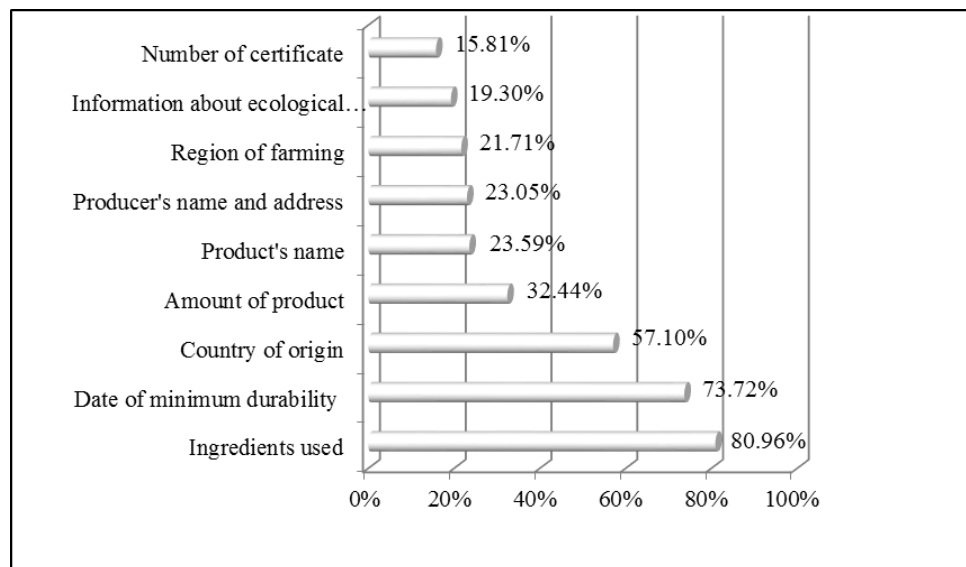


Fig. 5. Information searched by customers on packages of food products

Source: Developed on the basis of own studies.

As is apparent from the data presented in Figure 5, the largest part of respondents checks the list of the ingredients used in a product. This is undoubtedly one of the most important information that consumers can find on the package. Further information checked by consumers relates to the date of minimum durability of a product (73.72%), and the country of origin of the product (57.10%). It appears that relatively few consumers are seek information related to the

characteristics of organic products. Of the respondents, less than 16% of search for information on the certificate number, and 19.30% check data showing the organic nature of the product.

4. Conclusions

The market is demanding greener products and the demand for organic food is continuously growing. Manufacturers need to fully realize the growing pull for products with enhanced environmental and social benefits. The study reveals some facts regarding behaviour of organic food consumers. Probably the most important fact is that the vast majority (62.73%) of respondents declare their willingness to consume more frequently organic food. This demonstrates that in the future can be expected an increase in demand for this type of foods. To achieve this it seems necessary to bring the level of knowledge of consumers to a higher level. Therefore, it seems necessary to take appropriate actions, which will lead to the better education of customers. This can be done by effective delivery to consumers of the information they need and understand. In this field the Internet seems to be the most useful medium, especially when the group of young consumers is taken into consideration. Special attention should be also paid when it comes to packaging of organic food. Probably the labels and used symbols should be more exposed and visible. Taking this kinds of actions gives a chance for the increase of demand for organic food in the close future.

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Chapter IV – MACROECONOMICS: POLICY ANALYSIS

A COMPARISON OF MACROECONOMIC PERFORMANCE IN A CONTEXT OF CONFLICTING POLICY OBJECTIVES

Antonio Pavone¹, Paola Pianura²

Abstract

This study seeks to assess macroeconomic performance under conflicting policy objectives. Given the availability of data for the period 2008-2011, we select 60 upper-middle and high income economies spanning several large geographical regions. The performance were analyzed by directional distance functions under DEA model. Supplementary analysis is performed in terms of pairwise dominance comparison. The analysis revealed that the average efficiency scores difference between European countries and non European countries seems to be not much difference. However, grouping European countries by four sub-regions, differences are observed: North and West economies are more efficient than South and East countries. Distinguishing the development economies, according to IMF classification, advanced countries are more efficient than the emerging. Public policy decisions often require the establishment of a balance between conflicting objectives. The research suggests that DEA and pairwise dominance comparison are useful tools to find the best balance and guide the policymakers to improve the effectiveness of the policies. This is the first paper that investigates a wide range of economies, evaluating, at the same step, conflicting objectives of macroeconomic policy inside a performance perspective.

Keywords: macroeconomic performance, efficiency, data envelopment analysis, dominant units

JEL Classification: C61, O11

1. Introduction

After the financial crisis of 2008/2009, fiscal austerity has become the new principle for public policy in Europe and the U.S. However, for government it is not easy to restore the fiscal balance, as it can trigger negative externalities such as a recession, rising unemployment, deflation and increasing poverty.

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Traditionally, the evaluation of macroeconomic performance has been based on four objectives: growth rate, inflation, unemployment and trade balance which are envisaged as the “magic diamonds” of the OECD (e.g., Economic Outlook, 1987). However, this procedure has two limitations: first, these dimensions are incomplete because they are not able to take into consideration all the policy demands. For example, the UK government pursues not only high and stable economic growth, low inflation, high employment, but also sustainable economic growth, in terms of social and environmental impacts and sound government finances.

Second, this measure contains an arbitrary and unrealistic weighting scheme to aggregate the respective indicators: implicitly, assigning a unit weight to each component, each index treats its respective indicators as being equally important, no matter how strong a macroeconomic tradeoff occurs between various policy instances.

Several studies have been undertaken for overcoming these limitations. We considered some. Lovell (1995) considers the four magic diamonds to assess macroeconomic performance of ten Asian economies for the period 1970-1988, using the output-oriented Free Disposal Hull approach (Deprins, Simar, Tulkens, 1984). Lovell, Pastor. and Turner (1995) examine the macroeconomic performance of 19 OECD countries over the period 1970-1990, adding two environmental disamenities (carbon and nitrogen emission) to the magic diamonds list and use the non-radial Slack-Based Measure, under Data Envelopment Analysis approach (Charnes, Cooper & Rhodes, 1978), to assign a performance score to each country. Somnath Chattopadhyay and Suchismita Bose (2015) adopt the Multiple Criteria Decision Making, including fiscal deficit and GDP per capita to the standard four indicators. Camelia Burja, Vasile Burja (2013), applying a DEA approach to a selection of new EU Member States to estimate their performances, use GDP as an output variable and the following indexes “Global Competitiveness Index”, the “Human Development Index” and the “Environmental Performance Index” as input variables.

The novelty of our study is twofold: first, we have added, to the four dashboard indicators, per capita GDP, fiscal balance, Carbon Dioxide Emissions and Human Development Index. In such way, we try to take into account, simultaneously, economic, social and environmental goals. Second, under the DEA frame, we have applied Directional Distance Functions (Chambers et al. 1996) to measure macroeconomic performance, because it provides an asymmetrical treatment of good and bad outputs.

Supplementary evaluation analysis is done in terms of pairwise dominance comparison among countries. This tool does not need a measure to assert if a country is performing better than another to pursue political goals.

The empirical analysis proposed is limited to “upper-middle” and “high income” economies. Given the availability of data for the period 2008-2011, we have selected 60 countries spanning several large geographical regions.

The layout of the paper is as follows: the next section provides the methodology used to evaluate economic performance. Section 3 presents the theoretical justification for the selection of variables in constructing a macroeconomic performance, data and results. A Summary and concluding notes are reported in the last section.

2. Methodology

Following Koopmans 1951, Lovell, Pastor and Turner 1995, the macroeconomic decision-making apparatus of a country is formulated by its bureaucracy, called helmsman. The relative performance of a country is evaluated with reference to the outputs produced or the services provided, without reference to the resources consumed in the process. So, each country uses exactly one helmsman and a single constant input, with the value equal to one.

Under the assumption of constant return to scale in assessing the macroeconomic performance, we adopt the following mathematical programming formulation:

$$\max \left\{ \beta: \sum_{j=1}^k \lambda_j p_{jm} \geq p_{om} + \beta |p_{om}| \quad (r = 0, \dots, m), \right. \\ \left. \sum_{j=1}^k \lambda_j q_{jn} \leq q_{on} - \beta |q_{on}| \quad (s = 0, \dots, n), \right. \\ \left. \sum_{j=1}^k \lambda_j \geq 0, \quad \beta \geq 0, \quad \lambda_j \geq 0 \quad (j = 1, \dots, k) \right\}$$

where:

- country is indexed as $i = 1, \dots, o, \dots, k$
- good outputs vector p is indexed as $r = 0, \dots, m$
- bad outputs vector q is indexed as $s = 0, \dots, n$
- λ is a $k \times 1$ vector of intensity of variables.

Absolute values of p and q vectors are a simple alternative to handle negative data as well, (Kristiaan Kerstens, Ignace Van de Woestyne, 2011).

Additional analysis is proposed to evaluate macroeconomic performance. Here, the only constraints considered are expressed by an inequality assertion.

For each pair of countries (h_o, h_d) , h_o dominates h_d for which $(p_d' - q_d) \leq (p_o' - q_o)$, with at least one element of the vector inequality strict. Conversely, h_d is dominated by h_o .

Undominated countries, that never are dominated by other observations, are aptly called “efficient by default”.

This criterion has the virtue of providing, for countries dominated, the comparable dominant best practices to emulate.

3. Data, discussions and results

To take into account economic, social and environmental components, we consider the following indicators, distinguishing between good and bad outputs.

Good outputs:

1. Rate of growth of GDP (GGDP), as a proxy for economic growth (source World Bank).
2. Per capita GDP (PGDP) as a measure of the average wealth of the population of a nation (source World Bank).
3. Fiscal surplus/deficit as a proportion of GDP (FSDGDP) that captures the fiscal rectitude of a government and consists of keeping the national debt under control (source World Bank).
4. Current account balance as a proportion of GDP (CABGDP), which captures a country's external economic performance, whereas a deficit is regarded as a bad signal for the economy (source World Bank).
5. Human Development Index (HDI) is a composite indicator used to measure the social sustainability dimension of a country (source United Nations).

Bad outputs:

1. Unemployment rate is the proportion of the “economically active” population who are not working, as a signal of overall economic health (source World Bank).
2. Inflation or deflation rampage rate as a signal of price stability (Consumer Price Index data is available from World Bank). We assume that negative or positive deviations

from this threshold (2% as indicated by the European Central Bank) are detrimental for the economy.

3. The rate of Total Carbon Dioxide Emissions from the Consumption of Energy (source International Energy Statistics) on the Energy use (source World Bank) catches the national pollution concentration (TCDE).

We have restricted the evaluation to upper-middle and high income (World Bank definition) assuming homogeneity of behaviours across countries; however, the results produced by any performance assessment, should be handled with caution.

Due to missing data, the final sample used for analysis consists of 60 countries, listed in Appendix 1, according to their economic attributes and regional locations.

Countries span several large geographical regions: Europe accounts for three – fifths of the sample, nine countries are grouped in the East, eleven in the North, ten in the South and the remaining in the West. The high income countries are forty-one, thirty are OECD members, and twenty-seven are located in Europe. The advanced Economies are thirty-three and twenty-four countries are concentrated in Europe.

Table 1 provides a statistical overview of the data used in the analysis distinct by geographic region, income groups and economic classification.

Table 1. Average of indicators by geographical and economic regions

Groups	GGDP	PGDP	FSDGDP	CABGDP	HDI	Unemployment rate	Inflation rate (*)	TDCE
East Asia & Pacific	102.62	36,724.19	-1.21	5.23	0.87	4.28	2.70	3.23
Europe & Central Asia	100.19	30,037.22	-3.23	-2.13	0.84	9.93	4.13	2.32
Latin America & Caribbean	103.67	11,362.88	-2.87	-5.03	0.73	8.97	6.89	2.20
Middle East & North Africa	102.94	39,861.34	1.37	9.40	0.80	6.82	4.09	3.65
North America	100.68	44,222.04	-4.78	-2.78	0.90	7.96	1.95	2.35
Sub-Saharan Africa	102.81	10,866.50	-5.05	-2.25	0.64	23.41	7.75	2.53
High income	100.65	36,562.01	-2.52	0.93	0.86	7.59	3.19	2.55
Upper middle income	102.57	12,757.60	-2.99	-3.92	0.72	13.79	7.06	2.52
Advanced Economies	100.26	37,297.93	-3.14	-0.07	0.88	7.49	2.65	2.57

Emerging Market and Developing Economies	102.49	18,911.31	-2.09	-1.26	0.75	12.07	6.57	2.51
Gran Total	101.26	29,023.95	-2.67	-0.61	0.82	9.55	4.41	2.54

(*)For the evaluation we use the deviation from the ECB's 2% target rate.

Source: own work.

Sub-Saharan Africa shows an inferior condition with respect to other geographical areas. Comparing emerging economies with advanced ones, the first performs worse on all indicators with the exception of GGDP and TCDE.

In appendix II, for each country, there is reported the mean performance of four-years and the dominance occurrences within the observations set. Countries are ranked with respect to the score and the number of dominating relationships. Scores vary from 0 (best) to 0.55 (worst). The top performers are: Iceland, Kuwait and Norway. However, in terms of number of times that a country dominates others, Norway stands out (199 times), followed by Kuwait (14 times) and Iceland (10 times).

Table 2. Average of indicators by best performers

Country	GGDP	PGDP	FSDGDP	CABGDP	HDI	Unemployment rate	Inflation rate	TDCE
Norway	100.06	59,068.68	14.51	13.37	0.94	3.17	2.41	1.43
Iceland	98.80	38,084.04	-9.03	-12.51	0.89	6.22	8.52	0.64
Kuwait	100.81	85,367.31	17.51	35.82	0.81	1.60	5.83	2.81

Source: own work.

On the other side, the worst performers are Bosnia and Herzegovina, Greece, Jamaica, Serbia and South Africa. Ranking in terms of the number of times that a country is dominated by others. The worst hit is Jamaica (352 times) followed by Greece (175 times), Serbia (156 times) South Africa (119 times) and Bosnia and Herzegovina (90 times).

Table 3. Average of indicators by worst performers

Country	GGDP	PGDP	FSDGDP	CABGDP	HDI	Unemployment rate	Inflation rate	TDCE
Bosnia and Herzegovina	101.04	8,716.29	-2.34	-9.16	0.73	25.70	3.22	3.58
South Africa	102.21	11,439.27	-3.56	-3.91	0.63	23.95	7.05	3.34
Serbia	101.06	11,429.14	-3.24	-10.64	0.74	17.13	9.45	3.07

Greece	95.21	28,723.95	-11.46	-11.34	0.86	11.85	3.35	3.42
Jamaica	98.77	8,390.79	-6.73	-12.77	0.71	11.77	12.93	3.13

Source: own work.

Evaluating performances for homogeneous groups, East Asia & Pacific performs better than other geographic areas. The Sub-Saharan Africa performs the worst. European and non-European countries show similar score averages. However, grouping European countries by four sub-regions, more differences are revealed: the North and the West economies are more efficient than the South and the East. With respect to dominance relationships, the differences are much more pronounced. The North has 7.49 times the probability to dominate other countries with respect to the South, the West 7.83 times and the East 3.27 times. Distinguishing economies between advanced and emerging, the advanced ones are more efficient. A difference has also been found between high income and upper middle income – the first group performs better than the second.

Table 4. Summary of results

Group	No. of countries	Mean score	Number of Dominated	Number of Dominating
East Asia & Pacific	6	0.18	21	190
Europe & Central Asia	36	0.27	1,071	1,249
Latin America & Caribbean	7	0.30	441	113
Middle East & North Africa	6	0.26	40	114
North America	2	0.27	17	101
Sub-Saharan Africa	3	0.47	178	1
Non Europe	24	0.28	697	519
Europe & Central Asia	36	0.27	1,071	1,249
Eastern Europe	9	0.34	225	125
Northern Europe	11	0.17	87	672
Southern Europe	10	0.37	718	65
Western Europe	6	0.16	41	387
High income	41	0.23	647	1,611
Upper middle income	19	0.37	1,121	157
Advanced Economies	33	0.23	584	1,443
Emerging Market and Developing Economies	27	0.37	1,184	325
Grand Total	60	0.27	1,768	1,768

Source: own work.

4. Conclusion

Macroeconomic performance is a complex and multidimensional relationship. No one government is able to fit all policy goals simultaneously because, very often, these are conflicting

interests. To understand how priorities could change under conflictive political instances, we use DEA mathematical programming. It allows for unequal weighting, reflecting the political priority assumed by the policy maker. In that framework, we apply the directional distance function because it handles good and bad economic objects asymmetrically.

Additional analysis is done in terms of dominance relationships. What is important in this criterion is the frequency: for a country it is more worthy of attention to dominate many other countries rather than a few, as it is more worrying to be dominated by many others than by a few.

Final remarks may suggest a fruitful avenue for future research. An examination of the shadow prices may provide some useful information on policy impacts to ensure sustainable development. Shadow prices, in fact, measure the marginal sacrifice needed, in terms of lower growth in GDP to comply with some environmental and social restrictions. This information also allows us to compare the impact on diverse country systems with different regulatory systems.

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Appendices

Table 1. Selected countries according to categories and locations

Country	Region	EU	Income group	Economies
Iceland	Europe & Central Asia	N	High income: OECD	Advanced Economies
Kuwait	Middle East & North Africa		High income: non OECD	Emerging Market and Developing Economies
Norway	Europe & Central Asia	N	High income: OECD	Advanced Economies
Sweden	Europe & Central Asia	N	High income: OECD	Advanced Economies
Switzerland	Europe & Central Asia	N	High income: OECD	Advanced Economies
Malaysia	East Asia & Pacific		Upper middle income	Emerging Market and Developing Economies
Luxembourg	Europe & Central Asia	W	High income: OECD	Advanced Economies
France	Europe & Central Asia	W	High income: OECD	Advanced Economies
Estonia	Europe & Central Asia	N	High income: OECD	Advanced Economies
Netherlands	Europe & Central Asia	W	High income: OECD	Advanced Economies
Korea, Rep.	East Asia & Pacific		High income: OECD	Advanced Economies
Austria	Europe & Central Asia	W	High income: OECD	Advanced Economies
Peru	Latin America & Caribbean		Upper middle income	Emerging Market and Developing Economies
Finland	Europe & Central Asia	N	High income: OECD	Advanced Economies
New Zealand	East Asia & Pacific		High income: OECD	Advanced Economies
Czech Republic	Europe & Central Asia	E	High income: OECD	Advanced Economies
Singapore	East Asia & Pacific		High income: non OECD	Advanced Economies
Slovenia	Europe & Central Asia	S	High income: OECD	Advanced Economies
Germany	Europe & Central Asia	W	High income: OECD	Advanced Economies
Costa Rica	Latin America & Caribbean		Upper middle income	Emerging Market and Developing Economies
Canada	North America		High income: OECD	Advanced Economies
Australia	East Asia & Pacific		High income: OECD	Advanced Economies
Brazil	Latin America & Caribbean		Upper middle income	Emerging Market and Developing Economies

Japan	East Asia & Pacific		High income: OECD	Advanced Economies
Denmark	Europe & Central Asia	N	High income: OECD	Advanced Economies
Uruguay	Latin America & Caribbean		High income: non OECD	Emerging Market and Developing Economies
Slovak Republic	Europe & Central Asia	E	High income: OECD	Advanced Economies
Croatia	Europe & Central Asia	S	High income: non OECD	Emerging Market and Developing Economies
Bahrain	Middle East & North Africa		High income: non OECD	Emerging Market and Developing Economies
Belgium	Europe & Central Asia	W	High income: OECD	Advanced Economies
Lithuania	Europe & Central Asia	N	High income: non OECD	Emerging Market and Developing Economies
United Kingdom	Europe & Central Asia	N	High income: OECD	Advanced Economies
Malta	Middle East & North Africa		High income: non OECD	Advanced Economies
Colombia	Latin America & Caribbean		Upper middle income	Emerging Market and Developing Economies
Italy	Europe & Central Asia	S	High income: OECD	Advanced Economies
Portugal	Europe & Central Asia	S	High income: OECD	Advanced Economies
United States	North America		High income: OECD	Advanced Economies
Oman	Middle East & North Africa		High income: non OECD	Emerging Market and Developing Economies
Cyprus	Europe & Central Asia	S	High income: non OECD	Advanced Economies
Romania	Europe & Central Asia	E	Upper middle income	Emerging Market and Developing Economies
Latvia	Europe & Central Asia	N	High income: non OECD	Advanced Economies
Israel	Middle East & North Africa		High income: OECD	Advanced Economies
Hungary	Europe & Central Asia	E	Upper middle income	Emerging Market and Developing Economies
Bulgaria	Europe & Central Asia	E	Upper middle income	Emerging Market and Developing Economies
Spain	Europe & Central Asia	S	High income: OECD	Advanced Economies
Russian Federation	Europe & Central Asia	E	High income: non OECD	Emerging Market and Developing Economies
Poland	Europe & Central Asia	E	High income: OECD	Emerging Market and Developing Economies
Belarus	Europe & Central Asia	E	Upper middle income	Emerging Market and Developing Economies
Ireland	Europe & Central Asia	N	High income: OECD	Advanced Economies
Namibia	Sub-Saharan Africa		Upper middle income	Emerging Market and Developing Economies
Algeria	Middle East & North Africa		Upper middle income	Emerging Market and Developing Economies
Dominican Republic	Latin America & Caribbean		Upper middle income	Emerging Market and Developing Economies
Turkey	Europe & Central Asia	E	Upper middle income	Emerging Market and

				Developing Economies
Macedonia, FYR	Europe & Central Asia	S	Upper middle income	Emerging Market and Developing Economies
Greece	Europe & Central Asia	S	High income: OECD	Advanced Economies
Botswana	Sub-Saharan Africa		Upper middle income	Emerging Market and Developing Economies
Bosnia and Herzegovina	Europe & Central Asia	S	Upper middle income	Emerging Market and Developing Economies
Jamaica	Latin America & Caribbean		Upper middle income	Emerging Market and Developing Economies
Serbia	Europe & Central Asia	S	Upper middle income	Emerging Market and Developing Economies
South Africa	Sub-Saharan Africa		Upper middle income	Emerging Market and Developing Economies

Table 2. Efficiency scores and dominance relationship

Country	Mean score	Number of Dominated	Number of Dominating	Country	Mean score	Number of Dominated	Number of Dominating
Norway	0.00	0	199	Italy	0.30	27	31
Kuwait	0.00	0	14	Latvia	0.30	23	6
Iceland	0.00	0	10	Portugal	0.30	73	1
Sweden	0.02	0	116	United States	0.31	11	12
Estonia	0.08	0	25	Cyprus	0.33	42	0
Switzerland	0.09	4	176	Romania	0.33	46	6
Malaysia	0.10	0	20	Israel	0.34	9	19
Luxembourg	0.10	0	55	Hungary	0.34	31	23
France	0.11	10	44	Bulgaria	0.34	20	15
Netherlands	0.12	3	43	Russian Federation	0.34	12	18
Korea, Rep.	0.12	1	90	Spain	0.36	70	3
Austria	0.15	4	104	Algeria	0.37	19	10
Peru	0.16	2	18	Poland	0.37	15	11
Finland	0.17	7	76	Belarus	0.40	8	4
New Zealand	0.17	5	57	Ireland	0.40	22	2
Czech Republic	0.18	7	27	Namibia	0.40	6	0
Singapore	0.19	2	2	Dominican Republic	0.42	53	1
Slovenia	0.20	6	21	Turkey	0.44	77	6
Costa Rica	0.22	6	18	Botswana	0.45	53	1
Germany	0.22	4	92	Macedonia, FYR	0.46	56	2
Canada	0.23	6	89	Greece	0.46	175	0
Australia	0.24	0	7	Bosnia and Herzegovina	0.48	90	0

Brazil	0.24	10	30		Jamaica	0.51	352	0
Japan	0.24	13	14		Serbia	0.53	156	0
Denmark	0.25	6	46		South Africa	0.55	119	0
Uruguay	0.27	1	43					
Lithuania	0.27	9	4					
Slovak Republic	0.27	9	15					
Croatia	0.28	23	7					
Bahrain	0.28	3	23					
Belgium	0.28	20	49					
Oman	0.28	0	48					
United Kingdom	0.29	16	12					
Malta	0.29	9	0					
Colombia	0.30	17	3					

CREDIT RATING AGENCIES' DECISIONS AND I.S.D.A.'s CREDIT EVENTS: EFFECTS ON BANKING LIQUIDITY AND LEGAL CONTRACTS

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Abstract

This paper aims the research whether involving Credit Ratings Agencies (CRAs), regarding the provision of credit risk rating for the banking structured products, as well as the credit clauses of ISDA (International Swaps and Derivatives Association) agreements between banks, could affect the banking liquidity. The research work focuses on the existing regulation and the literature for CRAs and on whether a proposed set of regulation reforms could aim in manipulating future crisis in the finance environment. The ISDA operation, the legal framework of its proposed contracts (for banking products transactions) and the decisions of its committees are factors, which can also influence the operation of these products and the banking liquidity. The paper reviews the current European legislation of CRAs, as well as the policy of ISDA through its contracts. We examine the procedure with which the activation of hedging instruments is decided, when a “credit event” takes place. The research effort is based on the study of ISDA contracts as legal tool protecting the banks, bilaterally, from credit event risks. Under this reasoning, we have examined the liquidity effects concerning banks and how this is involved with the changes of the credit ratings. Among our conclusions and results, we present a clear explanation of how an ISDA credit event affects banking liquidity and we suggest specific legislative interferences and changes in ISDA agreement clauses wording, to preserve the banking liquidity. Under these changes, EU-certified CRAs, certainly, have to interfere in circumstances of downgrading the credit ability of banking institutions.

Keywords: CRAs, Credit Events, CDS, ISDA, Master Agreement, CSA

JEL Classification: G240, G280

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1. Introduction

I.S.D.A. (International Swaps and Derivatives Association) organization represents various members in the area of the bilaterally negotiated derivatives (Over-The-Counter OTC derivatives). ISDA was founded in 1985 and today has over 850 institutional members from 57 countries from all continents. Between these members are included some of the most important financial institutions, businesses, government entities and others, that rely much of their investing business, on OTC derivatives. ISDA has a leading role in coordinating the discussion and promotion practices for efficient and more law-codified functioning of the financial market participants, in the area of OTC derivatives.

ISDA has a group of committees, that decide on various issues (ie credit events, various protocols, etc.). Its relationship with the interbank market and the corresponding authorities is important. ISDA uses several means for this, such as advisory participation in legislative changes, proposals on contractual documentation, coordination and views statements, etc.

ISDA contributes to the smooth transaction activity of banking products and OTC derivatives, among other things, by providing the *ISDA Master Agreement* (MA) and the *Credit Support Annex* (CSA). This is, essentially, a mutually recognized contract between two counterparties or entities covering legal transactions and clearance of products (OTC derivatives) traded on a non-regulated market (under no law rules) providing clauses, for all default cases and post-trading risk.

This contract (MA), operates under the principles of the English Corporate Law (mainly for credit and financial institutions based in the EU). It is consisted of two main parts: the standard clauses part (which is nonnegotiable) and the variable (the “Schedule”) part (which is negotiable between the counterparties). Some key negotiation points are: the currency, the payment threshold (“Threshold Amount”), the minimum credit guarantees transfer amount (“Minimum Transfer Amount”), etc. As Harding et al. (2002) say, the CSA (Credit Support Annex), guarantees the transfer, on either side of counterparties, of the credit guarantees (“Collaterals”), in cases where for specific banking transactions and for credit risk purposes, the parties have provided payment guarantees (Nye, 2014). However, this guarantee varies depending on the dynamic changes and market conditions and on the rating of products included in the underlying transactions.

The ISDA MA provides, also, processes and issues concerning : trading, clearing, cash transfers, valuation, bankruptcy, *credit events*, corporate events that might affect the transactions, transaction confirmation ways, etc. The ISDA MA is, essentially, the “umbrella” agreement which governs all individual transactions of the parties. For each OTC derivative transaction, parties sign, also, the “transaction confirmation”, which follow the standards of the ISDA. The integrated logic of the institutional area of Capital Market is diversified, as around of the transactional system of credit institutions, there are bilateral relationships and not commonly accepted rules of statutory law, at all levels. However, the ISDA Master Agreement as long as the “transaction confirmations” constitutes a single legal entity.

There are certain clauses in these contracts, which are related to the ratings of the CRAs. Essentially, these clauses contain the concepts of “credit events” and “credit downgrade” from a CRA. In such cases, these clauses may provide the termination of some or all transactions whether the counterparty’s credit rating, falls at lower levels due to a worsening of its financial position. Then, the other party which is not affected by this change has the right to terminate and close the current transactions with the affected member whose condition was worsened. Therefore, under this legal act, the liquidity of both parties (mainly for the affected party), clearly, can be influenced. Similarly, the same situation can be occurred (because it is a *right*, not an *obligation*) not only with the specific affected counterparty, but also with all other counterparties, which have entered into a such agreement (ISDA MA) and have incorporated clauses for “credit downgrade”.

A Credit Rating Agency (CRA), in the financial world, has remarkable influence. The bond issuers are based on ratings as an independent certification of their own credibility and their issues. A major bond issue must have at least one (if not three) rating from a respectable CRA to be considered, as successful.

Moreover, CRAs and Special Purpose Vehicles (SPVs) (established by financial institutions), have a dynamic relationship. The function of CRAs correlates, additionally, to the objective assessment of the creditworthiness of *Government Financial Institutions* (BIS, 2010, 2011; BIS, 2006; BIS, 2001). Consequently, bank supervisor authorities allow banks to use CRAs (or *External Credit Assessment Institutes, ECAIs*) to assess the requirements in bank’s net reserves.

CRAs, also, evaluate “structured financial products”, as a group of loans with different characteristics. Simultaneously, their issuers consult a CRA on how they can structure these

products (“tranches”), in order to obtain the desired evaluation. In structured products, CRAs report that their evaluations are, actually, “opinions on the issue” in general (there is always a possibility, a particular issue cannot serve the cash outflows for a period), instead on the product volatility and certainly not as an investment proposal.

However, structured transactions have the trend to concentrate the same risk in such a way that a very slight change in volatility in any of its components, to lead to a significant influence of the price of the structured product. This has an impact on the rating, which may be i.e. AAA, but its price collapsing rapidly. This fact has led regulators and state authorities to introduce a new framework legislation, since normally high ratings are, typically, associated with low volatility and high liquidity.

CRAs answer that their analysis and ratings, constitute an opinion “point in time” and do not subject to a guarantee or an investment proposal. They, also, make clear that any change in the risk factors of a financial product issue will bring the non-validity of the analysis and the evaluation, as long as a different credit rating.

2. Literature Review

The market of CDOs (Collateralized Debt Obligations) has been criticized for large losses (worth over \$340.7m CDOs from Credit Suisse, top rated, losses were \$125m despite their high rating from S&Ps) (BIS, 2010, 2011; Gooch & Klein, 2002).

The most important source of revenue for the majority of the CRAs is the subscription fees by those who are interested in studying the ratings of several companies (model “subscriber-based”). Larger CRAs (S&Ps, Fitch, Moody’s, Japan Credit Ratings, etc.) receive their revenues from the same issuers of their products, who require a rating (model “issuer-pays”). However, there are concerns of conflict of interest in both revenue models of the CRAs (Harding & Johnson, 2002).

ISDA definition for the “credit events” (which also concerns Greece’s case and the PSI-Private Sector Involvement program for the exchange of bonds) on the basic concept of the proposed “restructuring” (“debt restructuring”), could be, by itself, a “credit event” and that would trigger the hedging CDS, particularly for those who had signed ISDA contracts (Harding, 2010; Panagopoulos, 2012).

Under ISDA, definitions, “restructuring”, it is a group of events for a financial transaction (Harding, 2004):

- if there is a reduction to the nominal amount or the rate of interest or the amount of accrued interest, or
- if there is a reduction in the principal amount or the amount which would be payable on expiration, or
- if there is any date rollover for the payment of interest or principal amount, or
- if there is any change in the classification in the priority of payments, or
- if there is any change to a “non-permitted” currency for the payments. “Permitted Currency”, means a currency of: (i) a G7 Country, or (ii) any Country of OECD (Organisation for Economic Co-operation and Development) with the highest rank by any CRA in the long-term debt in this currency.

If therefore appears one of these incidents cases, we refer to a “restructuring” (i.e. in the case of Greece, no. 2 and 3).

As Murphy (2013) and Hudson (2002) acknowledge, banks worldwide apply various policies in terms of this agreement. Kiff and Morrow (2000), initially and then Firth (2005) concluded, that the worldwide market for OTC derivatives is not considered as “regulated”. Actually, there is no commonly accepted rules of law from an authority – as the listed derivatives which are traded in organized markets and Exchanges), the ISDA Master Agreement, covers (as a common acceptable legal document between financial institutions) the full range of trading activity for the OTC products.

3. Methodology of Research

The present study aims to research, whether the existing regulations have contributed to strengthen the market, regarding the negotiation of agreements for bilateral traded structured financial products. Johnson (2005) proposed a method of negotiating OTC derivatives based on the bilateral signed agreements. According to this, it is wise to negotiate clause by clause, taking under consideration a group of risks: clearing, legal, currency and collateral. Additionally, we studied the terms “credit event” and “restructuring” for clarification, from the literature and from ISDA’s definitions. All negotiations between European Union, International Swaps and Derivatives Association (ISDA), credit institutions and CRAs, have also been studied. The need for additional regulation has already been examined, whether it is required and what could be additionally imposed and at what level for CRAs, legislative speaking.

Additionally, we investigated what prevails, for the time being, in Europe and the US. The key questions we used as a guide, of the research work are: CRAs should be restricted under further regulation and what will happen to the banking liquidity and their legal contracts (ISDA Master Agreements)? Should these legal contracts contain specific credit event clauses, which will prevent the lessening of banking liquidity, in case of credit rating downgrade? How is this connected with the banking liquidity? What kind of legal wording should be included in these agreements? The conclusions of the research, led us to a series of proposals, in order to clarify what is considered as a “credit event” and how we can strengthen the ISDA MA. We studied the necessity of existence and registration of “certified CRAs” by EU. In addition, we examined whether this is important to prevent the uncontrolled credit rating by CRAs.

The research effort was based on the study of ISDA MA (Gooch & Klein, 2002) as the legal document to prevent, initially, from legal risk the banking counterparties (Satyajit, 2005). Banking activities (Prime Brokerage, structured products trading), as described in the International Bibliography, have been taken under consideration. European and international developments have been taken into account, regarding the regulation of credit products (Moloney, 2002; England, 1991). Jankowitsch et al. (2011) proposed a new measure for liquidity risk, due to OTC price dispersion, so, the risks faced by investors and banks (OTC derivatives, risks of Prime Brokerage, structured products), were analyzed and studied, as well as the current situation of the recent efforts to regulate OTC derivatives and CDS, at European level.

As far as concerns the last issue, studies and surveys of International Organizations (ISDA, Bank for International Settlement (BIS), etc.), aimed our research paper, as well as, EU Directives and Regulations. The obtained results, conclusions and recommendations enriched, with our arguments regarding proposals for the “credit events” clauses contained in the ISDA MA, as well as with the impact of our suggestions on the banking liquidity.

4. Analysis of Current Developments

CRAs have been accused that they do not downgrade companies, in time (Enron case). They have also been accused of developing special relations with the management of the companies, or that they are unwilling to accept criticisms from companies. CRAs have also been accused that “blackmail” companies (Moody's & Hannover Re case). CRAs have received criticism as oligopolies (having high barriers to entry in this market, while their operation itself is

based mainly on their reputation). CRAs have demonstrated a “narrow-minded” view for state bankruptcies (Greece’s case).

The “rating triggers”³ and downgrades of companies, create sometimes a domino of bad events concerning, financial ratios influence, contract terms influence, fully callable obligations influence, refinancing and new borrowing, possible additional downgrading due to the lack of fulfilment of the new obligations, etc., that may lead to a bankruptcy (“death spiral”).

The US legislation (Sarbanes-Oxley act 2002, US SEC reports) for “CRAs’ operation in securities markets” requires that CRAs should describe in detail the use of credit ratings, as well as the “Code of Conduct of the International Organization of Securities Commission (IOSCO) for the CRAs”, in order to avoid conflicts of interest (Murphy, 2013).

The affection of the banking transactions validity of financial institutions, essentially, concerns the power of their reliability, as institutions. In today’s global financial world, this reliability is passing through the way of CRAs’ valuation models. The greatest proof of this, it is that in all their transactions regarding OTC derivatives, which produce the highest turnover and profits in their trading portfolios but bring the higher counterparty risk, the key factor is the coverage of these transactions by the ISDA Master Agreement, which in turn contains termination clauses for cases of credit downgrades, by a CRA.

The obligations of the financial institutions as counterparties clearly are influenced by any related downgrades, which may either be provided by contractual commitments or be imposed, indirectly, by the market practice. Bratanovic and Hennie van Greuning (2003), proposed, a context for managing the banking financial risk, additional credit guarantees of obligations transfer from the downgraded party to another. It is a natural consequence, that the liquidity of the downgraded party to be adversely affected, even it has been foreseen up to a point and therefore must this party invent new sources of self-financing.

The proposal for the regulation of CRAs, which was originally adopted in November 2008, became an EC Regulation (EC 1060/2009) and recently (October 2011) implemented by a decision of ESMA (European Securities and Markets Authority). This decision certified the first four CRAs in the European area (Moody’s, S & P’s, Fitch, DBRS).

³ Rating trigger: It is a term used, mainly, in these kinds of contracts (ISDA M.A.), in which there are specific clauses, which describe an event, and the actions should be followed, whether a change of the current rating of the company, by a CRA, takes place and falls below a specific level. If this happens, then the clause is “triggered” and some actions take place, which sometimes are very harmful, for the downgraded company.

The concept of a “certified” CRA by the European Commission (ESMA), is an effort with which it controls major issues: Transparency, Governance, Registration and Supervision. This concept will contribute to the institutional protection of the European institutions from arbitrariness in credit ratings by CRAs. This will become a reality, because it will provide them, with a kind of “passport”. Under this new regulatory reform, ESMA introduces the concept of “registration” and monitoring by the supervisory authority of the Member State, in which the CRA has its registered office. The new ESMA’s Regulation, stipulates requirements for the evaluation activities of a CRA, to be demanded at least the same to creditworthiness ratings issued outside the EU, in third countries.

5. Research Results, Suggestions and Discussions

In our research, we’ve found that the CRAs, sometimes, make mistakes during the evaluation and rating of structured and complex financial instruments, assigning “AAA” rating on debt and structured products (ie guaranteed debt issues, Collateralized Debt Obligations, CDOs), which in turn (the majority of them), are downgraded later or collapsed. It has often criticized that the Moody’s Assessment Model for CDOs, it is biased to include *speculative data* and therefore the factors that affect the expected bankruptcy are less. Thus, the expected mean bankruptcy estimators do not reflect the normal distribution bankruptcy of the model.

ISDA has committees that deal with solving issues related to legal and other financial cases concerning the contractual obligations of its members. The Credit Derivatives Determination Committee (actually there are five such committees, depending on the geographical region of the world) which is consisted of 15 representatives elected by its members (10 from Primary Dealers and 5 from portfolio managers), works to deliver an opinion (if requested) on matters concerning primarily *credit events, triggering of CDS* and their effects on contracts.

We’ve found, that, in the most cases of interbank contracts, there is a provision for the activation of credit risk premiums of a counterparty (CDS), (whether a “credit events” occurs), and premiums which are directly related to banking products (repos, swaps, etc.) and with which counterparties dealing each other. These are called “hedging CDS”.

Since there is no restructuring, the following conditions must however apply simultaneously for an event to be considered as a “credit event”. This event should:

1. Be referred in liabilities arising from the issuance of debt.

2. Be constituted by a number of the aforementioned *restructuring events* to be occurred (one or more, anyone of the aforementioned events).
3. Binds all holders of the debt.
4. Be agreed between the issuer and a significant number of debt holders binding them (or to communicated in such a way as to bind all debt holders).
5. Be not expressly referred in the of this debt issue, that *it is* “in force” (at least until the date of issue).

We entail that the following are NOT “restructuring” events:

- The payment in EUR (interest or principal) of a debt issued in a currency other than a EU member state, which has recognized the EU Treaty.
- The realization of any of the above events 1-5, due to a management event, tax event , accounting or technical event (or adaptation), which belongs to the boundaries of the normal business activity.
- The realization or the agreement (or notice) any of the above events 1-5, in circumstances, where such event does not directly or indirectly result from a downgrade of the creditworthiness or the financial condition of the Issuer.

It should be noted that regarding the total set of the conditions for considering the *restructuring*, as a *credit event*, the voluntary participation of the debt holders (the number of them is irrelevant) and whether does not bind all debt holders, then, does not meet the requirements of the above case no. 4. Therefore, in the example of Greece for the Private Sector Involvement restructuring, it is not considered as a “credit event” that will, in turn, trigger any hedging CDS.

On the part of Banks, the proposal of the final regulation contains a number of improvements to the original:

- Narrowing the scope of credit ratings use of the Regulation, only for regulatory purposes.
- The twelve-month transitional period before the credit rating of the share capital could be affected.
- Several transitional provisions where the credit ratings can be used for some time, even if the license of a CRA is revoked, and

- The regulatory framework to require several organization and supervision issues for the CRAs.

For the already complied CRAs to the IOSCO Compliance Code Requirements, the requirements for the compliance with the European regulatory framework will be fewer. Regarding CRAs registered outside EU, which wishes to provide credit ratings to EU companies and to European banks, the requirements due to the regulatory framework will be much greater. This occurs, for these Banks, especially, when wish to acquire company shares which classified by CRAs outside the EU.

Registering CRAs either as nationally recognized rating agencies or as external institutional credit management centres, defines them as a kind of “authority”, especially as a source of information about the creditworthiness for structured finance products, mainly.

We have also found that, the today's reality, especially with credit institutions which they are not in a strong bargaining position in the interbank market due to their low credit rating, has impact on the whole transaction volume of the products of this (non-organized) market. In contracts with standard clauses (issued by international organizations) for OTC derivatives transactions and other banking products, there are provisions (or imposed by the strongest party) for “credit event” clauses that terminate these transactions. These clauses are based mainly on credit ratings of counterparty banks, whether and whenever fall below specific ratings thresholds, downgraded by particular CRAs. These CRAs are based outside EU and are not governed by a specific regulatory framework, such as those based in EU.

We suggest that the international organizations (ISDA, IBF, ISMA, ICMA, etc.) which produce agreements for financial products trading, in the interbank market, constructing them with standard clauses. They also could propose counterparties to adopt compulsory clauses for events related to credit rating (“credit events rating”) in the contracts signed between counterparty (banks, credit institutions). These clauses will lead to termination of the transactions when these events occur. They could also propose the mandatory reference in the credit events clauses from “change in the credit rating” of the counterparties that their activation is necessary to come from the combined rating change. This rating change, is important to have been issued by CRAs registered and certified by a European regulatory authority (given that the counterparty credit institution has its registered office in the EU).

Regarding the aforementioned proposal and by assuming the following:

- There is a certified CRA based in the EU by the regulatory framework (lets symbolize it as CRCER).
- There is under negotiation an agreement (ie. ISDA Master Agreement with standard clauses) for OTC and bilaterally negotiated banking products (between financial institutions as counterparties).
- The notch (rating grades of the long-term debt) for the counterparties are given by Moody's, S&P's, Fitch and CRCER.
- The notches 'Baa3' by Moody's, 'BBB-' by S&P's and 'BBB-' by Fitch represent the same level, with the notch (lets symbolize it) '123' by CRCER (which level, we assume that it is a threshold level for a credit event, for the long-term debt), then we suggest a provision in the Schedule of the MA for a "credit event due to credit rating change", which has to be included with the following wording, in order to prevent the activation of clause for the termination of the transactions: "... in case that a fall in the credit rating of any party occurs, below 'Baa3' by Moody's or below 'BBB-' by S&P's or below 'BBB-' by Fitch and simultaneously below '123' by CRCER, then the non-affected party has the right to terminate the active transactions...".

Under this provision, it is not adequate a credit rating change (actually, a fall below a specific threshold by a well-known CRA to trigger the termination of the open transactions but additionally by a EU-certified CRA). This is quite important for the affected party and for its liquidity, especially because of the termination of such transactions. In other words, the credit event clause, which provides transactions' termination because of a credit rating downgrade, it will not be activated, easily.

We have to notice that the aforementioned idea could be irrelevant to the bargaining power of the counterparty (or its market position) to impose it or to prevent it, whether it has been foreseen by a European Regulatory Directive, or by the recent Basel III or by the similar to ISDA MA and provided by EU, the *European Master Agreement*.

Under this way, we consider that the arbitrary and uncontrolled downgrades of credit institutions of the European area will be more restricted. This, will be considered, at least, *more objective*, since this downgrade will occur under a combined decision by a certified CRA complied with European Regulation. Additionally, by providing this tight activation of

termination clauses for the transactions between counterparty, due to credit rating change, there will not create any effects, influencing the banking liquidity.

6. Concluding Comments and Further Research

This paper aims the research whether involving Credit Ratings Agencies (CRAs), regarding the provision of credit risk rating for the banking structured products, as well as the credit clauses of ISDA (International Swaps and Derivatives Association) signed agreements between banks, could affect the banking liquidity. The research work focuses on the existing regulation and the literature for CRAs and on whether a proposed set of regulation reforms could aim in manipulating future crisis in the finance environment. The ISDA operation, the legal framework of its proposed contracts (for banking products transactions) and the decisions of its committees are factors, which can also influence the operation of these products and the banking liquidity.

Throughout this system, there is a procedure occurs which decides the activation of hedging instruments (as Credit Default Swaps), when a “credit event” takes place. The research effort is also based on the study of ISDA contracts as legal tool protecting the banks, bilaterally, from credit event risks. Under this reasoning, we have examined the liquidity effects concerning banks and how this is involved with the changes of the credit ratings. The paper reviews the current European legislation of CRAs, as well as the policy of ISDA through its contracts and from the results ended, suggests specific legislative interferences and changes in ISDA’s agreement clauses, to preserve the banking liquidity.

Therefore, as a conclusion about negotiation proposals, in order to handle a “credit event” from a credit downgrade between credit institutions, we suggested a special clause introduced in ISDA contracts. This clause provides that a counterparty downgrade is required, simultaneously by a certified CRA. Under this provision, an institution can prevent the arbitrary and uncontrolled downgrade by a CRA, with significant consequences in its liquidity.

The fact that the Banks are required to use the ratings of registered CRAs only for regulatory purposes and not for wider use, it is something desirable for the credit institutions. There was a thought of broadening the scope of banking activities, already, from previous regulatory efforts. These thoughts would require the credit ratings to become by registered CRAs. From now on, clearly, the use of ratings issued, is linked with the legal framework, under regulatory purposes (i.e. Compliance with Community law).

We concluded, that in the finance arena of the competition between banking institutions, there are many classifications regarding their market position and therefore their negotiation power differentiates. Since, there is a weakness for some banks to impose their policy over other counterparty banks, we acknowledge a limitation to our research, in ISDA agreements. We cannot adequately suggest any standard negotiation process, for including clauses in these agreements, regarding credit events due to a credit rating downgrade. This of course, could affect their banking liquidity.

As a result, the counterparties have to apply individual negotiation processes for changing contracts' clauses and controlling the possible legal commitments (mainly on the deposited collaterals) to the existing ISDA agreements and thus, a further research is needed, on it.

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REACHING THE OBJECTIVES OF SUSTAINABLE DEVELOPMENT ON THE BASIS OF THE CREATIVE INDUSTRIES - A SOUTH AND EASTERN EUROPEAN ANALYSIS

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Abstract

The reduction of the development gap of South and East European economy compared with the rest of the developed countries represent an important condition to achieve the goal of “healthy development” of European Union. High level of competitiveness in West European industries as well as new policy of sustainable development causes a rethinking of strategy of individual countries. Creative industries may contribute to the efficient utilization of local resources and individual characteristics. Using the culture like an “engine” of regional development, in South and Eastern Europe, countries can generate many positive and lasting effects on these economies. This article presents the role and evolution of creative goods and industries in South and Eastern European countries, and aims to prefigure their impact on sustainable development of these regions. The involvement of these goods in international trade may improve or rehabilitate the position of different economies at European level.

Key words: sustainable development, creative industry

JEL Classification: O11,O17, Q56

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1. Introduction

Our world, a continuously changing one, stands upon one of the fundamental needs of the human being: achieving ever higher levels of material and spiritual welfare. The economy – through its diverse and adaptive sectors – seeks to reach these objectives and to reduce the efforts required to achieve them. Thus, an important dilemma arises: is it justified to achieve better results at the cost of serious threats to the future of humanity with respect to environmental quality and the evolution of the human society. Such negative effects of intense activities, unfriendly to the environment and to the society, can be found in current phenomena such as: increased concentration of carbon in the atmosphere, increased unemployment, widened gap within the society between rich and poor and between wealthy nations and poor ones, the growth of mass consumption with adverse effects on the environment and human welfare; all these take place while the economy comprises resource-intensive sectors, heavily polluting or intensely automated, and the human factor (with its creative force and cultural particularities) is undervalued and used in activities well below its potential.

Red flags about the seriousness of the problems seen in today's world have been raised and heavily publicized during the UN Environment and Sustainable Development series of conferences. Some states, taking into account the international recommendations and noting the already visible effects of excessive industrialization and other intensive activities (heavy consumers of resources and energy), have initiated wide programs that develop activities which employ the inexhaustible and highly diversified resources of their citizens: culture and creativity. The results in terms of added value of the industries using these resources have encouraged states to invest in such cultural and creative industries.

The ability to initiate and develop activities in which the human becomes the main driver of the results, offers countries and regions, regardless of their stage of development, the chance to launch new and innovative products and services on the world market – the so called “creative products”. Through them, the economic gaps between countries are no longer an impediment in the universal adoption of sustainable development principles, of “healthy” long-term development.

2. Sustainability strengths of creative industries

Creative industries have developed especially in the last 20 years, along with the rise of the digital technologies and the audio-visual domain at the global level, as well as in the context of the

various problems that different countries had to deal with and that referred to economic difficulties or the legislative and regulatory changes regarding the use of national resources. Although it seems that the creative industries represent only a new phase in the evolution of the activities that are already included in the current economic branches, their specificity gave rise to outstanding results and effects that exceed the expectations of other activities related to national economies.

According to the Department of Culture, Media and Sport (UK), a definition formulated in 2001 stated that the creative industries are “those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of creativity, intellectual work and the stimulation of cultural institutions”.

Joseph Schumpeter (1911), one of the greatest theorists of the capitalist economy, in his approach of the entrepreneur and his creative power, has shown that the entrepreneur is the one that has a key role in using the initiative and that the society must recognize his role in achieving the objectives of development creating the conditions for capitalizing all the resources and factors of production. So, without prescribing an interventionist policy, Schumpeter believes that governments should pursue the objective of development through the entrepreneurs and their ability to make the most of all the available resources.

The “creative” concept, in the sense that we have used so far, was first employed in Australia with the launch of the so called “Creative Nation” policy by the Prime Minister Paul Keating. To support the argument of the proposed policy of boosting the national culture and creativity, the main benefits were highlighted, within which important aspects of sustainable development can be seen: “This cultural policy is also an economic policy. Culture creates wealth. Broadly defined, our cultural industries generate 13 billion dollars a year. Culture employs. Around 336,000 Australians are employed in culture-related industries. (Policy online, 1994).

The period of Tony Blair’s labour government has represented the European spearhead in the use of the creative industry concept. In the period after the 1980s, Great Britain experienced significant development in the area of information and communication technologies. These technologies have evolved harmoniously in accordance to the principles of creative industries, generating an important effect in the economy: the emergence of new products and services in the economy and the development of new and attractive jobs.

Over time, given the complex nature of the creative industries, suggestive names were used that are related to the effects that they generate, such as the “creative sector”, “copyright industries”, “content industries”, “experience economy”, “creative business sector”, “art centric business”, “cultural industries and communication”, “media industries” and “knowledge economies” (Moore, 2014, p. 739).

Given that alongside the concept of creative industry we often meet the concept of cultural industry, it is necessary to clarify the distinction between the two. Although, in essence, both terms “creative” and “cultural” have, in their economic use, a similar value, “cultural industry” refers to “...those which have industrial production and organization to produce and disseminate symbols. This definition naturally points to media in general and digital media in particular” (Moore, 2014, p. 741).

Thus, it is not difficult to see that the creative dimension of economic activities naturally fits alongside the cultural dimension of peoples activities. The impact of industrialization itself is often determined by the cultural traits of a nation. Even if some key phases or moments in human history (such as the industrial revolution or the invention of the steam and internal combustion engines) have proven to be essential for the transition from an agrarian to an industrial society, from traditional to modern, the new steps in the evolution of technologies are just as important, because they are based on a strong involvement of the imagination, creativity and innovation that is specific to each nation. For all the countries in the world, their creative force of these processes, alongside with intelligence, represent a “neofactor of production” that completes the potential of the national economic system, but also has the capacity to substitute those factors or resources that are not available in certain states. Through culture, intelligence and creativity, economies can develop spectacularly and can reposition themselves on the global economic marketplace and conserve their own values, even in a strongly globalized world.

The use of technologies that were obtained from creative industries is a fundamental to sustainable development. The use of renewable energy, the development of smart cities and the creation of ecological buildings represent only a few of the fields over which the creative industries have had a major influence.

The increase of gross added value in the branches of the economy has always represented an important aspect of development. The members of the EU have observed significant increases in the GDP contribution of creative sectors. This has also encouraged political decision makers to

pay special attention the encouragement and stimulation of creativity and cultural factors when preparing development plans. With an extensive cultural and creative potential, Europe has a vast experience in the use and implementation of programs that stimulate the creative industries.

The link between the evolution of creative industries and sustainable development is relevant, because the new technologies are used to increase productivity, to limit the physical efforts of humans involved in economic activities, to ensure development and to meet the cultural needs of humanity. When discussing the relationship between technology and culture, Ieva Moore (2014, p. 740) notes that “technology influences culture and culture influences technology or technological innovation leads to social innovation as society adapts to new technology and then seeks for new solutions”. Thus, the strong link that exists between economy and society (a fundamental connection between two of the dimensions of sustainable development) is emphasized.

“Urban Rejuvenation” is another result of the innovation and creativity processes within an economy (Hall & Robertson, 2010; Scott, 2006). The „remodelling” of large urban settlements that are either polluted or depopulated has become a topic of interest when discussing the use of creative activities in solving problems related to urbanism, architecture and community service. This urban remodelling has a significant economic, social environmental and psychological impact (Moore, 2014, p. 743).

It is also worth mentioning the extensive concept of “creative territories”, defined as areas that “encourage citizens to explode with creativity in all areas: artistic (con-temporary art, street art etc.), culinary (regional flavours), craftsmanship (supported by heritage policy), natural (parks, gardens etc.), and entrepreneurial (new activities linked to ICT, to biotechnologies, to high tech industries)” (Moore, 2014).

It can be concluded that creative industries have a significant contribution to the overall process of development. The difficulty of evaluating their effects results from the multidimensional impact that is inherent to these activities. Researchers and analysts from various countries have sought to identify the contributing factors and the effects of creative industries. A wide array of methodological approaches related to these objectives currently exists.

3. The impact of the development of creative industries in Eastern and Southern Europe

Based on the classification offered by UNESCO in the Creative Economy Report (2013), countries can be grouped into various categories, depending on the approach used in implementing policies that stimulate creative industries: countries that have developed policies that seek to establish a link between creative industries and the concept of human development; countries that have adopted an approach that encourages the growth of creative industries primarily to increase consumption and production; countries that view the creative economy as a valid option for development, but whose policies are less adapted and focused or are subordinated to the sectorial objectives; countries that recognise the importance of the creative industries concept, but have chosen to adopt other policies due to the cultural specificities of their own economic sectors; countries in which the creative economy, as a homogenous construct of the use of creative industries, is not recognised.

After 1990, when almost all countries in Southern and Eastern Europe set on the path to becoming free market economies, a series of economic measurements started to be used for the evaluation of social activities that had an impact on the GDP. Thus, these countries transitioned from the category of states that recognise the importance of the creative industries concept, but have chosen to adopt other policies due to the cultural specificities of their own economic sectors to that of states that view the creative economy as a valid option for development, but whose policies are less adapted and focused or are subordinated to the sectorial objectives.

In these countries, the UK model of analysing and promoting creative industries was introduced by the British Council during 2005-2006 through a specific project in countries such as Bulgaria, Romania, Serbia, Montenegro, Bosnia and Herzegovina and Croatia. This initiative sought to transfer the experience of the UK in this field, which led to the formation of local experts that were able to evaluate the economic contribution of creative industries in these regions.

In any case, the process of recognising the economic dimension of cultural and creative industries happened at a very slow pace in all of these countries. The absence of a system to collect statistical data regarding creative industries contributed to the limited evaluation of the results and of the typology of these industries. Thus, from the point of view of the available data, the creative branches are often reduced to activities such as: advertising, movie industry, music industry, radio and television.

Over time, three essential variables were established (Andresen & Lorenzen, 2005; Boschma & Fritsch, 2007; Florida & Tiangli, 2004; Power & Nielsen, 2010) that can be used to evaluate the contribution of creative industries to economic development: gross added value, employment and number of enterprises in the sector. The creation of **gross added value** through the use of non-pollutant technologies, with a strong cultural customization (even traditional in nature) that generates business and creates jobs is not only a desideratum of economic growth, but also one of sustainable development. **Employment** represents one of the cornerstones of sustainable development, ensuring a basis for the growth of the human development index and of the quality of life. In addition, employment in sectors which have a strong cultural and intellectual nature (typical for creative industries) leads to the continuous development of society in the long term. **The enterprises in the creative industries** represent an engine for the sustainable development of the economy. The immense potential for increasing gross added value and employment plays an essential role in the economy and determines its sustainable nature.

Taking into consideration the main variables that describe the creative industries, but also the sustainable development, we analyse the situation in some relevant countries from Southern and Eastern Europe.

The employment is one of the most important variables that reflect the status of the creative industries and can be used to observe their contribution to the development of the countries. For South Eastern Europe, the situation is reflected in Figure 1. Employment in some Creative Sectors from South Eastern Europe Countries (2011).

If we consider the level of employment in Creative industries from Europe, in 2011 (e.g. for software, the employment is 211,113 in the UK and 86,361 in France) the situation in South and Eastern Countries is less encouraging (only 33,214 in Romania and 8,318 in Bulgaria). Nevertheless, taking into consideration that these countries have only recently become orientated towards adopting stimulating policies for creative industries, we consider that the situation is promising and the employment in these sectors contributes to sustainable development in these countries.

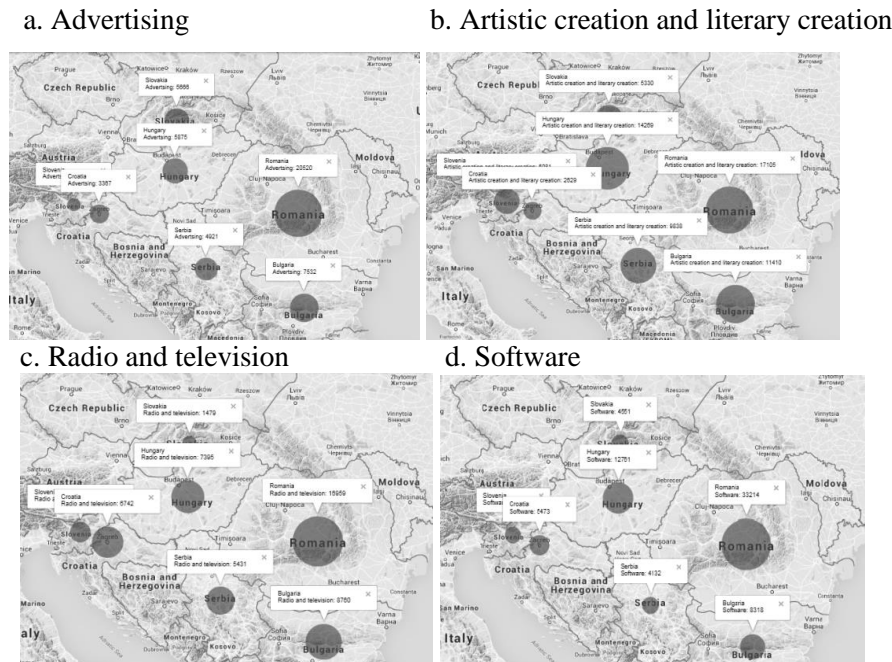


Fig.1 Employment in some Creative Sectors from South Eastern Europe Countries (2011)

Source: Cluster Observatory of UE, 2011.

With regard to the number of enterprises in creative industries in South Eastern Europe, the situation is illustrated in Figure 2 Number of Creative Enterprises from South Eastern Europe Countries (2011).

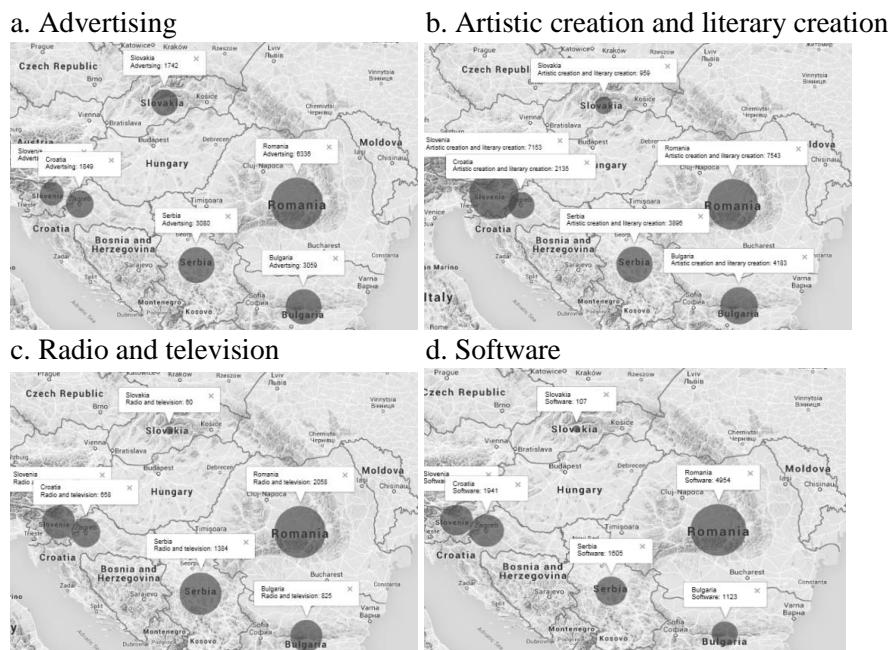


Fig. 2 Number of Creative Enterprises from South Eastern Europe Countries (2011)

Source: Cluster Observatory of UE, 2011.

Similar to the situation observed in the case of employment, the number of creative enterprises in Southern and Eastern Europe is relatively low compared to other European Countries (e.g. for the software industry there are 23,275 in Poland and 16,339 in Germany). But, considering the size of these economies, the numbers of creative enterprises (e.g. from the same sector: Software) from countries like Romania (4,954 units), Serbia (1,605) or Croatia (1,941 units) are very significant. These enterprises ultimately represent the “green and productive engine” for the entire economy, setting the foundation for sustainable development in the region.

Finally, the economic dimension of sustainable development is reflected by the contribution of added value to the GDP of the countries. For the entire EU, the added value of the total creative industries was approximately 6.9% share of EU GDP. For five South and Eastern European Countries, the share of creative industries in total value added of each country is described in Table 1.

Table 1. Contributions of creative industries to total value added in South and Eastern Europe Countries

	Advertising	Arts and entertainment	Film and television	Software	Publishing	Total share
Bulgaria	0.45%	1.19%	0.44%	2.43%	0.23%	4.75%
Hungary	0.41%	0.84%	0.80%	2.28%	0.50%	4.83%
Romania	0.49%	1.36%	0.21%	3.68%	0.36%	6.10%
Slovenia	0.37%	1.24%	0.40%	1.77%	0.35%	4.12%
Slovakia	0.62%	2.10%	0.23%	2.33%	0.43%	5.72%

Source: own work based on data from Eurostat.

As seen in Table 1, a significant contribution by creative industries already exists, amounting to at least 4% of the GDP for the assessed countries. In spite of the temporal and resource handicap in stimulating creative industries that affects South Eastern European countries compared to Western Europe, substantial development of the sector can be seen in these regions. Its contribution to the national development indicators is significant and the perspectives of sustainable development are promising, but require that all other economic sectors become aligned with the economic, social and environmental requirements of this desideratum of growth.

4. Conclusions

In their path towards becoming developed economies, the countries in South Eastern Europe have encountered some significant changes (especially over the last few years). These

were determined by a major political, economic and technological transition, but also by the desire (expressed by some of these countries) to become part of the European Union family. In the search for tools and measures that would allow them to recover the gap compared to Western states, the cultural and creative traits of each nation were identified. Although there are some disparities with regard to the definition of the concept of creative branch or industry compared to the countries that have approached and analysed these activities, there is a generally accepted view regarding their positive effects. However, their benefits are not only limited to quantitative variables that are easily measured (such as the macroeconomic impact of these industries), but also include the qualitative and long term effects of using national culture, art and creativity as an integral part of the development process. Although these qualitative traits are evaluated indirectly, there is a clear theoretical and practical link with the dimensions of sustainable development. The results of this study emphasize the major steps that were undertaken by the countries of South Eastern Europe on the path of development and offer the potential to sustainably reduce the gaps that exist between their economies and those of other developed European states. A subsequent analytical evaluation of the qualitative impact of each activity within each country will contribute to a clearer understanding of all the benefits of creative industries.

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FOSTERING ECONOMIC AND SOCIAL INNOVATIVENESS TO ADDRESS DEVELOPMENT CHALLENGES IN LATIN AMERICA

Joanna Gocłowska-Bolek¹

Abstract

The aim of the paper is to stress the need to foster economic and social innovation in Latin America. The change of the model of development of Latin American countries after the debt crisis which induced such a need is presented. Then it is shown that adequately funded long-term programs to promote innovation strategies combined with policies aimed at attracting FDI, which should be aimed at developing real and efficient cooperation between transnational corporations and local businesses should be introduced. Latin America's governments are becoming increasingly aware of the importance to innovation for economic development. Programs supporting innovation aimed at creating linkages between business and science are becoming more frequent and better designed as a permanent element of economic policy.

Keywords: macroeconomic analyses of economic development, innovativeness, social innovations Latin America

JEL Classification: O11,O17, Q56

1. Introduction

Since the turn of the century Latin America may enjoy the favorable economic situation and sustained economic growth, unprecedented in its recent history. Although the balance of change is not beneficial in all Latin American countries (e.g. Venezuela, Honduras, or Guatemala), the scale of the phenomenon and its universality stirred up a discourse about the “quiet revolution”, “change of epoch” or “the decade of Latin America” (Moreno, 2011). Macroeconomic data show that in economic terms the Latin American region has made enormous progress since the 1980s, the “lost decade” of the debt crisis and hyperinflation. Most Latin American countries conducted a successful economic reforms and introduced the necessary institutions (e.g. the autonomy of central banks, banking supervision system, capital investments security system etc.), so they turned out to be able to achieve a macroeconomic stabilization after the 1990s, when the region experienced of a wave financial and banking crises. Better monetary

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policy, significantly lower fiscal deficits, better public debt management led to a relatively painless period of 2008-2009, when the developed economies ravaged global crisis (Gocłowska-Bolek, 2013, pp. 267-286). Moderate optimists try to define not only the description of the current state of affairs, but also some projection for the future – Latin America has had a good starting point and accelerated its progress, and with social capital – building up and strengthening the institutional foundations, economic mechanisms and technical and social infrastructure – in the next decade may become one of the world leaders. Other observers, anyhow, warn against too naive a belief in “Latin American miracle”, pointing to unresolved structural problems, durability and range of poverty, inequality and other social problems, as well as new dimensions of exclusion.

However, various statistical data show a number of positive trends. In 2004-2007 the average economic growth in the region was 5.3%, while in 2010-2013 still 3.4%, bringing revival into the labor market, the development of many sectors of the economy and strengthen conditions of entrepreneurship. In 2013, Latin America and the Caribbean recorded the highest level of indicators of quality of life (average for the region of 77%, while in 1997 it was 41%) since 1997 (Latinobarómetro, 2013, p. 44). In the period 2002-2013 the number of poor people in the region decreased by 15.7%, down to 28.2% of the population, while those living in extreme poverty by 8%, down to 11.3% of the total population (CEPAL, 2013). This means that over 50 million people improved their socio-economic positioning, which caused a massive process of “expanding middle class” (Ferreira et al., 2013). The essence of this trend is not only to raise the level of income but also the changes in self-perception (perception of themselves as non-poor), consumer habits, ways of spending free time, aspirations, expectations from the state or the educational system. This is a new (“emergent”), non-traditional middle class, contributing to rapid growth in the housing and automotive industries, services, financial institutions, shopping centers development etc.

Of high importance is the fact that in the last decade in most countries in the region have solidified democracy and gained recognition among the public and the elites – even if only in declarative terms – as “the most desirable form of governance” (Latinobarómetro, 2013). In a number of countries, democracy is still immature in many respects, mainly due to the deficit of civil society, the crisis of the party system, as well as legal and institutional aspects. The governments of Latin American countries tend to express different attitudes to this challenge, according to their own tradition, ideological circumstances, and views of political leaders.

2. Change of the model of development of Latin American countries after the debt crisis: the need for economic and social innovation

The decade of the 1980s – the so-called “lost decade” (“*década perdida*”) – shows perfectly the negative effects of inappropriate economic policies, such as a decline in GDP growth and industrial production, a dramatic increase in foreign debt while simultaneously a reduction in export capacity, difficulties with monetary policy et al. The debt crisis has revealed extremely high susceptibility of countries in the region to external shocks. It is the debt crisis that finally led to the fundamental revision of the so-far existing doctrine, abandoning of state intervention and adoption of neoliberal ideology by majority of Latin American countries (Engerman, Sokoloff, 2012). Latin American countries experienced the meaningful economic transformation from the “lost decade” of the 1980s and ending with the turn of the century, leading to a better positioning of these economies in globalization processes.

Similarly to other economic phenomenon, globalization creates, for actors of economic and political relations, both new opportunities, and threats. So it is worth consideration, to what extent forms of production, investment and trade at the current stage of globalization, are associated with the process of generation and dissemination of knowledge and the role of innovation in this global system of interconnections.

A major weakness of the system is the lack of efficient cooperation schemes between science and industry, and thus a small number of joint scientific and business projects. Latin American innovation can be characterized by a relatively high activity of the state, while little effort, especially financial, in private sector. To a significant extent, this is due to the traditional economic and social models adopted into most countries of Latin America, where the State is the main actor stimulating and activating business processes. Innovation economy is stimulated, in many cases, by direct governmental support both in terms of funding and organization. This support is implemented within the framework of the funds distributed by sector, covering several major industries, including telecoms, energy, food industry, agriculture, IT, bio-technology and medicine. Strategic decisions concerning development directions are taken separately for individual sectors, often by a team composed of representatives of science, business and public administration. There are those projects supported in the first place that require joint potentials of science and industry.

The other tool for promoting innovation in Latin America, together with the structural funds, is a system of tax benefits (e.g. in the case of Brazil it generates annually costs of 1.5 to 2 billion BRL to the state budget, which is equivalent of approx. 0.1% of GDP). An insufficient rate of investment in the private sector remains as a serious problem, which means still too little progress in technology and human capital developing. This affects the competitiveness of Latin American products, and hence the unfavorable structure of foreign trade.

There is no shortage of positive examples of efforts of Latin American governments to reverse this trend. 115,000 qualified engineers graduated from Mexican universities annually, over thrice more than in the United States in relation to the number of population. The GDP growth over 4 percent a year in the past three years in Mexico, combined with the efforts of the government to improve the efficiency of its regulations, facilitate business registration, reforms of tax and legal systems, altogether results in a highest ever number of foreign investments.

Another specific element of the innovation system in Latin America are clusters, or cooperative ties between companies operating in the same or related industries, research centers and local authorities, whose aim is in gaining added value in terms of potential individual entities and increase their efficiency, competitiveness and innovation by creating synergies. The dominant model of clusters in Latin America are the satellite clusters (Wierzyński, 2013), in which the key role play small and medium-sized enterprises. The strength of this kind of economic relationships is primarily due to the advantage of the location and the associated lower level of operating costs.

Latin America has a long and rich tradition of cooperative networking. It seems that the main and primary concern of Latin American economies remains low performance (similarly in the mining, processing, and services), which causes many more difficulties. Low productivity results in low efficiency (in industrial production, as well as in agriculture and services), which in turn leads to low innovation level – again, responsible for the poor performance. Breaking this circle is difficult, as show evidence of repeated unsuccessful attempts, but individual economies are on track to accomplish this – just through investment in innovation of the economy and human capital. A solid basis to make this step are the achievements made in previous decades, and especially very favorable pre-crisis semi-decade of 2003-2008.

For at least two decades internationalization of big corporations has progressed while one can observe also the increased number of links between enterprises and scientific institutions, such as universities, technology parks and innovation centers. In this dynamic system transnational corporations play a special role, which is a source of direct investment (FDI), transferring its production and distribution systems to other countries. The increase in global FDI has contributed mostly into ICT (information & communication technologies) revolution, not only because of the high dynamics of its development, but also due to the impact into the organization of production. This still remains an area which creates and stimulates links between the organization of production on a global basis, the level of international competitiveness, innovation, and increased funding. It is significant that the factors described by the existing linkages between them: striving to deliver sales forces increase competitiveness, which in turn is achievable through better organization of production and distribution, i.e. the practical application of knowledge and innovation. It is worth mentioning, that innovation sees enormous potential in the areas of ecology: in “green” technologies, biofuels, environmentally friendly energy solutions in the industry, and tourism services.

3. Social innovativeness in Latin America

Another distinctive feature of Latin American innovation is social innovation. Region traditionally plagued with serious social problems, which in subsequent decades not received an adequate treatment: stratification, social exclusion, widespread poverty, violence, juvenile delinquency, poverty districts (Frankelius, 2009). Not only the economy, but the whole social order tended to require fundamental reforms. Latin American governments used to be increasingly aware that without social and cultural change cannot achieve sustainable and durable economic development. Thus, there was introduced a number of innovative educational programs, whose main aim was to reduce social inequalities, break the circle of poverty and crime, stimulate entrepreneurship and creativity of people.

In the sphere of innovative technologies and business processes and organizations, Latin America is a region that remains certainly still far behind the world leaders, but in the realm of social innovation can be considered as a trendsetter. The pursuit of modernity and innovation began just from the social changes affecting the change of consciousness of ordinary citizens and political elites. Latin America is on the right track from the system fusing existing inequalities and privileges for selected social groups passed down from generation to generation, the system

supports the development of the whole society. Of course, these are only some general observations for Latin America, while in individual countries appear from time to time separate ideas for social policy, such as in the case of Venezuela, with an attempt to introduce “socialism of the XXI century” made by Hugo Chavez.

The main element of social innovation are conditional assistance programs (“Conditional Cash Transfers” CCT). Most of the Latin American CCT programs are well targeted in terms of improving the situation of the poor and excluded groups, promoting gender equality, also in terms of access to education, including secondary education, improving the diet of children and adolescents, and access to health care. The effectiveness of these schemes is relatively high: it is estimated that on average 80% of its services actually goes up to 40% of the poorest families. The flagship programs in the field of social innovation are: *Bolsa Familia* program (introduced in 1990 as *Bolsa Escola*) and the *Pontos de Cultura* project in Brazil (inclusion in cultural projects excluded residents of the favela), *Oportunidades* in Mexico (helps poor families in education, health and nutrition kids), *Chile Solidario* in Chile (since 2002; the poorest families sign a contract specifying 53 conditions that must be met in order to overcome poverty, in return they receive financial and psychosocial support); *Familias en Acción* in Colombia, PRAF in Honduras, *Mi Familia Progress* in Guatemala (since 2008), the Social Progression Network in Nicaragua (since 2000.), *Red de Oportunidades* in Panama, and *Juntos* in Peru. By 2011, CCT programs modeled on the Brazilian one have been successfully implemented in 18 countries in the Latin American region, including in total 129 million beneficiaries (Stampini, Tornarolli 2012). CCT programs’ innovation is based on the involvement into social policy of instruments developing human capital and shifting the center of the gravity from “social assistance” into social development. For this reason the phenomenon is commonly recognized as the “new generation of social programs” (Pero, Szerman, 2010, p. 78). Social innovation in Latin America forms a basic pillar of the overall innovation policy and governments are becoming increasingly aware of their importance for economic development.

4. FDI inflows to Latin America. Unused opportunity to transfer of innovativeness?

There is no doubt that the incoming FDI, especially during the implementation period of export-oriented strategy, and with a wider stream in the 1990s, to a considerable degree enabled Latin American countries to incorporate new technologies and modernization of the services sector and industrial sector.

Some interesting conclusions arrive while one is trying to address the question why foreign direct investment, inflowing very strongly to Latin America in the 1990s, failed to bring about faster economic growth in that decade. Now, a series of reports on FDI (CEPAL 2012, UNCTAD 2014) shows that the main reason for their inefficiency was the search by transnational corporations sources of cheap raw materials, economies of scale caused by cheap labor and access to markets. Statistics for the period 1996-2003 (CEPAL 2012) show that the investments were placed primarily in the services sector (almost 60%), with much lower participation in the manufacturing sector (below 30%). This explains why the characteristics of Latin American economies that benefits FDI, arising from the modernization, increased productivity and competitiveness long remained limited territorially to small enclaves (in this case: subsidiaries of transnational corporations), without the overall effect of penetration of innovative solutions into other industries or sectors.

So far, Latin American countries still have not been able to build up sustainable and efficient mechanisms of links between science and research with national stakeholders from industry and services sectors. In many cases, lacking government support and co-ordinated, systemic policy aimed to increase export competitiveness of domestic enterprises reaching hand in hand with supporting the development of skills, technology, institutions and infrastructure. Support for government agencies proved to be too small to create lasting conditions for the development of innovation and integration to the world market. So it might be considered as a fundamental mistake that was committed in Latin American countries, though it must be admitted that in many economies out of the region, for example Central and Eastern Europe, including Poland, the situation was very similar.

5. Conclusions

An unfavorable trend was also observed in the preference for suppliers of transnational corporations associated with their international production systems, thereby eliminating, still undervalued, local suppliers. The whole economy loses in this sense, since without external stimulators local companies did not report the demand for knowledge, research infrastructure and new technologies. Moguillansky spoke directly about innovation as a missing link in the development of Latin America (Moguillansky, 2006, pp. 351-358), which could be a misuse of interpretation, but emphasizes very well the importance of those deficiencies. Attempts of reform aimed at using FDI introduced over time yielded some positive results. Latin American countries

stay admittedly far from such countries as South Korea, Taiwan, or Singapore. Undoubtedly, there are needed adequately funded long-term programs to promote innovation strategies combined with policies aimed at attracting FDI, which should be aimed at developing real and efficient cooperation between transnational corporations and local businesses. Latin America's governments are becoming increasingly aware of the importance to innovation for economic development. Programs supporting innovation aimed at creating linkages between business and science are becoming more frequent and better designed as a permanent element of economic policy.

In the last decade, Latin America has enjoyed an enormous economic growth despite the global crisis and maintain statistics of growth at a satisfactory level, and its effects have being used to carry out economic reforms. This growth translated into an improvement of the situation of the region as a whole, but also contributed for the first time in recent economic history of the region, to change the situation of the poorest groups of the population and to reduce inequalities. A positive example in this field is Brazil, which supports innovation with significant financial resources. For such a highly delaminated societies elimination of barriers to knowledge and wealth redistribution is a huge challenge and at the same time a key condition for starting development mechanisms. Social innovation is one of the pillars of national innovation policies, without them a chase of Latin America's biggest economies for modernity in advance would be doomed to failure. The effects of these efforts are likely to be visible only in the next decade, but even today you can venture far-reaching optimism in this regard. However, it should be emphasized that in spite of significant and undisputed success in systematic implementation of economic and social innovation strategies, many problems remain still unresolved in Latin America.

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THE REASONS OF UNDERGROUND ECONOMY, ITS RESULTS, METHODS AND THE TURKISH CASE

Zeynep Erdinç¹

Abstract

The underground economy has been one of the most important problems of today's economies and is very complex and multidimensional in respect to its definition, reasons, results and functionality. There is also no agreement on the definition of the underground economy and on its measurement approaches as it has many different names. Using false or illegal documents to pass laws and actions through government bodies is deceptive and misleading the government. i.e. Underground economy. Underground economic activities are caused by financial problems, economic problems and political problems. Underground economy has positive, negative and many effects on the economy and society. Therefore, Studies about recording the unrecorded economy is the most important aim of our leaders in our country. It is impossible to estimate the exact rate of informal economy, however some measurement methods have been improved. There are three approaches that use different assumptions in case of measuring underground economy. In this study, first the definition of underground economy will be given, second positive and negative effects will be explained. At the last part, the works to measure underground economy and the dimension of underground economy on Turkey will be mentioned.

Keywords: underground economy, effects of the underground economy, measurement methods of underground

JEL Classifications: E26, E20, C52

1. Introduction

The underground economy, which consists of all commerce on which applicable taxes are being evaded, leads to misleading macroeconomic indicators and thus the application of irrational economic policies. During the 1960's, the underground economy began to be discussed as an important economic and social issue in western economies and in the U.S.A. In the 1980's it became a problem discussed in all economies worldwide (Erdinç, 2012).

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During the last few years there has been growing concern about the phenomenon of the hidden (or shadow) economy among the public, politicians and social scientists. A useful and commonly used working definition of the underground economy is: All economic activities that contribute to value added and should be included in national income in terms of national accounting conventions but are presently not registered by national measurement agencies (Schneider, 1986).

In this study, first the definition of underground economy will be given, second positive and negative effects will be explained. At the last part, the works to measure underground economy and the dimension of underground economy in Turkey will be mentioned.

2. Defining the Underground Economy

The phenomenon of informal economy is defined under various names in the literature, indicating various aspects of it: underground economy, informal economy, unobserved economy, shadow economy, second economy, parallel economy, hidden economy, illegal economy, unrecorded economy, marginal economy, unreported economy, unofficial economy, dual economy etc. This variation makes it difficult to develop a common definition. In academic studies the term “underground economy” is considered as the most comprehensive definition, as it includes the illegality (Kök and Şapçı, 2006).

Informal economy refers to all economic transactions and activities that are entered in official records, cannot be documented through legal documents and are not taken into account in calculations of Gross Domestic Product (GDP) (Ay, Sugözü & Erdoğan, 2014).

When the literature for underground economy is analyzed, some basic definitions are observed. According to Schneider (1986), informal economy consists of all the economic activities that cannot be measured due to the absence of any official statistics, although they contribute to the value addition and, therefore, must be considered within the national income calculation. Tanzi (1982) and Smith (1994) define informal economy as market based goods and service production, being legal or illegal, that cannot be included within official GDP calculations. Bagachwa (1995) thinks that underground economy can be classified under three groups: Informal sector, parallel economy and black market economy.

They are informal in the sense that they are mostly unregistered, unrecorded in official statistics; and participants have little or no access to organized markets, to credit institutions, to formal education and training or to many public services (ILO, 1991). Parallel market activities

are alternative of legal market activities. It includes illegal production and trade of goods and services that are legal in their nature. Finally, black market activities consist of production and/or distribution of market and non-market goods that are forbidden by government. So different definitions of these three concepts reveal that using aforementioned names of underground economy interchangeably is misleading (Öğünç & Yılmaz, 2000).

The shadow economy includes all market-based legal production of goods and services that are deliberately concealed from public authorities for the following four reasons:

- To avoid payment of income, value added or other taxes.
- To avoid payment of social security contributions.
- To avoid having to meet certain legal labor market standards, such as minimum wages, maximum working hours, safety standards, etc.
- To avoid complying with certain administrative obligations, such as completing statistical questionnaires or other administrative forms.

Thus, I will not deal with typically illegal underground economic activities that fit the characteristics of classical crimes like burglary, robbery, drug dealing, etc. I also exclude the informal household economy which consists of all household services and production (Schneider, 2014).

It is thought that Table.1: A Taxonomy of Types of Underground Economic Activities can be very useful and helpful in understanding of what is underground economy and what kind of economic activities can be classified as underground economy.

Table 1. A Taxonomy of Types of Underground Economic Activities

Type of Activity	Monetary Transactions		Non Monetary Transactions	
Illegal Activities	Trade with stolen goods; drug dealing and manufacturing; prostitution; gambling; smuggling; fraud; etc.		Barter of drugs, stolen goods, smuggling etc. Produce or growing drugs for own use. Theft for own use	
	Tax Evasion	Tax	Tax Evasion	Tax Avoidance
Legal Activities	Unreported income from self-employment; Wages, salaries and assets from unreported work related to legal services and goods	Employee discounts, fringe benefits	Barter of legal services and goods	All do-it-yourself work and neighbor help

Source: Rolf Mirus and Roger S. Smith (1997, p. 5) and with additional remarks by Schneider and Enste (2000).

3. Methods to Estimate the Size of the Underground Economy

Although the issue of the shadow economy has been investigated for a long time, the discussion regarding the “appropriate” methodology to assess its scope has not come to an end yet. There are three methods of assessment (Schneider, 2014).

- Direct procedures using the micro level and aiming at determining the size of the shadow economy. An example of this method are surveys.
- Indirect procedures that make use of macroeconomic indicators proxying the development of the shadow economy over time.
- Statistical models that use statistical tools to estimate the shadow economy as an “unobserved” or “latent” variable; e.g. the MIMIC (Multiple Indicator, Multiple Causes) Method.

4. The Main Causes of Underground Economy

In the economic literature, the most important causes of underground economy are increase of the tax burden and social security contributions, increased regulation in the official economy especially in labor markets, forced reduction of weekly working hours, earlier retirement and the declining of tax morale. The increase of tax burden and social security contributions is the most important factor behind the increasing underground economic activities. As it is known, taxes affect labor-leisure choices of economic agents and also encourage labor supply towards to underground or untaxed sector of economy. As the difference between total cost of labor for employers in the official economy and after tax earnings of labor increases, we expect increasing underground economic activities (Öğünç & Yılmaz, 2000).

The intensity of regulations is also cause of underground economy. The increase of the numbers of laws, regulations and licenses requirements are evidence of increase of the intensity of regulations and decrease of freedom of choice of economic agents. Generally, the regulations can increase legal burden of employers and employers can transfer their burden onto employees' wages and so it can create an incentive for employees to work in the underground economy. High regulation can also cause employers to stay in the underground part of economy to avoid higher and nontransferable legal burden. Many studies in the literature reveal positive relation among underground economy and intensity of regulation (Johnson, Kaufmann & Shleifer, 1997).

The principal causes behind the existence of informal economy can be summarized as follows (Saraç & Başar, 2014):

- Economic causes (unjust distribution of income, inflation, tax system,unemployment).
- Fiscal causes (high tax rates, deficiency in auditing, insufficient accounting services).
- Legal causes (complicated and unclear laws, frequent change in regulation, degeneration in unitary structure).
- Administrative causes (organization of tax authority, technical structure,personnel profile and auditing mechanism).
- Social and psychological causes (tax ethics, taxpayer psychology and historical causes).
- Political causes.

5. Effects of Underground Economy

There are both positive and negative effects that an underground economy has on the official or registered economy. Primarily underground economies have a negative effect in the process of economic policymaking. Due to large underground economies, the measured macroeconomic aggregates, such as the unemployment rate or income level, become unreliable. As a result economic policy based on this data is likely to be ineffective.

Underground economies, on the microeconomic side, have significant advantages over official firms and creates unfair competitive conditions. Underground economy firms follow no legal regulations and are more free to set a competitive price than registered firms. Those firms can increase their sale volumes and profit levels by providing their products and services at a price lower than the general market.

Social security institutions are also affected by an underground economy and may suffer a deteriorating financial situation. Firms operating in the underground economy decrease tax revenue and do not contribute to the overall social welfare distribution

Following a decrease in welfare distribution, communities may have an increase in social tension as individuals on low-income will have an decreased living standard.

Being a phenomenon that affects the economy in general, informal economy destabilizes economic and social balances, and harms macroeconomic indicators and monetary and fiscal policies. The negative consequences of informal economy can be summarized as follows (Saraç & Başar, 2014):

- Underreported GNP and growth rates (real levels are usually much higher).
- Deceptive tax burden and therefore, tax injustice.

- Inadequately calculation of public sector volume.
- Budget deficit due to insufficient taxation.
- Instability in economic balances due to high borrowing or issuing money.
- Inadequate assessment of creditworthiness of firms due to inadequate financial reporting.
- Overreported unemployment rates.
- Overreported inflation rates.
- Inadequate reporting in export, import and current balance indicators.
- Inadequate reporting in productivity indicators Dollarization.
- Deviation from economic policies.
- Welfare loss.
- Unjust income distribution.
- Corruption in the society.
- Inefficiency in the legal system.
- Consumer damnification due to nonstandard, poor quality products.
- Unjust competition.

Despite the many negative effects, an underground economy does contribute to the registered economy in a positive way. Firms that operate in an underground economy have lower production costs, hence there is an increased labour demand when compared to the registered economy. As a result of this increased employment, dependancy on social welfare will decrease. As prior mentioned the firms operating in the underground economy can provide their goods and services at lower costs. This allows members of society on lower incomes to access goods and services that were previously inaccessible.

To list some of these positive contributions:

- It functions as a kind of “social relief valve” during crises by creating employment and income opportunities, causing increase in supply (Ilgin, 1995).
- Lower prices on the products due to low cost production, flexibility in working times and conditions (Carter, 1984).
- Providing dynamism to the economy and causing capital accumulation and growth(Saraç & Başar, 2014).

Research into the positive and negative relationship between the growth of both underground and official economies has proved to be controversial. Some researchers found that an increasing activity of underground economies would negatively affect the economic growth rate of the country. They found that increased underground activity led to a decrease in tax revenue for the government. As a result the level of infrastructure investment, necessary for economic growth, would also decline. Among researchers a lack of consensus exists on the relationship between the economic activity and growth of both underground and official economies.

6. Estimating the Size of the Underground Economy in Turkey

Earlier studies present evidence to suggest that participation in the underground economy in Turkey became widespread in the 1970s and 1980s for several reasons. However, with the liberalization of the economy beginning in 1987, profits in the underground economy were eroded as controls on trade, foreign exchange, and prices were removed. The incentive to engage in underground activity should have been expected to reduce as the supply of commodities increased in official markets.

The size of black economy in Turkey is substantially larger in comparison with developed countries. Studies on estimation of underground economy of 21 advance countries between 1988-2000 period shows that these economies has shadow economy between 14% and 21% of their official gross domestic product (GDP) (Schneider & Enste, 2002).

On the other hand, the results of the different estimations for Turkey are usually changing between 20% and 40% for the same period. This is a sign for the government agencies that the country should deal with this problem (Yıldız, 2013).

Many researchers, academics and policy makers are interested in underground economy and its measurement in Turkey. The measurement of the underground economy has been the subject of intense debate in the literature. Some authors have used the direct method to assess the underground economy while others have attempted an indirect method, known as the non-monetary approach and monetary approach, respectively. As the table shows, the estimated size of the shadow economy ranges from 3 percent to 178 percent depending on the time period investigated and the methodology used. Table 2 below summarizes the measurement efforts that have been conducted by various authors.

Table 2. The Size of the Underground Economy in Turkey from Various Studies

Author(s)	Period	Underground Economy as percent of 'Official' GDP	Methodology
Kasnakoğlu (1993)	1968-1990	4 - 35	Currency Ratio
Temel et al. (1994)	1975-1992	6 - 20	Currency Demand Approach
Yayla (1995)	1968-1993	0 - 42	Currency Demand Approach
Öğünç-Yılmaz (2000)	1971-1999	11 - 22	Currency Demand Approach
Çetintaş-Vergil (2003)	1971-2000	17 - 31	Currency Demand Approach
Savaşan (2003)	1970-1998	10 - 45	MIMIC Randomized Response
Us (2004)	1987-2003	3 - 12	Currency Demand Approach
Dorukkaya (2005)	1998-2004	29 - 37	Tax Evasion Rate
Baldemir et al. (2005)	1980-2003	11 - 28	MIMIC Randomized Response
Yılmaz (2006)	1970-2004	0 - 178	Simple Currency Ratio
Akalın – Kesikoğlu (2007)	1975-2005	0 - 47	Monetary Approach
Karanfil- Özkaya (2007)	1973-2003	12 - 30	Kalman Filter
Savaşan-Altındemir (2007)	1970-1998	10 - 45	MIMIC Model
Savaşan – Schneider (2007)	1999-2005	31	DYMIMIC Estimation Approach
Davutyan (2008)	2005	21	Expenditure-based Approach
Karagöz-Erkuş (2009)	1970-2005	86 - 73	Tax Evasion Rate
Erdinç (2012)	2002-2010	51	Currency Demand Approach

Source: Compiled by Erdinc from various authors studies.

In this study, our calculations following the monetary approach, it shows that the ratio of the underground economy to nominal GDP changes from 30 percent to 70 percent with an average of 51 percent in the 2002-2010 period. Empirical evidence strongly suggests that causality runs from the underground economy to recorded GDP and that the underground economy stimulates official activities in Turkey since income obtained from unrecorded activities is mostly spent on activities that have been included in the official part of the GDP.

7. Conclusion

Since the late 1970s, an important concern for policymakers has been approaches to measuring the size of the underground economy. Growing and already large underground economies understates the size of the economy, signals the existence of market distortions and excessive regulations and raises governance issues. This results in inaccurate signals being sent about the state of the economy and leads to suboptimal policy recommendations and outcomes.

As a result of its high inflation rates and a couple of severe economic crises experienced, Turkey has been characterized by economic instability during the last thirty years. After the most harmful banking sector driven crises of 2001 with the almost 140 percent annual inflation rate and -12 percent annual economic growth rate, Turkey has carried out some structural reforms within a heterodox stabilization program (Erdoğan, 2012).

Despite the many negative factors associated with an informal economy, a lack of consensus exists on whether informal economy affects economic growth positively or negatively. Although controversy exists, informal economies should be prevented by the development of new policies. These policies may include a reduction in interest rates, taxation reform, reduction of income and indirect taxes as a percentage of total tax revenue and preventing political instability. However, the above outlined government policies to reduce the underground economy, should mainly be carried out during a positive business cycle.

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Chapter V – INSTITUTIONS AND ECONOMIC CHANGES

PROXIMATE AND FUNDAMENTAL FACTORS OF GROWTH: CULTURE AND INSTITUTIONS – CASE OF SERBIA

Miomir Jakšić¹, Milica Jakšić²

Abstract

Political macroeconomy demonstrates that no single factor (market economy) is sufficient for the emergence of democracy. Reforms in post-socialist countries were based on misleading assumption of causality running from market economy towards consolidated democracy. Good institutions are characterized with three attributes: 1. they establish and protect property rights; second, they restrict social elites which strive to expropriate income and property of others members of society; third, they provide equal chances for employment, social security and civil rights to all individuals. Good institutions contribute to political stability, successful macroeconomic policy and enhance initiatives. Key role of institutions is in securing stability and continuity. Institutional innovativeness is confirmed in great historical events as transition to capitalism, Great Depression, postwar reconstruction, ongoing Great economic 2008. crisis. Authors demonstrate the importance of values - culture and governance for economic growth in two parts: first, comparing Asian and European countries (China, Japan, Germany), secondly, comparing South-Eastern countries (Serbia, Slovenia, Croatia) based on two internationally recognized indexes – World Values Survey and World Governance Index. They conclude that fundamental factors of growth (culture and governance) are of much more importance for economic growth and were greatly neglected during social and economic development of post-socialist countries.

Keywords: political macroeconomy, institutions, culture, democracy, good governance

JEL classification: B22, P16, P48

1. Growth and inclusive institutions

In recent two decades, due to contributions of Political macroeconomy, focus of macroeconomy turned away from narrow perspective based on market and privatisation (market fundamentalism) towards broader perspective based on institutions and values (institutionalism).

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Why do some countries have better technologies and more human capital? (Acemoglu, 2005; Acemoglu, 2014).

Main thesis of one of leading proponents of Political macroeconomy, D. Acemoglu, is: “growth is much more likely under inclusive (economic and political) institutions than extractive institutions. Inclusive economic institutions: Secure property rights, law and order, markets and state support (public services and regulation) for markets; open to relatively free entry of new businesses; uphold contracts; access to education and opportunity for the great majority of citizens, i.e., create incentives for investment and innovation and a level playing But most societies throughout history and today ruled by Extractive economic institutions: they are designed by the politically powerful elites to extract resources from the rest of society” (Acemoglu, 2012).

Guiso, Sapienza, and Zingales defined culture as “those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation” (Alesina, Giuliano, 2014).

The term *culture*, refers both to values and beliefs, and both are in decisive manner influenced by institutions which forms socio/economic framework for their emergence and evolution in complex and uncertain environments. Alesina and Guiliano conclude: “culture (or informal institutions) and formal institutions are interrelated, but the label ‘informal institutions’ implies that formal institutions determine informal ones and that the latter are of secondary importance. Once we agree that formal and informal institutions interact, and that either one may cause the other, then identifying certain values and beliefs as culture or informal institutions becomes merely a matter of semantics” (Alesina, Giuliano, 2014).

2. Hofstede model and former Yugoslavia republics

The most common tool for measuring institutions and culture is through indices and surveys questions. In this paper we used Hofstede dimension indice and The World Values Survey (WVS) for culture and compared different countreis.

Classical work of G. Hofstede was basis for inclusion of culture in the field economics, and nowadays contributions made by international human resource management and organizational culture (Hofstede, 2001).

Hofstede 6-D Model applied to Serbia and ex-Yugoslavia republics gives following results: (<http://geert-hofstede.com/countries.html>).

“Power distance

Serbia scores high on this dimension (score of 86) which means that people accept a hierarchical order in which everybody has a place and which needs no further justification.

Individualism

Serbia, with a low score of 25 is considered a collectivistic society. This is manifest in a close long-term commitment to the member ‘group’, be that a family, extended family, or extended relationships.

Masculinity

Serbia scores 43 on this dimension and is thus considered a relatively feminine society. In feminine countries the focus is on “working in order to live”, managers strive for consensus, people value equality, solidarity and quality in their working lives.

Uncertainty avoidance

Serbia scores 92 on this dimension and thus has a very high preference for avoiding uncertainty.

Pragmatism

With an intermediate score of 52, there is no clear preference for Serbia on this dimension.

Indulgence

A low score of 28 on this dimension indicates that Serbian culture is one of restraint. Societies with a low score in this dimension have a tendency to cynicism and pessimism. Also, in contrast to indulgent societies, restrained societies do not put much emphasis on leisure time and control the gratification of their desires. People with this orientation have the perception that their actions are restrained by social norms and feel that indulging themselves is somewhat wrong”

In Serbia Power distance and Uncertainty avoidance are significantly high, Pragmatism and Masculinity rather high, while Individualism and Indulgence are low. This leads toward conclusion that Serbian society is traditional and collectivistic, with high influence of traditional values and culture which in essence derives from model of traditional society, similar to Asiatic mode of production.

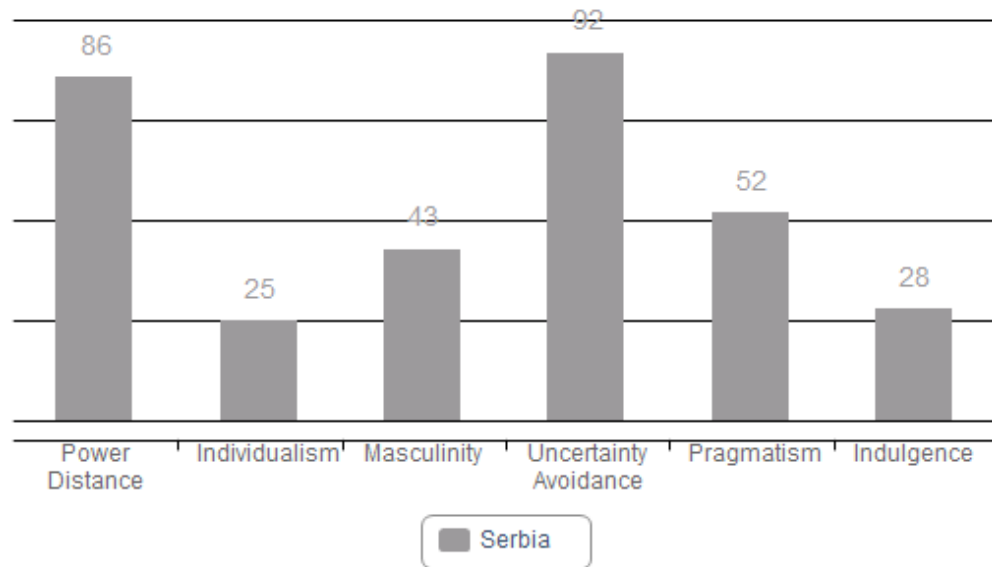


Fig. 1. Hofstede six dimensions for Serbia

Source: <http://geert-hofstede.com/dimensions.html>, accessed 4.1.2015.

Next graph compares three Ex-Yugoslavia republics (Serbia, Croatia and Slovenia): general conclusion is that there are no major differences concerning Hofstede dimensions: their historical position in world system was similar, and influence of former Ex-Yugoslavia common social and economic development is major explanation of those similarities.

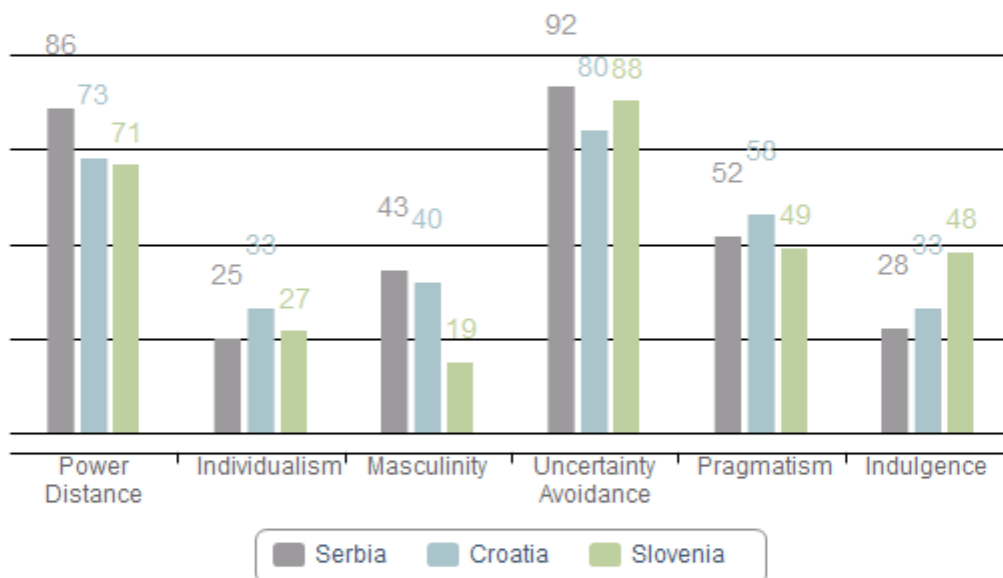


Fig. 2. Hofstede six dimensions for three ex-Yugoslavia republics.

Source: <http://geert-hofstede.com/dimensions.html>, accessed 4.1.2015.

A. Alesina support more broader approach, the one based of exploration of significance and influence of culture: “Recent contributions have looked at the coevolution of culture and institutions, leading to multiple equilibria characterized by a combination of some types of culture and some types of formal institutions. The general idea underlying this approach is that a country (or a region or an ethnic group, for example) shares certain cultural values, which leads to the choice of certain institutions. In turn, certain institutions lead to the survival (and transmission across generations) of certain cultural values” (Alesina, Guilano, 2014).

3. The Global Competitiveness and Serbia

Among 12 pillars of competitiveness the first one in *World competitive Index* (WCI) are *Institutions*: “The institutional environment is determined by the legal and administrative framework within which individuals, firms, and governments interact to generate wealth. The quality of institutions has a strong bearing on competitiveness and growth. It influences investment decisions and the organization of production and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies. Government attitudes toward markets and freedoms and the efficiency of its operations are also very important: excessive bureaucracy, overregulation, corruption, dishonesty in dealing with public contracts, lack of transparency and trustworthiness, inability to provide appropriate services for the business sector, and political dependence of the judicial system impose significant economic costs to businesses and slow the process of economic development” (Insight Report The Global Competitiveness Report 2012–2013 Full Data Edition).

Serbia is in *Stage 2. group – efficiency driven economies* whose development depends upon next pillars: Pillar 5. Higher education and training; Pillar 6. Goods market efficiency; Pillar 7. Labor market efficiency; Pillar 8. Financial market development; Pillar 9. Technological readiness, and Pillar 10. Market size. GCI rank for Serbia in 2012-013 is 95, and score is 3.87 (Table 7: The Global Competitiveness Index 2012-2013: Innovation and sophistication factors, p. 13).

Subindex for efficiency enhancers is better (rank: 88), but for innovation and sophistication factors rank is worse (124). For separate pillars rank for Serbia is as follows: 1) institutions – 130; 2) infrastructure – 77; 3) macroeconomic environment – 115; 4) health and primary education – 66; 5) higher education and training – 85; 6) goods market efficiency – 136; 7) labour market efficiency – 100; 8) financial market development – 100; 9) technological readiness – 58; 10) market size – 67; 11) business sophistication – 132; 12) Innovation – 111. (Table 7: The

Global Competitiveness Index 2012-2013: Innovation and sophistication factors, pp. 19-20).

Social sustainability– adjusted GCI () for Serbia is 3.48 with tendency towards worsening.

WCI scores for Serbia and SEE neighbours in the period 2007-2013 are as follows:

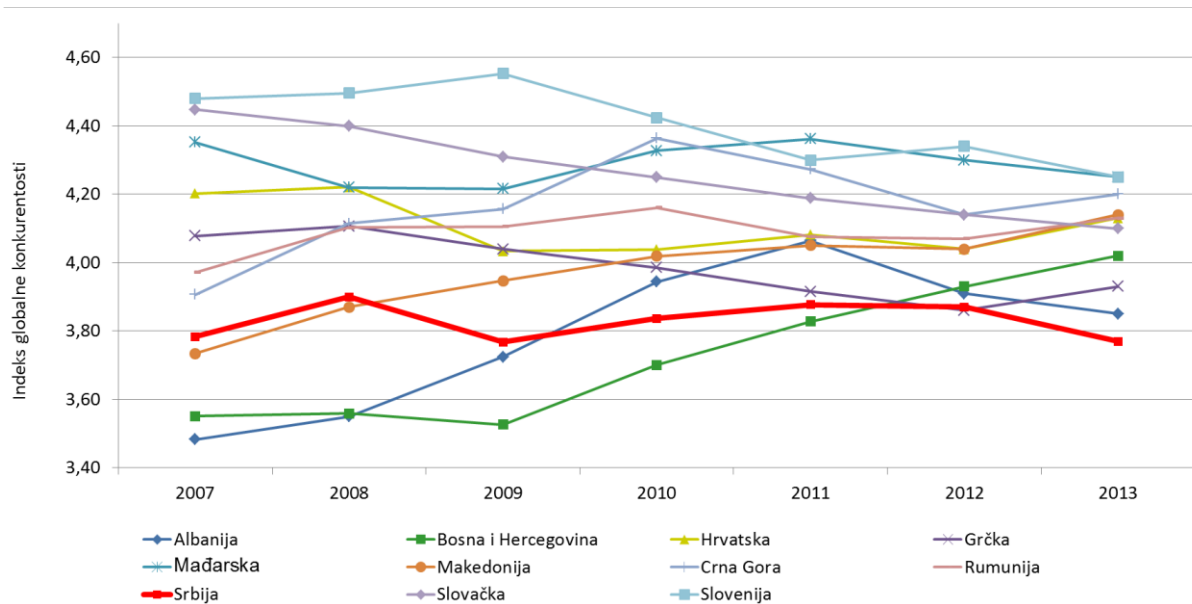


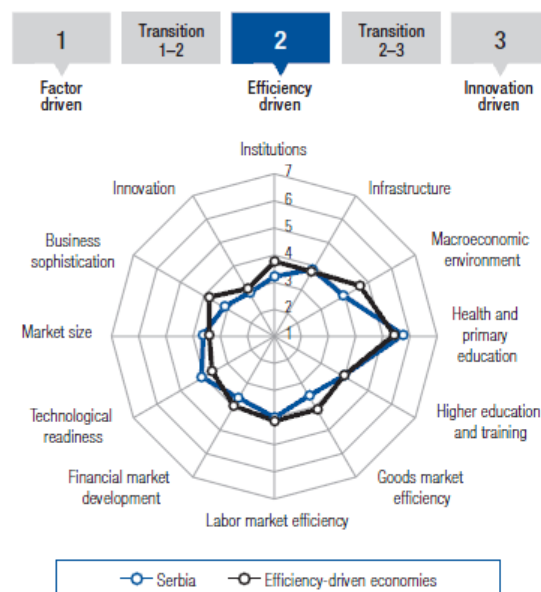
Fig. 3. Global Competitiveness Index for selected countries.

Source: Ristić, B., Tanasković, S., Konkurentna pozicija Srbije u 2013. godini according to Izveštaj Svetskog ekonomskog foruma, FREN, Beograd, 04.09.2013, p. 3.

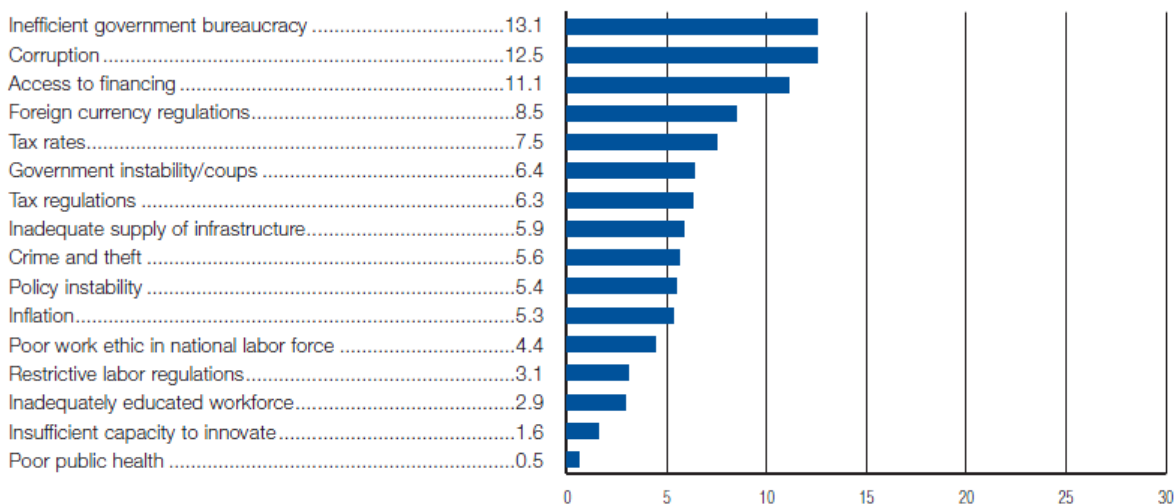
The Global Competitiveness Index

	Rank (out of 144)	Score (1–7)
GCI 2012–2013	95	3.9
GCI 2011–2012 (out of 142).....	95.....	3.9
GCI 2010–2011 (out of 139).....	96.....	3.8
Basic requirements (40.0%)	95	4.1
Institutions.....	130.....	3.2
Infrastructure.....	77.....	3.8
Macroeconomic environment.....	115.....	3.9
Health and primary education.....	66.....	5.7
Efficiency enhancers (50.0%)	88	3.8
Higher education and training.....	85.....	4.0
Goods market efficiency.....	136.....	3.6
Labor market efficiency.....	100.....	4.0
Financial market development.....	100.....	3.7
Technological readiness.....	58.....	4.1
Market size.....	67.....	3.6
Innovation and sophistication factors (10.0%)	124	3.0
Business sophistication.....	132.....	3.1
Innovation.....	111.....	2.8

Stage of development



The most problematic factors for doing business



The Global Competitiveness Index in detail

INDICATOR	VALUE	RANK/144
1st pillar: Institutions		
1.01 Property rights	3.1	130
1.02 Intellectual property protection	2.8	116
1.03 Diversion of public funds	2.8	95
1.04 Public trust in politicians	2.0	118
1.05 Irregular payments and bribes	3.6	86
1.06 Judicial independence	2.4	129
1.07 Favoritism in decisions of government officials	2.3	132
1.08 Wastefulness of government spending	2.2	132
1.09 Burden of government regulation	2.4	136
1.10 Efficiency of legal framework in settling disputes	2.5	138
1.11 Efficiency of legal framework in challenging regs.	2.6	133
1.12 Transparency of government policymaking	3.8	111
1.13 Gov't services for improved business performance	2.8	126
1.14 Business costs of terrorism	5.6	71
1.15 Business costs of crime and violence	4.6	85
1.16 Organized crime	4.1	118
1.17 Reliability of police services	4.0	78
1.18 Ethical behavior of firms	3.1	132
1.19 Strength of auditing and reporting standards	3.9	117
1.20 Efficacy of corporate boards	3.7	141
1.21 Protection of minority shareholders' interests	2.6	143
1.22 Strength of investor protection, 0-10 (best)*	5.3	65
2nd pillar: Infrastructure		
2.01 Quality of overall infrastructure	3.2	120
2.02 Quality of roads	2.7	122
2.03 Quality of railroad infrastructure	1.7	102
2.04 Quality of port infrastructure	2.7	134
2.05 Quality of air transport infrastructure	3.2	130
2.06 Available airline seat kms/week, millions*	57.9	92
2.07 Quality of electricity supply	4.8	73
2.08 Mobile telephone subscriptions/100 pop.*	125.4	38
2.09 Fixed telephone lines/100 pop.*	37.3	31
3rd pillar: Macroeconomic environment		
3.01 Government budget balance, % GDP*	-4.0	90
3.02 Gross national savings, % GDP*	16.1	93
3.03 Inflation, annual % change*	11.2	129
3.04 General government debt, % GDP*	47.9	92
3.05 Country credit rating, 0-100 (best)*	39.8	79
4th pillar: Health and primary education		
4.01 Business impact of malaria	n/appl.	1
4.02 Malaria cases/100,000 pop.*	(NE)	1
4.03 Business impact of tuberculosis	6.0	35
4.04 Tuberculosis cases/100,000 pop.*	18.0	40
4.05 Business impact of HIV/AIDS	6.0	29
4.06 HIV prevalence, % adult pop.*	0.1	12
4.07 Infant mortality, deaths/1,000 live births*	6.1	39
4.08 Life expectancy, years*	73.9	61
4.09 Quality of primary education	3.5	83
4.10 Primary education enrollment, net %*	92.7	77

INDICATOR	VALUE	RANK/144
6th pillar: Goods market efficiency		
6.01 Intensity of local competition	3.6	137
6.02 Extent of market dominance	2.6	142
6.03 Effectiveness of anti-monopoly policy	2.8	142
6.04 Extent and effect of taxation	2.9	122
6.05 Total tax rate, % profits*	34.0	50
6.06 No. procedures to start a business*	7	74
6.07 No. days to start a business*	13	59
6.08 Agricultural policy costs	3.3	119
6.09 Prevalence of trade barriers	3.8	113
6.10 Trade tariffs, % duty*	5.3	72
6.11 Prevalence of foreign ownership	3.8	124
6.12 Business impact of rules on FDI	3.7	123
6.13 Burden of customs procedures	3.5	102
6.14 Imports as a percentage of GDP*	53.5	56
6.15 Degree of customer orientation	3.7	135
6.16 Buyer sophistication	2.2	138
7th pillar: Labor market efficiency		
7.01 Cooperation in labor-employer relations	3.3	139
7.02 Flexibility of wage determination	5.4	41
7.03 Hiring and firing practices	3.6	98
7.04 Redundancy costs, weeks of salary*	8	21
7.05 Pay and productivity	3.5	106
7.06 Reliance on professional management	3.3	135
7.07 Brain drain	1.9	141
7.08 Women in labor force, ratio to men*	0.77	77
8th pillar: Financial market development		
8.01 Availability of financial services	4.0	97
8.02 Affordability of financial services	3.7	100
8.03 Financing through local equity market	2.4	124
8.04 Ease of access to loans	2.4	105
8.05 Venture capital availability	1.9	126
8.06 Soundness of banks	4.3	119
8.07 Regulation of securities exchanges	3.3	120
8.08 Legal rights index, 0-10 (best)*	8	24
9th pillar: Technological readiness		
9.01 Availability of latest technologies	3.9	127
9.02 Firm-level technology absorption	3.6	142
9.03 FDI and technology transfer	3.8	123
9.04 Individuals using Internet, %*	42.2	67
9.05 Broadband Internet subscriptions/100 pop.*	10.8	53
9.06 Int'l Internet bandwidth, kb/s per user*	76.8	20
9.07 Mobile broadband subscriptions/100 pop.*	34.5	32
10th pillar: Market size		
10.01 Domestic market size index, 1-7 (best)*	3.5	67
10.02 Foreign market size index, 1-7 (best)*	4.1	74
11th pillar: Business sophistication		
11.01 Local supplier quantity	4.2	110

4.08	Life expectancy, years*	73.9	61
4.09	Quality of primary education	3.5	83
4.10	Primary education enrollment, net %*	92.7	77

5th pillar: Higher education and training

5.01	Secondary education enrollment, gross %*	91.4	58
5.02	Tertiary education enrollment, gross %*	49.1	52
5.03	Quality of the educational system	3.1	111
5.04	Quality of math and science education	4.1	60
5.05	Quality of management schools	3.5	116
5.06	Internet access in schools	3.6	92
5.07	Availability of research and training services	3.2	125
5.08	Extent of staff training	2.9	138

11th pillar: Business sophistication

11.01	Local supplier quantity	4.2	110
11.02	Local supplier quality	3.9	113
11.03	State of cluster development	2.7	133
11.04	Nature of competitive advantage	2.5	134
11.05	Value chain breadth	2.9	119
11.06	Control of international distribution	3.5	120
11.07	Production process sophistication	2.7	128
11.08	Extent of marketing	2.9	129
11.09	Willingness to delegate authority	2.6	139

12th pillar: Innovation

12.01	Capacity for innovation	2.5	120
12.02	Quality of scientific research institutions	3.6	67
12.03	Company spending on R&D	2.3	132
12.04	University-industry collaboration in R&D	3.2	99
12.05	Gov't procurement of advanced tech products	3.1	115
12.06	Availability of scientists and engineers	3.9	78
12.07	PCT patents, applications/million pop.*	0.0	119

Notes: Values are on a 1-to-7 scale unless otherwise annotated with an asterisk (*). For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 83.

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Fig. 4. The Global Competitiveness Index for Serbia

Source: The Global Competitiveness Index 2012-2013: Innovation and sophistication factors, p. 313.

Executive opinion survey indicators were derived from the *World Economic Forum's Executive Opinion Survey*. Survey questions asked for responses on a scale of 1 to 7, where an answer of 1 and 7 always corresponds to the worst and best possible outcome respectively. For Serbia results are as follows: (*Insight Report The Global Competitiveness Report 2012-2013 Full Data Edition*, pp. 388).

- Property rights: How would you rate the protection of property rights, including financial assets, in your country? [1 = very weak; 7 = very strong] | 2011–12 weighted average (rank: 130; value: 3.1).
- Intellectual property protection: How would you rate intellectual property protection, including anti-counterfeiting measures, in your country? [1 = very weak; 7 = very strong] | 2011–12 weighted average (rank: 116; value: 2.8).
- Judicial independence: To what extent is the judiciary in your country independent from influences of members of government, citizens, or firms? [1 = heavily influenced; 7 = entirely independent] | 2011–12 weighted average (rank: 129; value: 2.4).
- Burden of government regulation: How burdensome is it for businesses in your country to comply with governmental administrative requirements (e.g. permits,

regulations, reporting)? [1 = extremely burdensome; 7 = not burdensome at all] | 2011–12 weighted average (rank: 136; value: 2.4).

- Strength of investor protection: Strength of Investor Protection Index on a 0–10 (best) scale | 2011 (rank: 65; value: 5.3).
- Quality of the educational system: How well does the educational system in your country meet the needs of a competitive economy? [1 = not well at all; 7 = very well] | 2011–12 weighted average (rank: 111; value: 3.1).
- Number of procedures required to start a business: Number of procedures required to start a business | 2011 (rank: 74; value: 7).
- Time required to start a business: Number of days required to start a business | 2011 (rank: 59; value: 13).
- Availability of latest technologies: To what extent are the latest technologies available in your country? [1 = not available; 7 = widely available] | 2011–12 weighted average (rank: 127; value: 3.9).
- FDI and technology transfer: To what extent does foreign direct investment (FDI) bring new technology into your country? [1 = not at all; 7 = FDI is a key source of new technology] | 2011–12 weighted average (rank: 123; value: 3.8).
- Capacity for innovation: In your country, how do companies obtain technology? [1 = exclusively from licensing or imitating foreign companies; 7 = by conducting formal research and pioneering their own new products and processes] | 2011–12 weighted average (rank: 120; value: 3.5).
- Quality of scientific research institutions: How would you assess the quality of scientific research institutions in your country? [1 = very poor; 7 = the best in their field internationally] | 2011–12 weighted average SOURCE: World Economic Forum, Executive Opinion Survey The Global Competitiveness Report 2012–2013 | 513 © 2012 (rank: 67; value: 3.6).

4. Conclusion

In this work we demonstrated the importance of values - culture for economic growth of three ex-Yugoslavia countries (Serbia, Croatia, Slovenia) and results of *Hofstede indice* and *WCI indice* (World competitiveness indice) and for Serbia.

Importance of institutions, culture and values lies in the fact that, contrary to previously dominant market fundamentalism, there exist correlation between economic development and culture and institutions, not oneway unilinear causation. Fundamental factors of growth (culture and institutions) are of much more importance for economic development and were greatly neglected during social and economic development of post-socialist countries, due to the fact that predominant significance was attributed to economic factors, and more narrow establishment of property rights through privatisation. After quarter century of experience of such approach what is needed is more broader social and economic model based on fundamental factors of growth, primarily formal and informal (culture and values) institutions.

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THE IMPACT OF ENVIRONMENTAL TAX POLICY ON SUSTAINABLE DEVELOPMENT OF THE EU ECONOMIES. DEA APPROACH

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Abstract

Challenges of climate policy increase the pressure on governments to find ways to reduce environmental damage while minimizing harm to economic growth. Governments have a range of tools at their disposal, including regulations, information programmes, innovation policies, environmental subsidies and environmental taxes. Taxes in particular are a key part of this toolkit. Without governmental intervention, there is no market incentive for firms and households to take into account environmental damage, since its impact is spread across many people and it has little or no direct cost to the polluter. Therefore, protection of the environment generally requires collective action, usually led by the government. Effective implementation of ‘green’ taxes requires careful consideration of a number of factors. Poorly designed taxes can have a reduced environmental effect and higher economic costs. The paper reviews the theoretical and empirical evidence to assess whether there is consensus on the problem: how ecological taxation affects the sustainable development. A detailed empirical analysis of the environmental tax policy impact on sustainable development in the EU countries concerning economic (the impact on selected economic development variables) and climate (the impact on selected ecological development variables) aspects have been carried out in the subsequent part of the study. The study uses the DEA (Data Envelopment Analysis) methodology, which allows to make a comparative analysis of the relative effectiveness of ecological tax policy in the above mentioned countries.

Keywords: ecological taxes, sustainable development, DEA approach

JEL Classification: H23, Q58

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1. Introduction

Environmental challenges are increasing the pressure on governments to find ways to reduce negative environmental impact while minimising harm to economic growth. There is a range of the green policy tools at governments' disposal, including: regulations, information programmes, innovation policies, environmental subsidies and environmental taxes. These last constitutes a key part of this toolkit. Environmental taxes have many important advantages, such as for example: environmental effectiveness, economic efficiency, the ability to raise public revenue, and transparency. Environmental taxes have been successfully used to address a wide range of issues including waste disposal, water pollution and air emissions. The design of environmental taxes and political economy considerations in their implementation are crucial determinants of their overall economic effects (OECD, 2010). The main goal of paper is to indentify the impact of environmental tax policy on the EU economies sustainable development, using DEA approach. Adopted hypotheses are following: effectiveness of the tax environmental policy is very differentiated between analysed EU countries, as well as between applied types of taxes. That is why adjustment of overall output levels and adjustment of levels of inputs and outputs will enable them to achieve higher efficiency.

2. Ecological policy instruments – types and possible profits from their implementation

Governments have a range of environmental policy tools at their disposal: regulatory (or “command-and-control”) instruments, market-based instruments (such as taxes imposed on: energy, pollution, resources and transport) and tradable permits), negotiated agreements, subsidies, environmental management systems and information campaigns. Although no one instrument can be considered best to address every environmental challenge, there has been a growing movement towards environmentally related taxation (and tradable permits) in the EU economies (OECD, 2010). Most environmentally related taxes generate very little revenue. Often, tax bases are quite small, making taxes unlikely to raise much revenue even though the resulting incentives can be quite effective from an environmental perspective. In other cases, tax rates can be quite low. In the medium term, additional revenues from carbon taxes and from the auctioning of tradable permits may increase the role of environmentally related taxation in government budgets (OECD, 2010). The EU governments are increasingly using environmentally related taxes because they are typically one of the most effective policy tools available. Exploring the relationship between environmentally related taxation and innovation is critical to

understanding the full impacts of this policy instrument as well as one potential facet of “green growth” (OECD, 2010). Taxes can directly address the failure of markets to take environmental impacts into account by incorporating these impacts into prices. Environmental pricing through taxation leaves consumers and businesses the flexibility to determine how best to reduce their environmental “footprint”. This ensures lowest-cost solutions, provides an incentive for innovation and minimizes the need for government to attempt to “pick winners” (OECD, 2010b). Environmental tax bases should be targeted to the pollutant or polluting behavior, with few exceptions. Their scope should be as broad as the scope of the environmental damage. The tax rate should be: commensurate with environmental damage, credible, clear, predictable, coordinated and transitional. Environmental tax revenues can assist fiscal consolidation or help to reduce other taxes. Distributional impacts should be addressed through other policy instruments. Environmental taxes may need to be combined with other policy instruments (OECD, 2010b).

3. The impact of ecological taxes on sustainable development – review of theoretical and empirical literature

So far most of the environmental and growth literature has been theory based, either using environmental taxes in an endogenous growth framework as in Bovenberg & De Mooij (1997) or as a general measure of environmental policy as in Ricci (2007).

The empirical literature on this issue has mainly concentrated on the use of simulation exercises rather than the use of econometric modelling, due to the lack of suitable macro-data so far.

The approach to environmental taxation in the EU has concentrated on the use of taxes to improve the environment, using the revenue raised to reduce the distortionary taxation on labour and production. This policy is often regarded as creating the double dividend whereby the environment is improved and at the same time the economy benefits through the reduction in these distortionary taxes (Bosquet, 2000). However other studies (Myles, 2000) state that for the double dividend to occur, the tax system must be inefficient, in which case a better policy would be to improve the system, rather than tax the pollutants. Fisher & van Marrewijk (1998) used a theoretical model which suggests that pollution taxes can result in a double dividend.

The main empirical work on environmental taxation and economic growth has centred around the use of simulations on the impact on environment, use of natural resources and the whole economy. Leiter et al. (2009) have used the EU environmental tax data as a determinant of investment. In their study they find that environmental tax revenue has a positive but diminishing

effect on investment. In one study on the EU (Andersen, 2007) the energy-environment-economy (E3) model was used to calculate the effect of a carbon-energy tax on economic growth where a positive contribution of such taxes for both the environment and the economy was found. In consequence the 'double dividend' theory holds because energy is used efficiently and it results in increased economic growth, as long as the energy taxes were used to reduce distortionary taxes, such as labour. Studies like Patuelli et al. (2005) and Anger et al. (2010) focused on a meta-analytical approach in analyzing the impact of environmental taxes on the economy and phenomena of double dividend, which involves the use of regression techniques to determine the effects from simulation studies within the current literature on the double dividend. There have been no econometric studies in general or Granger non-causality studies in particular on the relationship between environmental taxes and economic growth. Interesting example of this kind of analysis was presented in paper of Morley & Abdullah (2010). They investigated the impact of some environmental taxes on economic growth for 23 EU countries in 1995-2006. Authors concluded that there is a little evidence that an expansion of environmentally policies will enhance economic growth through the double dividend. The environmental tax policy interpretation is that more smart approaches for efficient instruments to promote sustainable economic growth and managing the natural resources as well as controlling pollution levels efficiently is required.

Pearce (1991) referred to the 'double dividend' theory, where there are two benefits of environmental taxes: increased environment protection and reduced distortionary impact of taxes on the economy. This theory has on the one hand won over environmentalists who support taxes on environmental externalities and claiming that revenue recycling of this tax in the economy offsets distortionary taxes for labour and firms. On the other hand, economists have argued environmental or pollution taxes affect economic development by reducing the competitiveness of firms.

In addition to the double dividend approach, other studies have suggested further justifications for a positive causal effect from environmental policies to economic growth. Ricci (2007) suggests a number of ways in which measures to improve the environment can enhance economic growth, such as the prospect of a better environment may encourage saving. Pautrel (2009) suggests when the reduced effects of pollution on health are taken into account, the effects of the environmental policy can be positive on the economy.

Environmental taxes can affect the economy in different ways, but if the double dividend holds, we could expect the environmental taxes to have a positive and significant effect on the economic growth, whether measured by GDP or adjusted net savings². Although causality could also run in the opposite direction from GDP to taxes, because an increase in the income and wealth of a country raises its ability and inclination to pay the higher environmental taxes (Morley & Abdullah, 2010). Some authors (see for example: Lee & Gordon, 2005) found a negative relationship between taxes and economic growth, although it depends on the form of the taxation. The most distortionary taxes are usually considered to be taxes on labour and capital.

4. Methodology and data description

4.1. DEA method and its usefulness for conducted analysis

DEA is a non-parametric frontier methodology developed by Charnes et al. (1978). Selection of the most appropriate DEA model is one of the most crucial tasks before carrying out the DEA analysis. There are two basic models of DEA: the CCR and the BCC models.

CCR also known as the constant returns to scale (CSR) model is the original DEA model developed by Charnes et al. (1978). According to CSR assumption the scale of operation of a DMU has no impact on productivity. It is appropriate when all DMUs operate at an optimal scale. In contrast to the CCR model, the BCC model developed by Banker et al. (1984) takes into account possible returns-to-scale evaluations (increasing, constant or decreasing) and therefore is called the variable returns to scale (VRS) model.

Each DMU consumes varying amounts of m different inputs to produce s different outputs. Specifically DMU _{j} consumes x_{ij} of input i and produces amount y_{rj} of output r . Envelopment BCC model (output oriented) is stated as follows (Thanassoulis, 2001):

$$\text{Max } z + \varepsilon \left[\sum_{i=1}^{m=1} I_i + \sum_{r=1}^s O_r \right], \quad (1)$$

subject to:

²Adjusted net savings (ANS) measure the true rate of savings in an economy after taking into account investments in human capital, depletion of natural resources and damages caused by pollution. Adjusted net savings, known informally as genuine savings, is an indicator that aims to assess an economy's sustainability based on the concepts of extended national accounts, see: <http://data.worldbank.org/indicator/NY.ADJ.SVNG.GN.ZS>.

$$\sum_{j=1}^N \alpha_j x_{ij} = x_{ij_0} - I_i \quad i = 1, \dots, m, \quad (2)$$

$$\sum_{j=1}^N \alpha_j y_{rj} = O_r - z y_{rj_0} \quad r = 1, \dots, s, \quad (3)$$

$$\sum_{j=1}^N \alpha_j = 1, \quad (4)$$

$$\alpha_j \geq 0, 1 \leq j \leq N, I_i \quad O_r \geq 0 \forall \quad i \quad \text{and} \quad r, z \quad \text{free}, \quad (5)$$

where

ε - is a non-Archimedean infinitesimal

I_i, O_r - represent additional output augmentations and/or input reductions (slacks)

The optimal value $z_{j_0}^*$ of z is the maximum factor by which the output levels of DMU j_0 can be radially expanded without detriment to its input levels. Thus by definition $\frac{1}{z_{j_0}^*}$ is the measure of efficiency of DMU j_0 and a measure of the pure technical output efficiency DMU j_0 . Slacks represent the leftover portion of inefficiencies. After a proportional increase in outputs, if a DMU cannot reach the efficient frontier, slacks are needed to push the DMU to the frontier (Kumar & Gulati, 2008).

A notion pure is to signal that technical efficiencies are “net” of any scale effect (Thanassoulis, 2001). The impact of scale size on efficiency is measured by scale efficiency. It measures the divergence between the efficiency rating of a DMU under CRS and VRS respectively. The CRS technical efficiency measure is decomposed into “pure” technical efficiency and scale efficiency. Scale output efficiency is defined as follows:

$$\frac{\text{Technical output efficiency of DMU}_{j_0}}{\text{Pure technical output efficiency of DMU}_{j_0}}. \quad (6)$$

DEA method has been applied in this paper in order to assess the effectiveness of environmental tax policy of the EU countries on sustainable development of their economies. Using the above method let extract the countries with the maximum level of efficiency and deviating from this level and to determine the degree of these deviations. The DEA also allows you to extract the most strategic, specific inputs and effects (called: *outputs*), which include in particular act in order to increase the efficiency of the impact of climate and energy policy in individual countries, which have a different determinants. In case of this kind of analysis it is

important to determine the benefits of scale. An approach based on intuition research suggests that there should be economies of scale variables, primarily due to: differences in the size of objects (countries), different societies environmental awareness in the countries concerned, as well as different traditions in the use of climate and energy policy and the different composition of the economy. Although there are also close, econometric methods of verification of the type of economies of scale, based on statistical tests. It should be noted that in some cases the choice of these advantages does not have very significant effect on the results obtained in efficiency, which in these cases also reinforces the argument for the use of variable economies of scale. The assumption variables economies of scale in terms of ex-ante evaluation is also necessary if at a later stage of analyzes we want to determine differences in the nature of those benefits to individual countries.

In this study 24 EU member states were analysed, four countries: Croatia, Cyprus, Luxembourg and Malta were excluded due to the lack of data for them. As mentioned above there was no justification for CRS, a VRS model was developed. The goal of the paper is to analyse the impact of tax ecological policy on the sustainable development of the EU countries, output oriented VRS model was applied in the analysis.

4.2. Description of variables

For the analysis were chosen, on the base of literature review, variables representative of the environmental tax policy and sustainable development. Proposed input variables illustrate the characteristics of different kinds of environmental taxes imposed on: energy (ET), pollution (TOP) and on transport (TT)) which should influence analysed sustainable development indicators: GDP per capita – based on Purchasing Power Standard (PPS) (GDP_PC), greenhouse gas emissions per capita (EPC) and the share of the renewable energy in gross final energy consumption (REN_EN). All kinds of analysed were taken from Eurostat database. Taxes imposed on resources were not included to the analysis because of lack of data. The relative values of all the analysed variables were used to compensate for the differences in size of countries. All tested types of environmental taxes are referenced to total taxes. The value of GDP is expressed in terms of per capita (based on purchasing power standard – PPS), the volume of greenhouse gas emissions is also calculated in terms of per capita, while the volume of consumption of renewable energy were related to total energy consumption. All analysed data are for the year 2012.

5. Results and discussion

Table 1 presents output efficiency of 24 EU member states under assumption of variable returns to scale. 10 member states are technically efficient and together they define the best practice or an efficient frontier. The remaining countries have a score bigger than 1 which means that they are technically inefficient.

Table 1. Output Efficiency Scores under Variable Returns of Scale (VRS) (analysed year: 2012)

DMU	Output Efficiency Scores (OES_VRS)	Benchmark(Lambda)	Times as a benchmark for another DMU
Austria	1	Austria(1.000000)	8
Belgium	1	Belgium(1.000000)	0
Bulgaria	1.469529	Lithuania(0.129450); Spain(0.250332); Sweden(0.620218)	0
Czech Republic	1	Czech Republic(1.000000)	0
Denmark	1.361341	Latvia(0.222620); Portugal(0.182929); Austria(0.594451)	0
Estonia	1.073111	Lithuania(0.984848); Spain(0.015152)	0
Finland	1.507145	Latvia(0.097860); Austria(0.902140)	0
France	1	France(1.000000)	1
Germany	1.295513	Spain(0.896907); Austria(0.103093)	0
Greece	1.384781	Portugal(1.000000)	0
Hungary	1.209073	Latvia(0.406775); Romania(0.160712); France(0.432513)	0
Ireland	1.217698	Latvia(0.114760); Austria(0.885240)	0
Italy	1.18672	Latvia(0.070618); Portugal(0.142578); Sweden(0.315365); Austria(0.471439)	0
Latvia	1	Latvia(1.000000)	7
Lithuania	1	Lithuania(1.000000)	4
Netherlands	1.377096	Latvia(0.031259); Austria(0.968741)	0
Poland	1.346027	Lithuania(0.363636); Spain(0.636364)	0
Portugal	1	Portugal(1.000000)	3
Romania	1	Romania(1.000000)	1
Slovakia	1.339251	Lithuania(0.283011); Spain(0.500594); Sweden(0.216395)	0
Slovenia	1.308517	Spain(0.519046); Sweden(0.283157); Austria(0.197797)	0
Spain	1	Spain(1.000000)	6
Sweden	1	Sweden(1.000000)	5
United Kingdom	1.345301	Latvia(0.308771); Sweden(0.046886); Austria(0.644343)	0

Source: own calculations based on Eurostat data.

To discriminate 10 efficient EU member states the author employed methodology applied by Kumar & Gulati (2008). For discrimination purposes, use was made of the frequency in the “benchmark set”. The frequency which an efficient country shows up in the benchmark set of inefficient countries represents the extent of robustness of that country relative to another efficient country. Efficient countries that appear seldom as a benchmark are likely to possess a very uncommon input/output mix. An efficient country with zero frequency in the benchmark set is termed as “efficient by default” because it does not have characteristics which must be followed by other inefficient countries (Kumar & Gulati, 2008).

Austria, Latvia, Spain, Sweden, Lithuania and Portugal may be regarded as global leaders of the EU. There are 2 countries (Belgium and Czech Republic) which may be regarded as “efficient by default”.

Pure Technical Efficiency (efficiency under VRS assumption) scores provide that all inefficiencies directly result from managerial underperformance. Inefficiency is a combination of both pure technical inefficiency and inefficiency that is due to scale of operations (scale inefficiency). Table 2 includes scores of technical efficiency, scale efficiency and kind of returns to scale for analysed EU countries.

Table 2. Scale efficiency and returns-to-scale (analysed year: 2012)

DMU	Technical Efficiency Score (TES_CRS)	Pure Technical Efficiency Score (PTES_VRS)	Scale Efficiency (SE)	Returns of Scale (RTS)
Austria	1	1	1	constant
Belgium	1.119248044	1	1.119248044	decreasing
Bulgaria	2.371449643	1.46952931	1.613747768	decreasing
Czech Republic	1	1	1	constant
Denmark	1.585735988	1.361340648	1.164834084	decreasing
Estonia	1.126104568	1.073111056	1.049383064	decreasing
Finland	1.785456032	1.507145376	1.18466079	decreasing
France	1	1	1	constant
Germany	1.433249966	1.295512991	1.106318482	decreasing
Greece	1.384780706	1.384780706	1	constant
Hungary	1.390043397	1.209072883	1.149677093	decreasing
Ireland	1.480062814	1.217697529	1.215460144	decreasing
Italy	1.316373181	1.186719658	1.109253709	decreasing
Latvia	1.259401432	1	1.259401432	decreasing
Lithuania	1	1	1	constant

Netherlands	1.787076932	1.377095595	1.297714507	decreasing
Poland	1.600752994	1.346027268	1.18924262	decreasing
Portugal	1	1	1	constant
Romania	1	1	1	constant
Slovakia	1.406483608	1.339251037	1.050201619	decreasing
Slovenia	1.767696409	1.308516875	1.35091602	decreasing
Spain	1	1	1	constant
Sweden	1	1	1	constant
United Kingdom	1.639005714	1.345301132	1.218318839	decreasing

Source: own calculations based on Eurostat data.

Based on the results from table 2 it can be stated that overall technical inefficiency of Belgium and Latvia, is not caused by managerial inefficiency but by inappropriate scale size. Greece's situation is the opposite, because overall technical inefficiency is caused by managerial inefficiency. In the remaining countries both pure technical inefficiency and scale inefficiency exist, because these states have both pure technical efficiency and scale efficiency scores more than 1. Only Bulgaria and Slovenia have pure technical efficiency score less than scale efficiency score which implies that their inefficiency is primarily attributable to the scale inefficiency rather than the managerial inefficiency. Remaining countries, besides Ireland, are in opposite situation, because they have pure technical efficiency score more than scale efficiency score. That is why their overall technical inefficiency is mainly caused by managerial inefficiency. In the case of Ireland the both scores are almost equal.

Slacks exist for all DMUs which are inefficient. They provide information regarding which areas should be improved by particular countries to make them efficient. Slacks were identified in table 3.

Table 3. Input and output slacks of inefficient countries (analysed year: 2012)

DMU	Pure Technical Efficiency Score (PTES_VRS)	Slacks (energy taxes/total Taxes) ET	Slacks (taxes on pollution/total taxes) TOP	Slacks (transport taxes/total taxes) TT	Slacks (GDP per capita, PPS) GDP_PC	Slacks (emissions per capita) EPC	Slacks (share of renewable energy in total energy) REN_EN
Bulgaria	0.693758	-3.344664	-0.247738	0	0	0	6.154067
Denmark	0.96568	-0.556268	0	-1.127497	0	0	1.965942
Finland	0.903055	-0.511155	0	-0.680109	0	0.028793	0
Germany	0.995698	-0.351702	-0.033191	0	0	0.06932	33.362612

Greece	0.975124	-0.92	0	-0.27	0	0.046519	11.258163
Hungary	0.965042	0	-0.122041	-0.087429	10638.11225	0	36.82199
Ireland	0.991676	-0.468022	0	-0.815495	0	0.018082	13.516746
Italy	0.835499	-0.309362	0	-0.387564	0	0	28.381379
Poland	0.659334	-1.543848	-0.496134	0	0	0	17.330295
Slovakia	0.802654	-0.263083	-0.02105	0	0	0	23.088805
Slovenia	0.677414	-2.776814	-0.512597	-0.015181	0	0	19.949412
United Kingdom	0.836524	-0.783926	0	-0.090267	0	0	31.690984

Source: own calculations based on Eurostat data.

In terms of input variables 11 countries have non-zero slacks for ET, 6 countries have non-zero slacks for TOP and 8 countries have non-zero slacks for TT. Regarding output variables: 1 country have non-zero slacks for GDP_PC, 4 have non-zero slack for EPC and 11 has non-zero slacks for REN_EN. These results show that besides the proportional increase in outputs by the level observed by pure technical efficiency most of the inefficient countries need to reduce input levels to become Pareto efficient.

6. Conclusions

The aim of the article was to analyze the environmental impact of EU tax policy for the sustainable development of member countries. The study used the DEA approach to assess the degree of effectiveness of the policy. Adopted hypotheses for varying effectiveness of the tax environmental policy, both between individual countries, as well as between applied types of taxes have been positively verified. On the background of analysis following conclusions can be formulated:

- there are areas for improvement in analysed EU countries: adjustment of their overall output levels and adjustment of levels of particular inputs and outputs that enable them to achieve efficiency,
- more detailed investigation of Slovak, Spanish, Belgian and Danish environmental tax policies should be carried out to identify best practices allowing these countries to serve as benchmarks for inefficient countries,
- implementation of best practices by the EU countries with worse performing environmental taxes would contribute to supporting their economies in terms of sustainable development indicators improvement,

- there is a strong necessity to concentrate on choosing relevant input and mainly output variables, which would be the most representative for sustainable development (DEA method doesn't let to take into account too many variables),
- it is worth to consider the possibility to analyse other tools of environmental policy, like for example: emission permits, spending on environmental protection, regulatory instruments, etc.,
- extremely useful could be analysis of the differentiation of tax rates levels and share of various taxes (environmental, imposed on work and on capital) in total tax revenues, in order to optimize the efficiency of tax systems in the analyzed countries,
- the results obtained in this analysis should be treated with caution. The proposed DEA approach should be possibly verified against alternative variable measures. It would be very difficult task to formulate policy detailed recommendations for particular countries because of their economic, political, social and ecological specifics.

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THE CASE OF TURKEY: IS THE EXPORT-LED INDUSTRIALIZATION STRATEGY ONLY WAY ?

Funda Râna Adaçay¹

Abstract

While the competition gains speed and conditions change rapidly in international arena, Turkey confronts some structural difficulties to adjust these changes. The aim of our study is to explain reasons of the above mentioned problem by using the performance of the industrialization strategies followed in Turkish economy, and to investigate the necessary main solutions. The main industrialization strategies can be Import-Substitution-Led Industrialization Strategy (I.S.L.I.S.) and Export-Led Industrialization Strategy (E.L.I.S.)

The main consequences of this study obtained by considering growth rates of manufacturing industry, investments, foreign trade and employment show that, I.S.L.I.S. used pre 1980 period in Turkey created a well established ground for the Turkish industry. However, the production of intermediate and investment goods which constitute the second stage of this strategy could not be accomplished. In the Post 1980 period, E.L.I.S. has been applied in Turkish economy uncompleted, like I.S.L.I.S. applied already. As a result, the industrial structure provided by both of these strategies has not been accomplished. I.S.L.I.S. is the first stage of E.L.I.S. and these two strategies are complementary for each other. When these strategies are applied at the same time, it is named as “Integrated Industrialization Strategy (I.I.S.)”. This strategy is an rational composition of import-substitution-led and export-led industrialization strategies. Effort of becoming an industrialized country by using this integrated approach will cause the Turkish industry to have a competitive structure. With its protective side, integrated industrialization strategy protects the Turkish industry against competition which exist in the rest of the World. It will also provide income required for becoming an industrialized country with the aspect of foreign currency provided from export.

Considering the international competition power, most of developing countries are placed among the last countries, and a strategy which aims an integration in World economy in the base of the productivity and technology more than price competition should be followed.

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JEL Classification: O14, O11

1. Integrated industrialization strategy (IIS)

The country strategy occurs in a process ranging from a directive plan and free market mechanism. To evaluate or take measures correctly, take advantage of natural opportunities or take measures against rising threats are the main yields of the country strategy (Rep. Of Turkey Industry and Trade Ministry, 1995, p. 39).

Import-substitution, in terms of international economic policy is not a criterion by itself, like a strategy based on export manifests which has growing foreign trade difficulties because of the failures of the import-substitution industrialization can not be accepted by itself as a way for industrial development. Perhaps, it features only an “offensive-aggressive international economic policy. On the other hand, foreign economic strategy of a country can partly cover the protective properties against the outside effects, and can also partly cover offensive elements. In this case, country’s existing, economic potential and international competitiveness will be exposed to some difficulties. Therefore, there is no distinction between the two defined strategies. While offensive approach looking for ways to increase the efficiency of the economy, protectionist approach is based on economic security by limiting attitudes” (Simai, 1982; pp. 25-26).

The problem of developing countries in the industrialization is not to give the importance or priority to which strategy. But not making a choice between two strategies. At the same time but for finding an integrated strategy that will allow the development of both export-oriented and introverted industrialization (Çarıkçı, 1983, p. 98). First and important step against each other in a new strategy of import-substitution and export-oriented strategy, showing a flexible feature should be ensured against changes in the direction of internal and external conjuncture that complement each other.

Observation and research based on a combination of import- substitution and export-oriented strategy, which is called “bilateral” reveals a good performance of the development strategy (Kurdoğlu, 1975, p. 80). This strategy “Integrated Industrialization Strategy” as we might call, reveals complementary sides of both ISLIS and ELIS. Both the import-substitution strategy and export-oriented strategy are complementary rather than competing properties.

Import-substitution which is necessary to initiate industrialization and export-led industrialization formed the preliminary stage is commonly generally accepted view. In fact, subject to exports of industrial goods usually results in import-substitution policy. It can be benefited from both implementing the protectionist policies to increase competition the export potential of the industry by creating an industrial base in the high area, and to achieve breakthrough in export (Eser, 1993, p. 172). In fact, if the import-substitution industrialization strategy in the long-term perspective considering that for this purpose; export-oriented strategy, which aims at the roof of this situation is created by the import-substitution strategy. Even, to export breakthrough after 1980 industrial based on protectionism practised, in the period prior to 1980 from an important base and companies today even having technological knowledge in Turkey, taken into consideration, opening to random economy and insisting on liberal policies will be seen unmeaningful (Çarıkçı, 1983, p. 57).

With the integrated industrialization strategy, both the strategy based on import-substitution and the economic problems resulted from export-led strategy will be resolved. The integrated strategy: defensive side of I.S.L.I.S. with one hand, new competition emerging in the World economy, the negative effects on the economy of the rapid development in the monetary system and trade can be reduced to a minimum; on the other hand, the foreign Exchange earnings needed for industrialization will be provided by E.L.I.S. (Adaçay, 2014, p. 172).

Another indication of not being able to apply the extrovert strategy in order to ensure success of the industrialization of developing countries is higher fluctuations in terms of trades of developing countries than developed ones and also keeping the industrialized countries their markets off for industrial goods, like textile, of developing countries. On the other hand, it's very difficult to realize for liberalization of foreign trade based on comparative advantage of scale economies and with increasing competition assumptions. For example, by increasing the comparative advantage and competitiveness greater economies of scale can not be achieved (Parıltı, 1994, p. 85).

The important point in the development of developing countries is keeping the balance between the investments for the substitution of imported goods and investments in order to boost exports. On the other hand, export demand flexibility and whether the domestic demand on this goods meet the production cost or not gains an extra importance. In fact, the basis of the problem for developing countries is as income increases, consumption trends, demand for intermediate

and capital goods needed for investments and the demand for imported goods because of the launching the new Technologies to the market (Alper, 1982, p. 102). Therefore, the solution of these problems requires the implementation of a combination of a flexible policy bundles. These policies from the bunch, thanks to the implementation of integrated industrialization strategy, the acquisition of a unit of currency and the marginal cost of internal resources spent for a unit of foreign currency savings would be the same. Consequently, by providing effectiveness in resource allocation, structural defects in industry can be prevented. However excessive and prolonged disrupting the distribution of resources applied to import substitution industrialization of the country's potential was to reveal an inverted structure of the comparative advantage. But given the extreme extrovert industry subsidies could lead to the same result (Çarıkçı, 1983, p. 30).

As a result, integrated industrialization strategy spreading the area with dynamic comparative advantage of the country's import substitution differs from expanding in an unlimited way as time passes. In this case; of particular import substitution, means the avoidance of the obstacles posed by the growth in the expanding substitution process (Hiç, 1994, p. 67).

1.1. Utilization of Economic Policies as Conversion Purpose

The main objective of the integrated strategy is to be able to join in industrialized countries as soon as possible by using existing and future resources in the country in an optimal manner. When realizing this aim to reduce the dual structure between the various sectors in the economy performing and export, employment, taking into account the interaction between efficiency and rapid growth; particular attention should be paid to ensure coherence between these objectives.

Primary industrialization models that will be implemented must adapt to the conditions and characteristics of the country with the current conjuncture. Long-term strategy to be a character in order to give sensitive to developments in internal and external conjuncture of economic policy should be flexible. In this regard, a union on the basis of the broadest possible effort should be made to ensure objectives of industrialization, for example; workers, employers and government representatives in wage-productivity link, safety anti-trust laws, quality control, consensus around issues such as environmental pollution and ensuring the consensus on basic principles could be an important step in this direction (Şenses, 1989, p. 94).

The reduction of customs of external input or removal of export private loans higher depreciation for export goods industry, reducing the income and corporate tax or installed commercial information are provided among other measures (Rep. of Turkey Industry & Trade

Ministry, 1995, p. 91). With such an export policy, with the resulting loss of protectionism in domestic and international welfare; can be expected to be resolved with new campaigns of specialization later on (Clapham, 1973, p. 121). The fundamental importance of the contribution to the economy and development of the manufacturing industry should be continued, but in this context, the concentration in exports of labor-intensive consumer goods in particular should be avoided. This property of low demand elasticity in addition to higher supply elasticities,

Corporate restructuring in the industrial policy of creating high value-added exports, with a high contribution to the development of new products and technologies open “strategic” should set new industry branches. “Strategic sectors” aimed at a long-term industrial/technological innovation is inevitable for the preparation of conditions. Considering the renewal of the institutional forms of political management for structural changes, which affect income and the distribution of resources and significant repercussions on the real sector economy, the financial system must also not be subject to revision and reform. Rapid changes in structural changes in the financial system that occurred as a result, reforms of financial liberalization terms after 1980, Turkey has led to an escape from the expressed financial securities with the money and made more open to influence from the economy from going abroad. The increase in inflationary expectations, to increase the financing costs of high interest rates lead to instability in the financial markets for speculative profit-seeking activities and economic activities, it has led to economic instability. Therefore, the need for monetary policy to ensure price stability in the economy and institutions tasked with carrying out a way, far from arbitrary interference of political power, must ensure that it has a structure compatible with national economic policies.

To see the current and potential comparative advantages, you must take into consideration the price mechanism of the market process. Market prices and expected of industrialization policies which have turned to comparative advantage must be associated with the growth of the economy based on market conditions. Also ensure that the transformation of the structure of export-oriented industrialization and basic approach to the market economy and above all supportive measures must be taken to create additional stimuli should be consistent. Among the most important is that the transition to a realistic and stable exchange rate practices of this application.

1.2. Strategy Experience In The Industrialization Process Of Turkey

Since 1963, the Turkish economy has been governed with development plans, I.S.L.I.S.’s actually the first phase was completed at the beginning of this period; however, to the production

of intermediate and investment goods which is the second stage couldn't be passed. Abandoning this strategy in the economy which came to an impasse, it is understood that intended economic developments hasn't been achieved yet as a result of the transition to E.L.I.S. In other words, also unrealized both strategies; there has not been a stable and a rapid industrialization in the economy. I.S.L.I.S. criticized and abandoned in 1980, which has been tried to be applied with plans though, when looked at the results, it has seen that it was applied "randomly". Despite the negative consequences, this strategy has been the basis of industrialization in the Turkish economy. The post - 1980 E.L.I.S with high and sustained export, growth target wasn't achieved; in addition to this, export structure hasn't been much of a change. The Starting point of payment problems of both strategies couldn't be solved in a stable manner; The dependence on imports continued. This situation shows that the abandoning the I.S.L.I.S. and choosing E.L.I.S. didn't change the case and turned the country back to the starting point. The main source of growth that takes place in both strategy period; the increase in domestic demand. Exporter sectors of the domestic market rent and production resources after 1980 led to the domestic market higher. and; therefore, this has resulted in the inhibition of export. In both strategy periods; enhancing policies were applied to the use of technology; but, while consumption and import of intermediate goods increased. The decrease in investment goods imports reveals that it wasn't benefitted enough from technological advances. Besides technology use policy, enforcement has been neglected, though (Adaçay, 2014, pp. 167-172).

2. The perspective of Turkish economy in terms of competitiveness

Improving the industry's competitiveness and keeping it stable in the long run needs structural changings that should be considered with especially in technology policies, and new corporate developments that plans and applies education and investment and finance policies. Because, the main axis of a long-term industrial strategy consists of a rich human resource (human capital) accumulation, physical capital structure and renewed and improved technology infrastructure.

2.1. Changes in Competitiveness Indicators

The world economy is undergoing significant structural changes. In the recent past while many underdeveloped countries entering the international market by producing labor-intensive goods, developed countries adapted a strategy that specializes themselves in producing more sophisticated goods and leaving the labour intensive production to underdeveloped countries. In

the past, developed countries who were thinking to leave the production to the underdeveloped countries, has reached a high level of competitiveness with cheap, labour intensive textile productions by developing high-tech textile production (Berksoy, 1991, p. 40). The foremost of the various factors that make up a country's competitiveness in world markets is the price level. Because it quite affects the relative share of export price changes in the exchange market, but it has been learned as a result of efforts to penetrate foreign markets, the price level of industrial products in the debate, but the price is a certain level of quality which even can't be debated often (Oral, 1985, p. 56). Thus, quality is becoming increasingly important in the production of goods and services towards improving competition format. However, the quality of competition, flexible manufacturing systems suitable for the production of goods which allows the customers to enjoy requires a number of manufacturing techniques utilizations (Müegge, 1990, p. 45).

2.2. Turkey's Competitiveness and Growth Indicators Based on Export

There are different criteria from each other in research to determine the competitiveness. International price comparisons, export performance, comparative advantage criterion, unit cost price comparisons, such as labor or capital productivity is used to measure the competitiveness of many countries (Pala ve Saygı, 1990, p. 100). Exiting the way with the different assumptions, using various models suited of competitiveness leads to obtain different results from the research (For example: Duman, 1992; Göl, 1968; Demir, 1992).

European Management forum, in its report regarding the competitiveness, in terms of international competitiveness puts various criteria which are: The dynamism of the economy, efficiency in the industry, market dynamics, the skills gained human resources, natural resources, outward-looking export strategies, the ability to meet future socio-political consensus in society, economic stability (Müegge, 1990, p. 47).

According to the account of Global Competitiveness Index in the period between 2013 and 2014, Turkey ranks 44th among 148 countries. In the last year, Turkey ranked 43th among 144 countries while it had been in 59th among 142 countries in the previous year. As last year, the best performance in the components of Global Competitiveness Index has been displayed in the market size item. While the 16th most competitive economy is in the market size, with the rank of 130th, the worst performance is seen in the effectiveness of the labor market. Figure below provides information about the location of Turkey in the some components used to calculate the Global Competitiveness Index. As seen in the figure, the most important improvements compared

to the previous year are seen in institutional structuring, innovation, health and primary education, higher education and job training index.

Table 1. Turkey's Competitiveness Index Components

Competitiveness Index Component	Turkey's Ranking among 148 Countries (2013)	Turkey's Ranking among 144 Countries (2012)
Corporate Restructuring	56	64
Infrastructure	49	51
Health and Primary Education	59	63
Higher Education and Job Training	65	74
The Effectiveness of the Commodity-Goods Market	43	38
Market Size	16	15
Innovation	50	55
Labor Market	130	124
Macro Economic Atmosphere	76	55
Development of Financial Markets	51	44

Source: WEF, Global Competitiveness Report-2013-14.

In the Global Competitiveness Index, China, with its rank of 29th, is one of the top 30 most competitive economies. It has a leading position among large scale developing countries. Among the other 4 BRICS countries, South Africa ranks 53rd, Brazil 56th, India 60th while Russia 64th. Although Turkey went a step back in this year, it has only been behind China. Considering the countries in Middle East and N. Africa, Qatar is a leader with its rank of 13th.

2.3. Turkey's Economic Strength Indicators

According to the report of 'World Economic Outlook' published twice a year by the International Monetary Fund in terms of GDP sizes (PPP), while Turkey was the world's largest 14th economies in 1987 and 16th in 1999, while Turkey was placed in the world's 17th largest economy in 2002 when the current government, AKP, came to power (www.mfa.gov.tr). Although Turkey remained in this position for many years, Turkey has slipped one position to 18th with the year of 2014. According to World Bank data, Turkey is ranked 59th in the world in terms of income per capita. In this respect, while Hungary is also ranked 49th, Greece is 39th, Italy is 27th, France is 24th and Germany is 17th in the world (www.data.world.org).

According to Human Development Index published annually by the United Nations which evaluated the average life expectancy, literacy rate, education level, living standards and quality of life measures in the country, Turkey ranks the 69th among 187 countries. For this index, Costa Rica is ranked 68th, Bulgaria is 58th, Romania 54th, Cuba 44th, Poland 35th (www.hdr.undp.org). In other words, there are 68 countries which offer a better quality of life to people around the world than Turkey. ‘Good Life Index’ made by OECD which has many criteria such as shelter, income, job opportunities, social life, education, environment, health, life satisfaction, life satisfaction, and security, Turkey is ranked the last among OECD countries; furthermore, Mexico, Greece and Russia are better off than Turkey (www.oecdbetterlifeindex.org). According to GINI Index measuring the inequality in the distribution of income, Turkey is ranked 57th country where it has maximum income inequality. While South Africa, Gambia, Peru and Rwanda are worse than Turkey, exactly 84 countries have better income justice than Turkey (wdi.worldbank.org). According to CIA data, Turkey has been ranked 7th country which has the largest current account deficit by the year of 2013 in the world. For the data of 2013, Turkey is the world’s 27th biggest exporter. Belgium with its population of 11 million is exporting 1.5 times more than Turkey, and with a population of 16 million, the Netherlands is also exporting exactly 3 times more. The current deficit which was around 7.5 billion dollar in 2003, through increasing the following years, became 38.5 billion dollar in 2007 and 41.9 billion dollar in 2008. Particularly, before the years of economic crisis, the exceed of the threshold value about 4-5%, of the rate of Current Deficit/ Gross Domestic Product (GDP), causes concerns as to be understood as a possible economic depression. As of the year 2010, the rate of current deficit is 6.5% in comparison to the rate of GDP; however, according to the data of April 2011, the aforementioned rate became 64.1 billion dollar by increasing to 8%. On the other hand, according to the data of June, the annual current deficit provided by the Central Bank increased to the level of 72.5 billion dollar while decreasing to 47.8 billion dollar in regard to the data collected for 2014 (www.cia.gov).

In Turkish industry during the 2000s, the resource and labour intensive manufacturing industry structure has continued while structure which includes high added-value and technology (high speed of demand growth) having high competitive power is not taken place. Due to the failure of the establishment of the differentiated production structure based on scientific progress

and research and development activities, the portion of the products having high technology in whole manufacturing industry is in low level which is about 2%.

The data regarding to the sectoral allocation of the national economy proves that the sectors of industry has lost their importance comparatively in Turkey after the 1980s in industrial sectors while a growth process based on services and construction sectors has been experienced. In this process which starts with the subordination of the industry and producing real sectors in general, it has been observed that the employment has lost its momentum as well and the increase in national income is not fed by the increase of employment. On the other hand, the analysis of total factor productivity in which the sources of national income is separated with regard to the production shows that the contribution of the labour factor decreases in half from the 1980s while the contribution of the (import) capital sector has increased from 50% to 67% during the same process. The findings are evaluated as a natural reflection of the speculative oriented growth model. If necessary to summarize in general, in conditions of speculative oriented growth as it is realized in all global economies, in Turkey as well, it is observed that the fewer portions of the sources is separated to non-financial and real sector activities. It is also observed that Turkey is growing slowly which is unable to create sufficient employment. This process which is defined with the substitute of the labor force factor by the capital factor comes on the ground as the main result of unfriendly employment growth and import oriented industrialization road network (Yeldan, 2014, pp. 64-65).

3. Conclusion

In today's World in which it is the quality rather than price competition and technology competitiveness, Turkey's low competitiveness in the international arena is seen. Once, the first main macroeconomic problem should be resolved to increase the international competitiveness, it is necessary to create a stable and efficient market economy. Cost, quality, profitability problems in the area should be solved and state with a structure of router to provide organization must become active. While the problems were the public finance deficit and high chronic inflation in the 1990s, the problems in new term are external deficit and the growth which are unable to create employment. In the 2000s, the structure of production still focuses on the products having low added value together with its technological content still depended on the source-labour intensive sectors. In this context, the economy of Turkey has half-industrialized feature which is differentiated and is deprived of making production in the scientific-driven sectors. In both

medium and long terms, there is a necessity to establish planned industrial policies whose strategic aims are determined, to transform the foreign dependent structure, and to adapt production process which includes high added value together with advanced technology in order to have competitive industry sector. In this sense, among the BRICS countries, the deficiencies of Turkey's implementations and precautions on this way are seen significantly. So, with the aim of decreasing the import-oriented production in the internal domain, there is a necessity to develop policies to product the intermediate input used in industry in terms of conditions of competition.

With the "Industrial Strategic Paper of Turkey for 2011-2014" in the context of three main aims called as to increase the production rates in sectors of medium and high technology in the industry of Turkey, to adapt a production process having high added value, and to support the dynamic and competitive companies; in the frame of eliminating the regional development diversities, it is foreseen to develop the SMEs, improve human resources, encourage the research and development together with advanced technology, establish developed industrial infrastructure and to provide a coordinated operations of related institutions, organizations and companies under the supervision of Ministry of Industry and Trade. And especially the industrial branches like automotive, white goods and its sub-sector, electric and electronic industry, textile industry, food industry, and iron and steel industry are foregrounded. Once again in terms of "the incentive law" introduced in the beginning of 2011, the regional incentives are developed with providing deduction of tax on corporations, return of value added tax, the incentive of income tax withholding, support of insurance premium, field of investment apportionment; also, by determining the strategic sectors (motor vehicle, machine, electric and electronic industry, iron and steel industry, chemistry, mining, advanced technology informatics) and by supporting the production depending on import substitution, the structural transformation of the industry is aimed. As it is observed from the plans, it is possible to provide internal transformation of the industrial sectors in terms of technology, labour force, infrastructure, and financial means and also possible to provide incentives and supports which are not contrasted with the sanctions of the World Trade Organization (WTO)². For the developing countries, for being successful of the model of "outward-oriented growth based on export", by selective industrial policies, to adapt a structure in which specific industrial sectors are preserved, planned; policies established under

² There is no contradiction between removing the customs on the import inputs of the export-oriented products and the rules the WTO. Besides, it is possible to implement the customs on the level of 20-30%. Moreover, the rules also enable regional incentives and R&D.

the cooperation of public-private sectors; investments are expedited, and the structure which has advanced technology, research and development oriented has become more of an issue. It should not be forgotten that, these policies are not against market; on the contrary, these are the directive policies to provide the perpetration of the dynamics of the market for the good of country's benefits (Baştav, 2011).

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POLITICAL RISKS OF WESTERN COMPANIES IN A TRANSFORMING COUNTRY. EVIDENCE FROM RUSSIA UNDER THE THIRD TERM OF PUTIN

Ewa Martyna-David¹

Abstract

Foreign companies are said to form an integral part of the economic landscape in their respective host country. With regard to countries in transition, Western enterprises have to face specific risks and obstacles related to the current stage of the democratic and economic development. They are, just as those domestic firms, harassed by political risks such as corruption, political favoritism or legal uncertainty.

This paper is drawn on the evidence collected during a field study conducted between March and September 2014 in Austria and Russia. The author conducted 24 qualitative interviews with Austrian business representatives operating in Russia and Russian experts on business environment.

The results of this study can be used for the improvement of the understanding of specific business conditions ruling in Russia. The paper can be considered a valuable foundation for further in-depth research both on the political risks and individual factors

Keywords: business environment, coping strategies, international business, political risks, russian federation

JEL Classification: FO 17, FP 48

1. Introduction

After the breakup of the Soviet Union, Russia as its main successor for many years seemed for many scientists to be on a path to Western-style democracy and free market economy. Two decades of transformation show that many informal institutions inherited from the Soviet period are still present in the political and economic life of the country. The transformation process, however, changed their character and scale.

This article discusses political risks faced by Western businesses in Russia. My purpose is to demonstrate the impact of informal institutions embedded in the political-institutional

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frameworks of a state on business development, especially in case of Western enterprises. The aim lies at searching for answers to the following research questions: In which ways can the Russian business environment characterized by neopatrimonial practices and how do Western enterprises react on such system. The latter question looks at coping strategies introduced by them in order to adjust to Russian market conditions.

There is a wide range of studies on individual informal factors which characterize a neopatrimonial system such as patron-client relationship, various forms of corruption or the lack of rule of law. The impact of informal institutions within such a system on international business has not been addressed yet. This article tries to bridge this gap by offering a multidisciplinary, comprehensive approach.

Firstly I will present literature review and methodology. The second part consists of a detailed case analysis of consequences of on political risks on Western firms in Russia. The final part will outline coping strategies adopted by these companies attempting to deal with the business environment they operate in. At the end of this paper, I will try to sum up the most relevant findings.

2. Conceptual framework: Political Risks and Neopatrimonialism

So far, there no accepted universal definition of political risk in business administration has been established, let alone a list of indicators. However, despite the proliferation of definitions and theoretical concepts, there is at least a common understanding. Agarwal and Feils (2007) describe political risks as the consequence of possible interference with business operations of external agents like the government. In search of matching ideas which may be suited to be applied for transition countries, we may find the concept of neopatrimonialism, mainly used in political science.

It analyzes the coexistence of formal and informal institutions within a political system (Bratton & Van de Walle, 1997). Its initial application in the 1970s refers to developments in Africa but has been used over time with reference to other regions. Neopatrimonialism describes a type of a system in which the tradition of patron-client networks is interrelated to some kind of rational-legal structure of bureaucracy. Formal structures and rules do exist, although the separation of the private and public sphere is not always observed in practice (Erdmann & Engel, 2007, p. 105). This situation creates uncertainty for stakeholders. Under a neopatrimonial

organization, “people have a certain degree of choice as to which logic they want to employ to achieve their goals and to best realize their interests”.

Informal institutions come into being both when formal institutions do not function properly and where formal institutions work effectively. In cases when informal institutions coexist with ineffective formal institutions, the first are supposed to substitute or compete with the latter (Helmke & Levitsky, 2004, p. 729).

Although the concept is still underdeveloped and ill-defined due to a lack of coherence, some factors such as corruption, rent seeking, patron-client relationships and legal uncertainty are widely used to describe this phenomenon. These informal factors are embedded in the political system but due to the interplay between politics and economics they mainly tend to influence the latter.

This paper focuses on the informal institutions in a neopatrimonial system and their consequent impact on the operational environment of Western companies. Informal institutions are “mainly unwritten, socially shared rules and procedures, which are put into social live, distributed and implemented “outside of officially sanctioned channels” (Helmke & Levitsky, 2004, p. 725). They might include corruption, personal networks; clientelism and patronalism (Helmke & Levitsky, 2004, pp. 727-729).

Corruption is an umbrella term which covers various aspects such as collusion, cronyism and nepotism, fraud, gifts, hospitality, lobbying, abuse of power or office and influence peddling (cf Shekshnia et al., 2014, p. 5). This broad understanding can be found in the widely cited definition by J. Nye (Nye, 1967, p. 419).

According to this author, corruption is a behavior which deviates from formal duties or rules of conduct governing the actions of an officeholder because of their private motives such as wealth, power, or status. This pattern can be detected in various forms, i.e. bribery, nepotism and misappropriation. The first practice is always of monetary nature, the last two can also have a non-monetary character.

The definition has a very broad scope in terms of types of corruption forms and gains. For this paper, I have adopted a narrow understanding, which is limited to monetary nature of corruption acts. Systemic corruption means that politician and officials use their authority in order to sustain their status and private wealth.

Taking into account importance of the non-monetary aspects of relations within informal institutions, the term of “systemic favoritism” is to be introduced and consequently applied. Systematic favoritism describes the systematic use of public office to foster the interests of the patron himself and/or his clients, while impeding initiatives by actors who are no part of this network.

3. Literature review

There are a few relatively recent publications, which pay attention to the interrelationship between political and economic spheres in Russia using a neopatrimonial prism (cf. Ledeneva, 2013a; Robinson, 2013). The concept of patrimonial capitalism applied by Robinson can be seen as a variant of Weber’s patrimonialism and neo-patrimonialism in the economic sphere (Robinson, 2011, p. 4). Ledeneva analyzed the nature, norms and methods of informal governance under Putin drawing on this concept (Ledeneva, 2013a, p. 1136). Both studies have been very important for the practical shaping of this paper.

If we take a broader look on the relevant literature relating to the interplay between politics and economics in Russia without direct reference to the neopatrimonial concept we may observe different lines of research. Scientists elaborating on transition or area studies have noted the existence of a variety of informal practices, including the corruption of the public sector and informal networks of ruling elites. With regard to post-communist informal state institutions, which generally also cover corruption and patron–client relationships, there is a bulk of existing literature.

A lot of attention has been paid on one particular informal institution: corruption. This instrument is widely discussed as a practice present in the bureaucracy and the political system (Anderson, 2012; Hanson, 2013; Leslie, 2012). Business corruption constitutes a theme in many very interesting analyses (c.f. for instance Ledeneva, 2011; Mommsen, 2012). Denisova-Schmidt (Denisova-Schmidt, 2010) describes the role of public administration and personal networks in corruption acts of foreign companies.

Interpersonal networks such as patron-client ties within political and economic elites have been another popular topic for research on informality and informal institutions. Krystanovskaya and White (2013) have analyzed the networks within the ruling elite and state networks. Ledeneva has authored a study on the informal practices within public administration (Ledeneva, 2013) and Hanson has dealt comprehensively with networks in domestic business-state relations (Hanson, 2013). Some scholars sought to define the dominating players in the state-business

interactions and showed a change in this relationship from state capture to business capture (c.f. Yakovlev & Zhuravskaya, 2004; Yakovlev, 2006).

4. Methodology

This paper presents the findings of a field study conducted by the author between March and September 2015 in Russia and Austria. The selection of qualitative approach was justified by the sensitive character of the research problem. This method helps me to investigate “how” questions of my project.

Based on an extensive literature review I designed a questionnaire and consequently a category system. The interviews were semi-structured and conducted by the virtue of guidelines. The questionnaire was my guideline for conducting them. Expert interviews were selected as data collection method. One to one interviews conducted in a confidential manner provide access to information that otherwise would not be accessible.

The author has contacted roughly 200 Austrian companies registered in Moscow and 10 scientists, journalists and NGO activists. Interview partners were recruited by targeted selection by applying the position technique, the scientific respondents by using the reputation technique. The criteria of selection of business interview partner were the size of the company and the line of business. The aim was to reach a broad involvement of a wide range of various types of enterprises.

Representatives of Austrian business were invited to contribute to the project on the political-institutional framework for business activities. The Russian scientists, journalists and representative of NGOs were directly asked to share their relevant knowledge in their field of expertise. Both groups were approached by guaranteeing strict confidentiality and were asked the same categories in the questionnaire. The interviews were conducted orally by using sensitive words such as corruption. Due to the promised confidentiality I codified firms as numbers in increasing order.

The collected data result from 24 qualitative interviews conducted with managers of Austrian companies on their operations in Russia and Russian experts from academia, journalism and NGOs on the general business environment. The business interview partners represented a wide range of sectors and companies from SMEs to large enterprises (e.g. construction sector, high-tech equipment, steel constructions, etc).

The interviews were mostly conducted in person allowing for a broader conversation on the topics of interest. They helped the author gain more insights into the structure and workings of informal institutions in Russia. The language used was of the choice of the respective vis-à-vis: English, German or Russian. The 20 face to face personal interviews were supplemented by 4 telephone and Skype interviews. They lasted on average one hour. 20 interviews are recorded, 4 respondents preferred not to be recorded. Concerning the latter, I was able to take extensive notes.

After data collection, the interviews were transcribed in full in original languages. The category system guided me through the analysis of the interview material. In this respect I followed Mayring (2000). I used summarizing qualitative content analysis while applying the deductive approach. The reason to opt for this procedure was the already existing plethora of literature providing rich variables and concepts which could be used as points of departure.

5. Consequences for Western Business

5.1. Political corruption

Corruption exists in many forms and is committed at various levels in Russia. Due to the hidden nature of such transactions it is very difficult to identify the structure of this phenomenon. Western firms encounter it mostly in the state administration where public officials demand things which they should not demand (Interview 5, Interview 19 & Interview 30). Corruption structures function in all state institutions (Interview 9). Each body has a certain sphere of specialization. Corruption is also visible in the some state regulatory bodies (at the senior official level) such as the finance police, tax inspectorate, customs service, fire department, work inspectorate or sanitary inspectorate (Interview 21).

As of the scale, the number of corruption transactions drops but the range of the money grows (Interview 8 & Interview 16). It also constitutes a kind of compensation: As salaries in public administration are quite high, it is a higher risk for an official to involve in corrupt practices. Companies are also using it for accelerating or delaying decisions or processes (Interview 2, Interview 5, Interview 8 & Interview 21).

The official combat against corruption makes the basic bribery more difficult. Such an old practice like an envelope containing money is not possible any more (Interview 9, Interview 15 and Interview 17). Supervision of corruption acts has become stricter, but the companies have also learnt to adapt and invent new instruments or other “solutions” which are not formally banned by law (Interview 9 & Interview 13). The rate for corruption payments depends on the

size of the contract and the type of service. The average rate of corruption demand is estimated at 30-40 percent of a transaction (Interview 9 & Interview 11).

The incidence of such acts depends on the size of a project and line of business. A foreign company can encounter such a demand when awarding a state contract or contract with or companies close to the government. The chance of solicitation of bribes is bigger, when the involved company is large one and when is applying for a federal state project (Interview 6 & Interview 15). Companies experienced that when interested in state procurement (Interview 4 & Interview 9) and dealing with public tenders (Interview 15, Interview 19, Interview 21, Interview 23 & Interview 24). Obtaining a certificate or in Russia is connected with corruption money (Interview 5, Interview 13, Interview 19 & Interview 21).

Bribing is still present in infrastructure projects especially in state ordered projects (Interview 15). It is also used in branches which work with projects in general. Each one needs a license from the state or from a licensed company (Interview 19).

5.2. Political favoritism

There are only very few companies, which conduct projects with partners who are politically well-connected and belong to one of client-patron networks in the country (Interview 10, Interview 22 & Interview 24). There are a very few cases, where an Austrian or German company has been threatened (Interview 15, Interview 21 & Interview 24). If a confronted company ignores a raider threat, the other party has so far refrained from further actions. An attempt of such an unfriendly takeover can happen in a sector where Russian oligarchs are operating (Interview 32). In the high risk group are enterprises which offer good standards in production or trade (Interview 21). There are various options in use. A company may receive an offer of selling shares to a local political businessperson. A company reaching a certain level of turnover or sales volume can also become a subject of raider attack (Interview 21 & Interview 17).

It can also happen that a Russian businessman gets dissatisfied with a new Western competitor and falsifies the ownership documents of the foreign rival's company. Then an inspection may be sent which starts to collect some informal information about a company of interest, also by insiders (Interview 4). As an alternative, a Western businessman can be forced to sign a document passing the ownership on the raider (Interview 15). Sometimes the raider does not stop short for using law enforcement agencies to fulfil their demands. The third option is to

provide some criminal claim to the court. The judge is bribed to issue an illegal sentence which makes the foreign company pay a certain fine. This money is used to pay the law enforcement agencies to take the company over by force physically or use some sort of goods raiders (Interview 4).

6. Coping Strategies of Western business

Western companies have developed some strategic options which help them minimize the potentially losses coming from the institutional environment. They try to adapt to the local model in order to be successful.

Foreign businesspeople understand that running a business could be risky in Russia, but brings also large profits. Companies reduce some risks by seeking contacts to informal networks. If a large company has established good rapports with high-ranking government representatives or the President himself in the best case and made an arrangement regardless of its form, they will have no problems in their business activities in Russia. This is a kind of political “Krysha” (“special protection”).

Companies without such a direct contact have to look for support through business partners with political clout. It helps to outsource the corruption problem or obtain state contracts. A company can also cooperate with a local domestic consulting company, which has regular connections with the regional authorities and know what their demands and requirements. The largest companies have their own departments with some well-informed and well-connected employees who are very familiar with the peculiarities of the Russian political landscape.

Another strategic option in order to minimize the risk of raider attacks is to keep local exposure at a low level. This can be reached through various measures. Instead of establishing a fully operating local subsidiary, the parent company only sets up a local representative branch which then outsources its activities to local firms or leaves the core processes with the parent company in the home country. Another approach in this strategy would refer to property. In order to prevent the exposure from expropriation, one has to avoid adding any property within the country. Instead, the firm rents its entire business infrastructure, from the building to the telephone.

The second set covers corruption. A first strategy is to avoid bribery at all. Some firms have given up doing business with public authorities and try to cooperate with independent “private” partners. They decided not to take part in public tenders or state procurement. Another option is to find a niche where foreign products are sought-after and the local competition is low

or they offer a high-tech product which cannot be provided by domestic companies or which is connected with know-how.

Another kind of corruption avoidance is the strict maintenance of control of the sensitive areas of the own company like finances or accounting to external specialized companies. These companies report directly with their headquarters in Europe and thus give the outer control on the regional manager.

Corruption, however, can also be outsourced. They can also shift responsibility for some business operations such as sales and distribution to the Russian partner or cooperate with independent local companies in these areas. In sectors where state permissions, licenses or certificate are obligatory a company can use a mediator to solve this problem for it. They engaged special company responsible for getting certificate for them.

7. Conclusions

Research on effects of corruption and political favoritism in transition countries is still limited. The available data on corruption is mostly about quantitative information. Informal networks and their impact on business are poorly analyzed. This paper addressed a previously limited area of research in international business: how informal institutions embedded in political system impact on business activities of Western enterprises. My theoretical framework was based on the concept of neopatrimonialism, which provides the tools to analyze individual institutions and their interdependence.

The empirical findings show the methods and schemes of corruption in wide range of sectors and in various sizes of companies. It also provides some insight into methods of operations related to existence of political favoritism.

Results of this research attempt to shed a light on some aspects and could serve as a starting point for further research. Empirical data were collected in Moscow, which represents a large metropolis with a high concentration of foreign investors. The business environment faced by foreign companies in other regions was no part of this study.

Several themes may emerge from these findings and consequently require additional work. Further exploration could provide important insight into the accessibility of local networks to Western business, corruption schemes in particular sectors or depending on companies' size or use of legal intermediaries in problem solving process.

Furthermore, practitioners interested in entering the Russian market could also benefit from these findings. They could be warned of the role of informal institutions and easier develop coping strategies or refrain from entering the market.

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Interviews:

- Interview 1, am 25.03.2014
- Interview 2, am 25.03.2014
- Interview 3, am 25.03.2014
- Interview 4, am 26.03.2014
- Interview 5, am 26.03.2014
- Interview 6, am. 27.03.2014
- Interview 7, am. 27.03.2014
- Interview 8, am 28.03.2014
- Interview 9, am 28.03.2014
- Interview 10, am 31.03.2014
- Interview 11, am 01.04.2014

Interview 12, am 01.04.2014

Interview 13, am 01.04.2014

Interview 14, am 02.04.2014

Interview 15, am 02.04.2014

Interview 16, am 02.04.2014

Interview 17, am 03.04.2014

Interview 18, am 03.04.2014

Interview 19, am 10.04.2014

Interview 20, am 22.04.2014

Interview 21, am 14.05.2014

Interview 22, am 21.05.2014

Interview 23, am 03.07.2014

Interview 24, am 24.09.2014

THE ROLE OF TRUST AND CULTURE IN BUILDING MUTUAL RELATIONS IN BUSINESS COMPETITIVE MARKET

Grażyna Śmigielska¹, Bogdan Wierzbński²

Abstract

Under the challenges of globalization and fierce competition from large, international companies, SMEs worldwide are searching collaborative solutions to their business sustainability problems, hence inter-firm networking proliferating in production, commercialization, innovation etc. This complex, evolving phenomenology, shaped by economic, technological and cultural factors, calls for inquiries, both conceptual and empirical, as to why and how to get involved in such collaborative settings, and how this engagement impacts on economic performance of individual firms and markets at large. Our research-in-progress paper tackles Polish SMEs involvement in inter-firm networks in terms of the peculiar interplay between the management culture in place and their ever-increasing use of information and communication technologies. Dominant culture currently prevalent in Polish SMEs is deemed to be marked by individualism and weak propensity towards involvement in networks; in turn, this can be explained by the enduring risk-avoidance attitude of most where old associations of state enterprises – along with the underlying tradition – were dismantled and fast pace privatization led to the emergence of standalone businesses, mainly SMEs. On the other hand, ICT and, in particular, the Internet, provides ever wider opportunities for networking, which has strategically meaning (Śmigielska, 2013, p. 30) , knowledge sharing and joint business ventures. These technologies are significantly increasing the propensity for inter-firm partnering and offer an alternative range of solutions to the risk-minimizing concern of SMEs, oriented towards synergy, co-opetition and collaborative arrangements.

Keywords: value-based advantages, inter-organizational relationship, SME

JEL Classification: M14, M15, D22, D23

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1. Introduction

Under the challenges of globalization and fierce competition in contemporary economy companies are searching collaborative solutions to their business sustainability problems by developing inter-firm networking. This complex, evolving phenomenology, shaped by economic, technological and cultural factors, calls for inquiries, both conceptual and empirical, as to why and how to get involved in such collaborative settings and what are the key success factors of the networking.

2. The economics of network organization

Network organizations are analyzed from different point of views and within the different theoretical approaches. Van Alstyne (1997, p. 5) identified and described three of them: computer, society and economies. Here the focus is on network as economies which is considered an option to organizing transaction through market or vertical integration (Antivachis & Angelis, 2007). In this structure social relations over a set of persons, positions, groups, or organizations are involved. The most important are strategic networks which encompass a firm's set of relationships, both horizontal and vertical, with other organizations – be they suppliers, customers, competitors, or other entities – including relationships across industries and countries. They are composed of interorganizational ties that are enduring and have strategic significance for the firms entering them. They include strategic alliances, joint ventures, long-term contract with the suppliers (Gulati, Nohria, Zaheer, 2000).

Such kind of networks could be defined by the structure, process and purpose. Structurally they combine co-specialized possible intangible assets under shared control to achieve unifying purpose, what distinguishes network organizations from centralized organizations, inflexible hierarchies, casual associations, haphazard societies and mass markets (Van Alstyne, 1997, p. 5).

In knowledge based economy the collaborative networks tend to develop. They focus on collaboration and fulfillment the goals of the members whereas in industrial economy it was on cooperation. Collaboration involves mutual engagement of participants to solve problem together, which implies mutual trust and thus takes time, effort and dedication (Camarinha-Matos & Afsarmanesh, 2006). The examples of goal oriented networks include supply chain and virtual government (continuous production driven) as well as Virtual Enterprise, Virtual Organization, Dynamic Virtual Organizations, Extended Enterprise, and Virtual Organization

Breeding Environment (VBE). VBE is an association of organizations and their related supporting institutions, adhering to a bade long term cooperation agreement, and adopting of common operating principles and infrastructures with the main goal of increasing their preparedness towards rapid cooperation of temporary alliances for collaboration in potential Virtual Organizations.

VBEs, could be based on regional basis. They examples include: industrial district, business ecosystems. In business ecosystem, the networks try to preserve local specifities, tradition, and culture, and they frequently benefit from (local) government incentives. VBEs tries to cover the key sectors within the geographical region. It is characterized by the intensive use of ICT tools to support the cooperation. Among the most important market-related reasons of VBEs there are: profit increasing, coping with market turbulence and increase chances to survival. Organizational reasons should focus on management of competencies and resources as well as the approaches to built trust. Other elements that may determine the behavior of the network and its members include: schame of incentives, the existing level of trust, code of ethics, culture of collaboration, and collaboration agreement (Wang, Kovacs, Wozny, & Fang, 2006, pp. 30-36).

Analyzing network organization in the framework of Transaction Cost Theory (TCT) involves the general description of forms characterized by repetitive exchanges among semi-autonomous organizations that rely on trust and embedded social relationships to protect transactions and reduce their cost (Borgatti & Foster, 2003). It is argued that their fast development is due to the fact that they balanced the flexibility of the markets with the predictability of traditional hierarchies. Networks could be located between hierarchies and markets (Table 1).

Table 1. Comparison of the networks with markets and hierarchies

Firm attribute	Hierarchies	Networks	Markets
Purpose	- Advance the Interests of a Central Executive	- Advance the interests of the Cooperative	- Provide the forum for Transacting
Vertical Integration	- High, Centralized Ownership of Inputs to Production	- Variable	- None
Assets & Resources	- High Assets Specificity, Not Easily Traded - Slack Resources, Buffer Stock - Fixed, Largely Tangible Assets	- Moderate to High Assets Specificity - Few Slack Resources - Flexible, More Intangible Assets	- Low Assets Specificity - Easily Traded
Trust	- Low	- Moderate to High	- Low

Transactions	<ul style="list-style-type: none"> - Long term Time Frame, - High Likelihood of Repetition 	<ul style="list-style-type: none"> - Moderate to Long Term - Variable 	<ul style="list-style-type: none"> - Short Term Time Frame - Low Likelihood of Repetition
Boundaries	<ul style="list-style-type: none"> - Fixed, Rigid, In or Out - Strong, Typically Stable Ties or Associations 	<ul style="list-style-type: none"> - Flexible, Permeable, Relative, Latent Linkages - Strong and Weak, Often Dynamic Ties or Associations 	<ul style="list-style-type: none"> - Discrete, Entirely Atomic - Distant, Arms-Length, one-Time Ties or Associations
Communications	<ul style="list-style-type: none"> - Persistent - Through Channels (Vertical) - One-to-Many (or Many-to-One) 	<ul style="list-style-type: none"> - As Needed - Direct - Many-to-Many 	<ul style="list-style-type: none"> - Short Lived - Direct - Many-to-Many
Task Basis	<ul style="list-style-type: none"> - Functional Orientation 	<ul style="list-style-type: none"> - Project Orientation 	<ul style="list-style-type: none"> - Unitary (one party completion start to finish)
Control/Authority /Mode of Influence	<ul style="list-style-type: none"> - Status or Rule Based - Command/Obedience Relationship 	<ul style="list-style-type: none"> - Expertise or Reputation Based, More Persuasion - Control also Effected via Tie Formation 	<ul style="list-style-type: none"> - Persuasion Achieved via Pricing Mechanism

Source: (Van Alstyne, 1997, pp. 88-89).

Involving in networks means often specialization and engagement in narrow range of activities which on one hand increases efficiency but on the other increases the fear of the partner opportunism. According to Williamson (1985) if asset specificity increases more complex governance structures (i.e., more complex contract) are required to eliminate or attenuate costly bargaining power over profits from specialized assets (Dyer, 1997). Dyer developed the model of interfirm cooperation in which production networks can simultaneously achieve the twin benefits of high assets specificity and low transaction cost, what could be the source of competitive advantage, (see Figure 1).

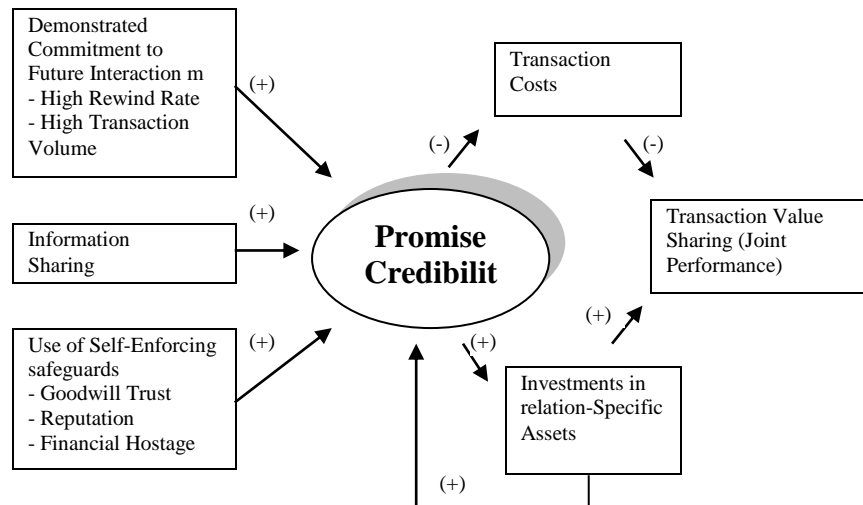


Fig 1. A model of interfirm collaboration

Source: (Dyer, 1997, p. 551).

In this model if the partners demonstrate commitment to future interactions by e. g. high transaction volume, information sharing, and transparency as well as usage of self-enforcing safeguards like goodwill, trust, reputation and financial hostage there is no need for bear high contracting, monitoring and enforcement costs. “The purpose of safeguards is to provide, at minimum cost, the control and trust that is necessary for transactors to believe that engaging in the exchange will make them better of” (Williamson, 1985; Dyer, 1997; Dyer & Singh, 1998a). Such a network reduces cost of the partners involved in them and in this way they become more competitive. But development of it depends directly on trust and indirectly on culture which influences propensity to collaborate.

3. The role of trust and culture in developing networks

Trust relates to the confident positive expectations that individual has about the motives of another in respect to situation involving risk (Hodgkinson & Ford, 2005, p. 22). The focus in bargaining power among network members raises new questions – concerning how performance gains (if any) are distributed within the network (Grimshaw & Rubery, 2005, p. 1038). Trust can be defined as increasing one’s vulnerability to the risk of opportunistic behavior of one’s transaction partner, whose behavior is not under control in the situation in which the cost of violating the trust are greater than benefits of upholding the trust (Rotter, 1967), (Rotter, 1971), (Rotter, 1980). There is a strong relationship between trust, information, control and influence

(Zand, 1972, p. 231). Without the vulnerability of the risk of opportunism there is no need to trust (Chiles & McMackin, 1996, p. 86).

Trust is the core of successful relationship and successful cooperation. (Zaheer, McEvily, & Perrone, 1998, p. 142) distinguished interpersonal from organizational trust. They define interorganizational trust “as expectation an actor 1, Can be relied on to fulfill the obligations 2. Will behave in predictable manner 3. Will act and negotiate fairly when the possibility of opportunism is presented”. Trust influences how parties in social exchange relationship think and act.

If the trust is low, parties of relationship need more information (see figure 2). As long as they get the information trust increases (Tomkins, 2001, p. 164-172).

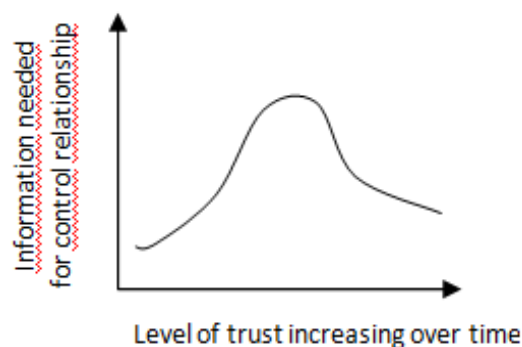


Fig 2. The inverse u-shaped relationship between trust and information

Source: (Tomkins, 2001, p. 170).

If the firms, which are highly economically interdependent, want to create long term and successful cooperation they should build higher level of trust or more extensive control mechanisms with the associated increase in information. The level of trust (and as a consequence the demand for information) and propensity to opportunistic behavior depends on culture and personal variables.

Culture is the concept which is very complex. According to the model developed by Schein (Schein, 1984, p. 4) three levels constitute it: 1. Behaviors and artifact, 2. Beliefs and values, 3. Underlying assumptions. This model could be applied to both corporate and national cultures. Since the international networks will be discussed the focus is on national culture. Literature suggest that organizational culture arise from specific historical events experienced by the group and organizations as well as form the influence of individuals engaged in their routine interactions. Thus within the same relative stable national culture context, organizational and

group cultures can vary widely (Salk, Emmett & Crocker, 2006, p. 77; Brannen, 2000, p. 192-193). According to (Laurent, 1986) corporate culture may modify first two levels but will have a little impact on underlying assumptions that are embodied in national culture. The underlying assumptions prescribe ways of perceiving, thinking, and evaluation the world, self and the others. This assumptions include views on the relationship with nature and the human relationship.

The relation with nature reflect several dimensions 1. Control over the environment, 2. Activity vs. passivity or doing vs. being 3. Attitudes towards uncertainty 4. notion of the time 5. Attitudes towards change 6. What determines the “truth”. The dimension of individualism/collectivism is marked by the degree that people within a society prefer to act on behave of themselves as individuals, as opposed to acting on behalf of the group. In collective culture a person learns to respect own group, remain loyal to it and prefer group interest above individual (Emmett & Crocker, 2006, s. 77). Networks build with the companies from the countries with high power distance are likely to exhibit the need to show deference to contact, so the additional time may be required to pay the appropriate respect to network members. If the home market is characterized by collectivism relationship based on traditional concept such as trust and loyalty is valued. In individualistic society more emphasis is placed upon contact, and meritocracy (Dodd & Patra, 2002, pp. 122-123). Uncertainty avoidance is the measure of the degree to which a given culture adapts to changes and copes with uncertainty and ambiguity.

4. Problems of network development in Poland

The participation in networks is especially important for Polish SMS. The sector of small and medium sized enterprises is very important for Polish economy. In Poland in 2012 there were 1,8 million of firms, from which 99,8 % belonged to SME sector (Łapiński et al., 2014, p. 14-20). They generate in Poland almost a half of Polish GDP (48.4%) although their contribution to GDP is lower than average for UE28 it gives Poland the position of the sixth economy in the EU. But the problem is that many of them disappear every year also because they operate alone in very competitive market.

The research conveyed Hashi and Krasniqi which compared three advanced Central Eastern European countries (Poland, Hungary, and Czech Republic) (Hashi & Krasniqi, 2011, p. 475) indicated that SMEs in Poland (which is include in CEE group) have reached a stage where they could benefit from networking (mainly through: information flow, the ability to

represent the group's interest and influence public opinion and the policy process, etc. due to high quality labor force.

In Poland the masculinity culture dominates, what means rivalry, status manifestation and individualism. The focus is more on the individual person than the group so the tendencies to achieve the individual goals could be more important than goals of the group. It could become an important obstacle in networks development.

Reputation is linked to the trust on the internal and external level. The problem concerning reputation and trust building has become the main research subject of studies which created numerous models and approaches to its characteristics (Lavrač, Ljubič, Jermol, & Bollhalter, 2005, p. 170; Lavrac, Lavra, Ljubi, & Ljubic, 2007). Constituent of trust is reputation and cooperation. The main instruments of trust building, among others are: reputation, honesty, common values, goals, vision, organizational structure, adaptation within the enterprise, communication (Huotari & Iivonen, 2003, pp. 189-192). The results of the research conveyed in South-East of Poland (Potocki & Wierzbiński, 2013, pp. 73-74), showed that businesses which defined themselves as well known companies of high reputation defined importance of few factors which gives opportunity to competitive advantages in the context of perceived trust and company's reputation. From the point of view of SMEs, the most important factor which builds the company's reputation is the trust to firm. It is especially important in a situation when company starts cooperation with the new business partners.

5. Conclusion

Networks are characteristics for nowadays economy. By being involved in different types of collaboration companies could get access to the resources they do not possess and in this way become more competitive. Growing importance of networks is also associated with the development of information technology. IT makes the process of network coordination and control easier and cheaper. So in the well developed countries not only big but also medium sized and small companies are involved in different type of networks and many of them tends to be collaborative networks.

In Poland, due to growing competition not only from national but also international companies, independent firms face the problem of developing different types of relationships with business partners. Individualism and low trust which are characteristics for Polish culture could become the obstacle in network development. But on the company level business partner

reputation and trust, which could be the result of previous experiences, could increase the propensity for networking. But identification of real factors which encourage the companies to involve in the networks needs primary research.

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Chapter VI – INNOVATION AND SUSTAINABLE DEVELOPMENT

SUSTAINABLE INNOVATION OF TECHNOLOGY AND BUSINESS MODELS: STEPS TOWARD RETHINKING TECHNOLOGY AND BUSINESS STRATEGY

Maja Levi Jaksic¹

Abstract

The paper deals with sustainable innovation and technology management interrelated to sustainable business development. The focus is on strategic management issues concerned with technology dynamics and innovation interwoven with business model and strategy innovation. Sustainable technology and business strategy as radical innovation is achieved by questioning and rethinking the principles of managing business. In this paper innovation of technology and business strategy are treated in an integral way as the issues are inseparable, leading to the presentation of an integral strategic model: the society and environment pull model (SEP model). The overall scene and crucial dilemmas in the environment in which business operations are performed are emphasized with special consideration and focus on the dilemmas and conflict goals of technology innovation management. It is argued that sustainable business development is based on continuous balancing and trade-offs within a holistic management approach in a long-term, strategic perspective. Innovative technology and business models are based on rethinking and redesign of the basic principles and tools. It is concluded that sustainable technological solutions represent a necessary but not complete nor sufficient condition, and need to be combined with sustainable business and consumption models in order to achieve the complex sustainable development goals.

Keywords: sustainability, innovation, business and technology models

JEL Classification: O35, L21, O33

1. Introduction

In this paper the focus is on sustainable technology and business development as the central pillar of sustainable development of the economy and society. Sustainable business development (SBD) rests upon sustainable technology and innovation, and managing

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technological change directly influences sustainable competitiveness of business operations. (Popa, 2013; Levi Jaksic, 2012).

Research emphasis is on the combination of sustainable business models and sustainable technological innovation management in a push-pull model, closely interwoven, linked together, and led by complex sustainable development goals.

It is argued that it is at the micro, business, level of the economy, where the crucial determinants of sustainable development (SD) are established, and more specifically “it is indeed at the strategic level that sustainable development can fully uncover its value creation potential for a company” (Sempels & Hoffman, 2013, p. 3). The crucial SD determinants are concerned with the output to be offered in terms of products and/or services (what business should we be in), which inputs and resources are necessary to be engaged for the business and where should it be located, how to accomplish the business goals and what processes/operations in transforming inputs into outputs should be used. Crucial responsibility and starting point for sustainable development lies within firms representing the value-creating agents in the economy.

The sustainable development model is based on three crucial sets of goals: social, economic and environmental/ecological. In the general model presented in this paper, the economy is viewed as a process where the active, dynamic transformation is occurring – social and environmental conditions (input) are actively transformed and put in the service of the fulfillment of social and environmental goals (output).

Sustainable Business Development (SBD) is a challenging new concept balancing the external and resource-based view (Levi Jakšić, 2005), reaching for solutions in the domain of balance and right «fit» to be achieved in situations of opposed and conflicting goals and dilemmas present in managing business. “SBD is a holistic management construct that includes the entire value system from the origins of the raw materials to production processes and customer applications to end-of-life (EoL) solutions. It encompasses the full scope of relationships with supply networks, customers and stakeholders, and support service providers for providing business solutions and also handling wastes, residuals, and impacts” (Rainey, 2006, p. 2.) Sustainability is therefore defined in a broad and complex perspective, with focus on new principles, models, and tools integrating multiple dimensions and aspects of sustainable business, technology and innovation management.

2. The general model: technology and business model innovation at the core of sustainable development

Using systems and process approach, a comprehensive, general model has been developed based on the understanding that “the economy is a means, ecosystems integrity is a condition, and the social dimension is the objective of sustainable development” (Gendron, 2013, p. 55).

The complex sustainability equation is derived from a set of social, economic and environmental equations, noted in this paper as the Triple Integrated equation (TIE), corresponding to the three basic pillars of sustainable development. The new perspective and approach is emerging with the changes of the traditional business for profit strategy increasingly introducing the TIE dimensions. This leads to the conclusion that we witness a convergence of the nonprofit and business for profit sector which is primarily viewed in the more complex goals oriented at strengthening sustainability capacities leading to the “nonprofit sector gearing towards more market-based solutions, mechanisms and dynamics, ... businesses in general have assumed social responsibilities in a broad array of their activities, as well as responsibilities for the natural environment and natural resource consumption” (Bardy & Massaro, 2013, p. 139).

The general model (see Fig. 1) views the three pillars of sustainable development within a systems approach based on *input-process-output* model. In the general model (see Fig. 1) the inputs are the factors of the environment – *PESTLE* (*political, economic, social, technological, legal, natural environment*), designated as the *social and environmental conditions*, the *economy* is the *process* by which value creation and distribution is achieved, while the fulfillment of *social and environmental goals* are the *output* (based on the consumption of goods and services).

This approach harmonizes the economic, social and environmental dimensions pointing out the convergence of the concepts *eco-social business* and *business in general*. “There is no clear, consensual definition of ‘social enterprise’ in the literature – much less so for eco-social business... a social enterprise is a nonprofit venture that combines the passion of a social mission with the discipline, innovation and determination commonly associated with for profit businesses, ...to generate social value” (Bardy & Massaro, 2013, p. 140). Performance of social entrepreneurship is measured economically where the social impact can be viewed in social costs concept. Field and Field (2006) argue that the social cost components include the external costs. It is a cost that appears for society and the environment caused by the activity of an enterprise. “Social entrepreneurship provides a social value from its business activities which has an impact on society or the environment” (Bagus & Manzilati, 2014, p. 14).

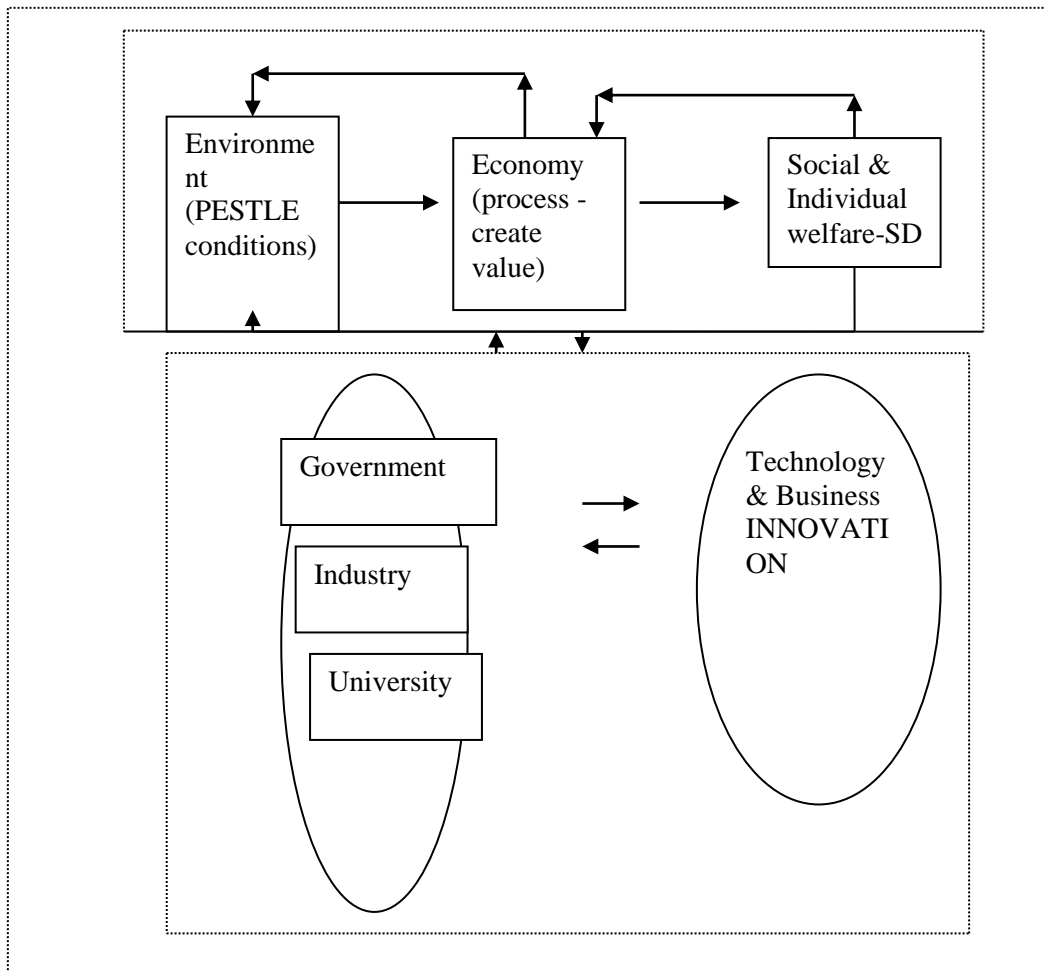


Fig. 1. Sustainable development relations: input (environment), process (economy) and output (social and environmental objectives)

Source: own work.

Social entrepreneurship is another concept emphasizing that entrepreneurship is based on innovation creating new value for economic growth, enabling the fulfillment of individual and social goals represented by a broad set of quality of life objectives.

Social entrepreneurship is utilizing resources in transactional way. Resources become tools and are used as much as possible for a particular purpose both economically and socially. Social entrepreneurship performs social activities with profit, then distributed as an effort to create social value (Kardosa, 2012).

Within the economy, the *Technology & Business Innovation Models* are at the core of competitive performance (Levi Jakšić et al, 2014). They are undergoing radical change and are the dynamic motor power of sustainable development with the mission to create social value

while simultaneously appreciating the *environment* as a condition and keeping the whole system running, vital and succesful. The triple helix actors – government, industry and university – are clearly represented as key bearers of responsibility for innovating technology & business models and strategy for sustainable development (Levi Jakšić, 2011).

Technology and business innovation drives the economy towards acheiving the sustainable development goals, hence the emphasis is on technology and business innovation, where sustainable business strategy is approached through sustainable business, technology and innovation model. “If the business model cannot align economic, environmental and social issues, the only credible solution is to change it... the business model should be innovated by integrating sustainability in order to build or keep a competitive advantage in an ever changing economy” (Sempels & Hoffman, p. 20).

In the society and environment pull (SEP) business model (see Fig. 2) social and environmental objectives are built into a sustainable strategy, leading to technology and business innovation, creating and delivering new value consumed by customers and society and environment are inflenced by all these actions, they are the consequence and at the same time initial stage for a new business cycle in the economy and society.

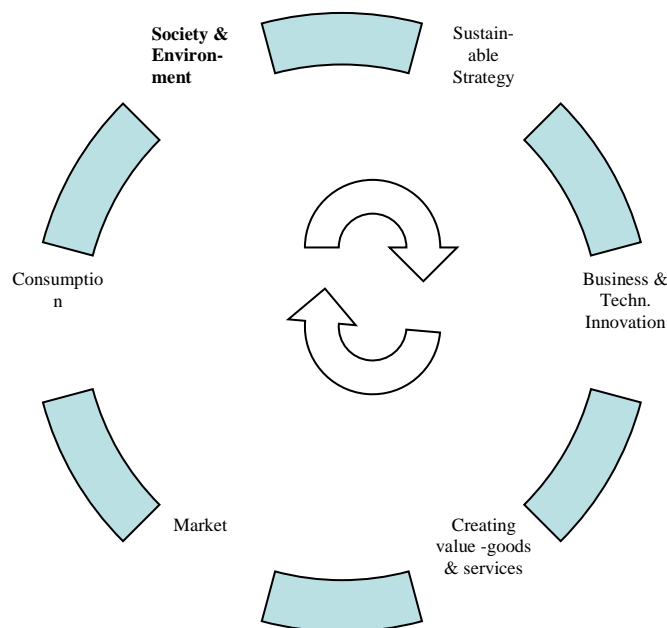


Fig. 2. SEP Business Model

Source: own work.

The SEP comprehensive model combines macro and micro dimensions emphasizing basic relations of achieving sustainability in the macroperspective, while focusing on technology & business innovation as the core factor affecting sustainable development.

3. Sustainable technology and business innovation model

Sustainable business competitiveness means the achievement of a set of different goals – economic and non-economic – of the firm. It is a concept based on quantitative and qualitative performance indicators, namely, the integration of traditional business performance goals measured by traditional economic indicators (e.g. profitability) and a set of new non-economic performance criteria that emphasize the satisfaction of needs of the customers, employees and all other stakeholders. SBD approach is based on the efforts to build sustainable competitiveness taking into account multiple factors (Meyer, 2002, p. 42).

Business model innovation is increasingly becoming a priority for managers in terms of creating competitive advantage and achieving superior performance (Velu, 2015)

The triple integrated equation (TIE) comprising social, ecological (environmental) and economic functions within the sustainable business development (SBD) concept has added the dimensions of ecology and society to the already established economic equation.

The focus of some studies on green technology have led to the assumptions that our efforts are to be directed towards safe, green technology and that by achieving the goals of environmentally safe technology we have automatically solved the problems of sustainable business. As a result, focus on green technology and pushing it to the businesses became the dominant concern (Boons & Ludeke-Freund, 2013).

The definitions of SBD that are focussing on ecological equation, leaving behind economic and social aspects, could be understood as a consequence of neglecting the natural environment for a long period of time and facing the very urgent need to act in an alarming situation of deteriorating soil, water and air by our business activities. The priority of sustainable business strategy is given to preserving the ‘essential’ or ‘critical’ natural capital and «sustainable development is achieved if actions of producers and consumers do not harm air, biodiversity, climate, soil and water, and thus maintain the earth's ecosystem services (Bardy & Massaro, 2013). Some authors even postulate that the economic and the ecological equation are confronted, opposing and contradictory, so the solutions should be looked for in the domain of coercion, legal acts and regulations limiting, forbidding and constrainig damaging actions to the environment.

This could be understood as the reaction to urgent needs in a short time span only. In this paper we argue the significance of dealing with the complete TIE of SBD for the long term, sustainable future. This means innovation of business models, strategy and solutions with a radical change in the overall business philosophy simultaneously striving for solutions by developing new, innovative, safe technologies as the long term, strategic sustainable dimension of the businesses of tomorrow.

As result of research, we come to the conclusion that the concepts of sustainable innovation and sustainable business are converging. It is difficult to draw a line as innovation is understood as commercialization of invention (idea), referring to its market introduction and transfer. “Research and experimental development (R&D), when appropriately valorized, lead to technological innovation in the form of new products and processes, which contribute to growth, competitiveness and job creation, and which produce other societal benefits. Because of market failures, the private sector, left to its own devices, invests in R&D in sectors not always fully aligned with, and at levels below, the socially desirable, and is unable to fully valorize its research output” (Delanghe & Muldur, 2014). The necessity to develop sustainable technological innovation and sustainable business models based on the TIE (triple integrated equation) involves the idea to idea concept starting from research and development of sustainable technological innovation, its implementation in a sustainable business environment considering the complete life cycle – idea, innovation, market, exploitation and end of life.

Viewing literature on the definitions of business model it is evident that the concepts of technology and business innovation are closely linked: a business model is used as a plan which specifies how a new venture can become profitable (Boons & Ludeke-Freund, 2013, p. 10). Business model is a “market device” (Callon et al, 2007), an intermediary between different innovation actors such as companies, financiers, research institutions, etc., i.e. actors who shape innovation networks. Business model describes the principles according to which an organization creates, distributes and captures value. (Sempels & Hoffman, 2013, p. 35.) Business model is a means by which company strategy is established (Sempels & Hoffman, 2013, p. 3).

The two core questions concerning the relations between sustainable technology and sustainable business innovation considered are:

1. Could there be a sustainable business based on non-sustainable technology?

2. Is it possible to have sustainable technology innovation embedded in a non-sustainable business?

In this paper it is argued that sustainable technology innovation is inseparable from sustainable business.

In literature business model consists of different blocks: value proposition, value architecture and economic equation (Sempels & Hoffman, 2013); value proposition, supply chain, customer interface, financial model (Boons & Ludeke-Freund, 2013).

The above models clearly show absence of social and environmental objectives and they need rethinking.

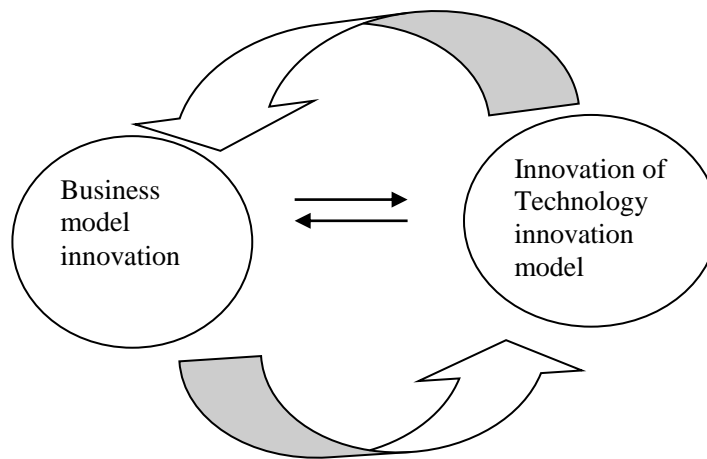


Fig. 3. The sustainable model of PUSH-PULL relations between SB and and STI models.

Sustainable competitive strategy is based on interrelatedness between the two spheres (see Fig. 3). Sustainable technology pushes the sustainable business (SB) and sustainable business pulls sustainable technology innovation (STI). Both business and technology model rethinking will lead to overall innovation of their relations integrated in a sustainable business development strategy.

4. Conclusion

The input-process-output model of SD focuses on the economy as a dynamic process by which new value is created to increase the overall welfare, satisfaction and benefits to the society. The driving force of economy dynamics are the businesses implementing technology to develop operations leading to the creation of new value in the form of goods and services to be consumed and used in further increasing social benefits and welfare.

The broad concept of technology management indicates the complex involvement of technological issues in all the aspects of business development and the technology-push model insists on business trying to adapt and create an ambience for introducing technological innovation efficiently and effectively. We develop the SEP model that starts and ends with the societal and environmental conditions, objectives and goals.

Rethinking strategy means posing the sustainability TIE and deriving means for its fulfillment through innovative sustainable business and technology. Although sustainability encompasses the complex TIE, in practice it is often understood that by implementing green technology we are safe from unsustainable business models. In this paper it is argued that the full capacity of SD can be reached in the comprehensive approach focussing on the three crucial dimensions of TIE in relation to technology innovation, but also business model innovation as it should be noted that “while creating and delivering customer value, the business model itself can become a source of competitive advantage by means of business model innovation” (Boons & Ludeke-Freund, 2013, p. 10).

The conclusion we come to is that the concepts of sustainable technology innovation and sustainable business model are close concepts but differentiation is found in the push-pull dynamics: sustainable technology innovation pushes to the market in a business environment, and sustainable business model innovation seeks for sustainable technology. Future research in the complex nature of the relations will show more distinction in the potential situations occurring in practice.

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MODELING OF THE MODERN ORGANIZATION INNOVATION AND SUSTAINABLE DEVELOPMENT ON THE BASE OF THE PROCESS APPROACH

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Abstract

Since the beginning of the century the concept of sustainable development became a forceful reference point for fast-growing and learning organizations not only because it is operating on any economic level (from international and national levels to the level of small businesses and entrepreneurs), but also because it disposes a powerful methodological support in the form of Sustainability Reporting Guidelines. However, the concept is based on three components that characterize the result of organization activities – economic, environmental and social ones, and it does not touch upon the question of the main resource of modern organizations, through which they are received – innovation and knowledge. From this point of view, on the one hand the necessity for modeling of the innovation and sustainable development of the organization emerges, on the other hand – the possibility of such a modeling, based on a process approach, appears and ensures their comparability. The article clarifies the theoretical foundations of the process approach for modeling the process of sustainable development planning and management process of innovation development.

Keywords: process approach, sustainable development, innovation and knowledge

Jel Classification: B410, M21, O440

1. Introduction

Critical changes in the economic situation in the world as never require modern business innovation, flexibility and tolerance “at the speed of thought”. If in the past century, the organization has focused on the production, its suppliers and consumers, the new century has significantly expanded the boundaries of the organizations themselves, diversifying activities through the management of quite different objects – change, innovation, energy efficiency, risk management, sustainable development, etc. Bulkiness of the functional approach to management is obvious. Process approach to management, as the basis for the modeling and analysis of

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modern organizations, is becoming one of the most effective tools for improving business performance. Numerous very differently oriented views on its implementation, both theoreticians and practitioners demonstrate its relevance and require a generalization. From this perspective, the concept of TQM, implemented in the family of standards ISO 9000, has become a unique platform on which new knowledge is generated on the process approach (Mekhantseva, 2007).

2. Standart's Review

The standard ISO “Quality management systems. Requirements” is the base in the 9000 family of standards and provides understanding of the process approach, as well as a model of quality management system based on the process approach (ISO 9001: 2008, 2008). The current version of the standard (the fourth), was published in 2008. Three previous versions published, respectively, in 1987, 1994 and 2000, respectively. This fundamental change in the document has undergone a conceptual level in 2000 – the category of “quality” of the economic turned into Economics and Statistics due to the new definition, a 22 element of quality management system were replaced process approach.

Released in 2014 version of the DIS ISO 9001: 2015 (DIS EN 9001: 2015, 2014) develops the idea of the essential process approach, as reflected in the following key changes:

- Management processes can be achieved with an overall focus on “Risk-based thinking”, aimed at preventing undesirable outcomes.
- Cycle PDCA is presented for a single process.
- The concept of “Context of the organization”, which is inextricably linked to the quality management system and its processes.

The structure of the section 8 “Processes” consists of seven sections: 8.1 “Planning and management of the processes”, 8.2 “Determination of requirements for products and services”, 8.3 “Development and design of products and services”, 8.4 “External management of the software products and services”, 8.5 “Preservation of products and services”, 8.6 “Output of products and the provision of services”, 8.7 “Control of nonconforming processes, products or services”. In accordance with the requirements of this section, the organization must plan, implement and manage the processes necessary for the quality system and to determine the required inputs and outputs for each process, their sequence and interaction. As part of the monitoring and assessment of the organization should maintain the necessary documented information in order to ensure full confidence in the fact that the processes are carried out as planned.

Also, according to the requirements of section 8 of ISO 9001:2015, the organization should define and establish the processes of interaction with consumers, the requirements relating to products and services and to carry out their regular review. To meet these requirements should be defined and established the relevant processes.

Paragraph 8.3 provides general requirements for planning design, design and development input, control methods, the output data changes.

The requirements of paragraph 8.4 “Management of external software of products and services” are similar to the requirements of section 7.4 of ISO 9001:2008 management procurement. The section contains general requirements for the management of external security requirements for the type and degree of control external security requirements for information management of external security.

Paragraph 8.5 prescribed requirements for managing finished products and services, in particular for the identification and traceability, preservation of the property of the consumer, or an external vendor, product protection and post-delivery activities, as well as change management products.

Paragraph 8.7 the organizations are determined by the necessary actions in the event of inconsistencies in processes, products or services.

Spot analysis of the ISO 9001:2015 shows that today's quality management system is evolving on the basis of the process approach. Now, not only system of the processes, but the process itself is based on the methodology of PDCA – “Plan - Do - Check – Act”, focusing on the workflow processes that are not mentioned in its definition. Then, from the perspective of the modeling of any process it is necessary to expand perceptions of the process approach and the key definitions, and process modeling can be realized by providing activities in the process step by step of PDCA Cycle.

3. Methodology

To construct a process model of the organization, we propose to add the term “process approach” and give it a statistical entity, and make its definition as a way to extend its definition groups (associations) with the help of dedicated facilities management functional approach to determine the connections that enable project-based approach to translate the organization as a system from one state into another, synchronizing the speed of its development with the environment.

In addition, we propose to identify the organization on the basis of the process approach in the form of processes network by which we mean a hierarchically related group of processes which, using processes resources to add value for all stakeholders of the organization, transforms inputs into outputs. For the best visualization of processes network, we adhere to the most common process classification and highlight the following three categories: strategic management process (understanding the context of the organization, its quality management system and processes, leadership, policy and responsibilities, processes for planning and consideration of risks and opportunities , processes for performance evaluation, processes for improvement); basic processes (operational processes related to customers and products and services); support processes (processes for support, including resources, people and information). The link between the identified components of each process is “inputs from other processes” and “outputs into other processes”.

To model the process as part of the organization process model, we offer the organization to clarify its definition as follows:

Process – a group of related operations, which, using resources to add value to the consumer, transforms inputs into outputs.

The group – a set of operations that make up a certain way (technology) to add value to the consumer. The Group determines the uniformity of the operations performed, the goal – its borders through the operations that lie both within the organization and outside it.

Operation – a single action or a limited group of interrelated actions aimed at obtaining private result within the framework of the problem solution.

Value – the ability to fulfill the requirements.

We have identified the following significant from the point of process modeling view its components:

1. Inputs from other processes.
2. Products and services (purpose and outcome of the process).
3. Interested parties of the process: the external consumers; directly involved in the process (the head of the process team); mediated actors (domestic consumers, domestic suppliers and partners, the owner of the process); external suppliers and partners; the owners of the organization; the staff of the organization (with the exception of direct and indirect participants in the process); society.

4. Process Groups (Mekhantseva, 2011).
5. The resources of the process: the workers; infrastructure; work environment; information; knowledge; suppliers and partners; natural resources; financial resources.
6. The outputs to all other processes.

4. Data and Empirical Results

The practice of Russian enterprises implementing a process approach in the construction of quality management systems, and not only them, is very extensive (Repin, Eliferov, 2013). Studies show (Skripko, 2011), that often process model consists of three process groups – basic (core) processes, support processes and management processes, while a few years ago met a division into two groups – adding value and does not add value. Analysis of integrated quality management systems shows (Khokhlacheva, 2015) that the group of management processes expands depending on the integration of systems built on the basis of complementary standards that are compatible with the family of ISO 9000. Then it is perfectly logical to include to the mentioned process group – management processes group – two processes “Sustainable development management” and “Innovation Management”.

Dedicated contact process “Sustainable development management” in accordance with BS 8900:2006 is an “opportunity for innovation” and therefore we consider it as a priority in the pair of processes “Sustainable development management” and “Innovation Management”. The process of “Sustainable development management” can be developed on the basis of BS 8900:2006, which set forth the requirements for implementing of the sustainable development principles based on the definition of objectives and their respective programs for sustainable development of the organization with the release of the parties involved and resources. There is an example of sustainable development maturity matrix for assessing the results of the management of sustainable development of the organization. In support of this standard may also serve the GRI Sustainability Reporting Guidelines (GRI, 2013), which “offer Reporting Principles, Standard Disclosures and an Implementation Manual for the preparation of sustainability reports by organizations, regardless of their size, sector or location”. The Guidelines also offer an international reference for all those interested in the disclosure of the environmental, social and economic performance and impacts of organizations. The associated Standard BS 8901:2009 states that “the organization shall identify, document, implement, maintain and improve the system of management of sustainable development in accordance with

the requirements, and identify ways to meet these requirements” that in the light of the implementation of the ISO 9001:2105 process approach allows to regard the “Sustainable development management” process as the best management decision. The most significant part of the process model in terms of its implementation, we have presented in Table 1.

Table 1. Modeling of “Sustainable development management” process

PDCA-cycle	Process groups
Plan	Identification of stakeholders and their needs; Formation of the (revision) mission of the enterprise; Development (adjustment or updating) policies; Development (adjustment or updating) an organizational development strategy; Development (adjustment or updating) of measurable goals for sustainable development, including the risks; Formation program for the sustainable development of the organization
Do	Deployment goals of sustainable development of the organization; Implementation of business (business strategy) and functional strategies; Implementation of medium-term projects; Development (adjustment or updating) a network of processes and the processes themselves;
Check	System monitoring measurable objectives of sustainable development, including the risks
Action	Formation of the (possible) registration of the report on the sustainable development of the organization

Source: own work.

Dedicated process of “Innovation management” is extremely popular for Russian companies as support for innovation remains one of the most pressing issues in the scientific and business environment, as well as at the state level. Implementation adopted in 2011 strategy of innovative development of Russia until 2020 (The strategy, 2011) has allowed Russia to rise in the rankings INSEAD (The Global Innovation Index, 2014) from the 52 place in 2011 to 49 in 2014, but the crisis of 2014 equated the issue of innovation management to the condition of the survival of Russian companies in the new economic conditions.

In contrast to the sustainable development management, the methodology of innovation management has at its disposal not only a rich history, but also a whole set of models – a model of technological push (Dodgson, Rothwell, 1994), combined model of the innovation process (Rothwell, 1994; Freeman, 1995), a chain model (Kline, Rosenberg, 1986), the Japanese model (Imai, Nonaka, Takeuchi, 1985), integration and networking model (Trott, 1998), innovation

stage-gate process model (Cooper, 2001), creating a new knowledge model (Trott, 2005) and others. However, the convergences of these advances have not yet occurred at the level of European standards (Hohlyavin, 2015). Claimed ISO series of standards in the field of innovation management is not developed yet, although its structure is defined and consists of 7 parts: Introduction and Terminology, Innovation assessment tools, Creativity management, Collaboration management, Guidance on the application of design thinking as a strategic methodology for sustained innovation, Intellectual property management, Strategic intelligence management. In the standard ISO 9001:2015 innovation is defined as a “process, resulting in a new or substantially changed object”, so the most significant part of this process, we are able to realize in the following sequence of actions (Table 2).

Table 2. Simulation of the “Innovation Management” process

PDCA-cycle	Process groups
Plan	Market research (known classification requirements); Market research (identification of needs); Creating a set of characteristics of the product (product), services (service), technology (technology), process (process) or the system (management system); Market research (classification of the identified needs); Creating a set of indicators
Do	Develop a proposal on the basis of innovation changes in the structure characteristics; Development of the project of introduction of innovation; Evaluating the effectiveness of the implementation of the project innovations, including the risks; The project is the introduction of innovation; Development of a trade policy; Establishing and defining the level of the dynamics of price changes; Development of the program of promotion; The development of marketing programs
Check	Analysis of indicators of quality, performance and risk; Identification of methods for analyzing quality indicators; Grouping of indicators of quality of product characteristics (product), services (service), technology (technology), process (process) or the system (management system)
Action	Establishment of normative documents on standardization and application of the rules, regulations and requirements to ensure the early dissemination of innovations in the organization; Improvement of the company at the level of sub-processes, processes, network processes; Final coordinating measures to improve the activity of the enterprise

Source: own work.

5. Conclusion and Discussion

Process approach at the present stage, taking place as a requirement for quality management systems, has become a recognized tool for the simulation activity of modern organization aimed at long-term success. Its application in previous versions of the ISO 9000 family of standards has evolved from the process models of production through a series of basic processes – the processes of the life cycle – before the system processes with a shift in emphasis in the latter on processes of management and thus the model organization (Mekhantseva, 2006). For the first time ISO standards, developed on the platform SL, allow not only the integration of the subsystems of management, but also on the basis of the strategic directions of development of the vision to extend the practice of modeling the processes of implementing the latest scientific and practical achievements in various fields of knowledge. Risk-oriented thinking on the level of planning can become an effective tool for filtering the above-mentioned achievements, which will help businesses avoid serious losses on the realization of the strategy of development.

From this perspective, the most pressing problems of process simulation will be:

1. Identification of the management processes in addition to regulated groups of standards harmonized with the family of 9000, which can now be referred to as “the processes of strategic management”, as this group is represented in the ISO 9001:2015 the largest number of processes.
2. Identification of the inputs and outputs of the processes of strategic management as the relationships to ensure the integrity of the processes.
3. Evaluation of the balance of the processes in terms of achieving the planned results.

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COLLECTIVISM AND INNOVATION TOWARDS SELF-RELIANCE AND SUSTAINABILITY: LESSONS FROM SOME ASIAN SMALL AND MEDIUM-SIZED ENTERPRISES' EXPERIENCES

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Abstract

Small and medium-sized enterprises (SMEs hereafter) in the rural districts in Southeast Asian countries and in Japan are explored in terms of collectivism and innovation. The paper intends that rural/local industries in Eastern European countries could have lessons from these Asian SMEs' experiences of innovation. The case studies about Thailand, Indonesia and Japan are presented here. The paper will explore the issues why things were, how they were, how they got to be that way and what was making them change. The approach for this is historical, political economy, and anthropological. The main focus is on 'One village one product movement' in Japan and Thailand. The paper shows: 1. Collectivism is of a variety of concept depending on the country. 2. Innovation in rural SMEs in these Asian countries is based on collective power and cooperative capacity, which are historical, social and cultural. Conclusions are: 1. Collectivism is the internal dynamic of innovation in rural/local industry in these Asian countries. 2. Community-based collectivism is of solidarity and cooperative capacity. 3. SMEs as such could be gathering momentum in these countries. 4. These rural/local industries tend to be self-reliance and sustainable. 5. Some Eastern European countries could have lessons for local economy revitalization from rural/local community-based enterprises' innovation associated with collectivism in Asia.

Keywords: collectivism, innovation, rural/local industry, Thailand, Japan, 'commune'

JEL Classification: D2, Z13

1. Introduction

Collectivism is power. It can be social power. It can be power for innovation. Asian countries have shown a type of collectivism, historically, socially and culturally. The term 'collectivism' is abstract compared with 'individualism'. Accordingly, 'collectivism' shows a

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variety of concept depending on the concrete circumstances. The term of 'community' is used commonly as an expression of social collectivism.

The paper's main focuses is on SMEs in Asian countries in relation to collectivism and innovation. SMEs are fundamental for local economy in terms of job creation and local prosperity. In fact, having faced 'hollow-out' and increasing cheaper imported commodities, in line with decreasing local population, local SMEs need to be innovative for survival, development and prosperity. This is the case, in particular, for Japan. The paper focuses on the actualities of these businesses in rural/local district in Thailand, Indonesia and Japan, and their linkage to the dynamic of 'collectivism' in relation to innovation. Such kind of culture 'collectivism' could have been a major drive for their fight to survive against hard times. Such culture could have inspired and supported innovation. How such a relationship would have worked out. This is the main argument in this paper. The case studies about Thailand, Indonesia and Japan are presented here.

In reality, with regard to the significance and hardships of SMEs as rural/local industry, there is no difference between these countries. Recent case studies (Mizuno, 1996; Kurose, 2011; Yokomoto, 2008; Nakamura, 2009; Shibayama, 2011) show that community-based rural/local industries have succeeded in innovation of organisation, product and process in Indonesia, Thailand, and Japan. Many articles and books are published about 'one village one product' movement and policy in both Thailand and Japan (Natsuda, Igusa, Wiboonpongse & Thoburn, 2012; Takei, 2007; Kaewmanotham, 2008; Matsui & Yamagami, 2006; et al.). These studies show that the grassroots have shown their willpower as community playing the major role for innovating organisation, process and products. In fact there have arisen a number of issues in the process of these movements. This could be explained from the viewpoints of historical, political economy and cultural differences in these countries.

It seems that there is a long history of 'commune' in Eastern European countries. The 'commune' exists in parallel with 'village' in Romania (Lascăr, 2012), Poland (Matysiak, 2014), and Russia (Nafziger, 2010). 'Commune' in these countries is rooted in old and historical institution and persists as a potential social force in the post-communist era (Vlachoutsicos, 1997). While there exist the vast literature on the 'commune' of *mir* in Russia (Nafziger, 2010), Romania and Poland have had 'commune' as a history. 'Commune' ascends far beyond the era of communist states.

In Thailand the term 'community' is equivalent to a representative of each local culture. In Japan the term 'keiretsu' may be applied for as a concept of collectivism at the national level (Oikawa, 2011). Indonesia has a traditional way to reach consensus, *musyawarah mufakat* (consensus and unanimous). What is common among a variety of collectivism above is that it should be based on mutual trust and dependence/or interdependence which have been built up historically, socially and culturally. This potential social force in both Eastern European and Asian countries belong to informal sector. It is this informal sector that could show the power for continuity and change of social structure (Wolf, 1984).

The main focus for exploration is on 'one village, one product' movement in Japan and Thailand. Indonesia is an interesting case of innovation in terms of community-based industry. This is to see the linkage to the dynamics of collectivism in relation to innovation. The argument is built up on the basis of secondary materials. These materials show that the grassroots have shown their willpower as community playing the major role for innovative organization and production in these countries. The paper argues: (1) there are differences between Thailand, Indonesia and Japan in terms of the dynamic of collectivism, (2) community-based innovative activities in industry are picking up in the case of Japan (Nakamura, 2009; Shibayama, 2011), and Thailand and Indonesia have witnessed the rise of community-based innovative activities as rural/local industry (Mizuno, 1996; Kurose, 2011; Yokomoto, 2008), (4) Collectivism has shown the dynamic of innovation with great potentialities for further sustainable economic development.

The paper is divided into five sections as follows.

1. Literature review.
2. 'One village one product movement (OVOP)' in Japan.
3. 'One Tambon (villages) one product movement (OTOP)' in Thailand.
4. Community-based innovation in rural industry in Indonesia.
5. Significance of community-based rural/local industry – historical and cultural background of collectivism and innovation.
6. Conclusion.

2. Literature review

(1) Collectivism and innovation

Schumpeter (1934 (2008)) states that innovation is not just technology development but the social process of destruction of *gewohnten bahnen* (beaten tracks). Recent studies

(Numagami, 1999; Page, 2007) claim that innovation is the social process where the optimal choice is taken via interaction among various ideas.

There have been published the voluminous works in relation to collectivism and individualism, mostly from the viewpoint of psychology and management. There are a small number of studies concerning relationships of innovation with individualism and/or collectivism (Taylor & Wilson, 2012; Černe, Jaklič & Škerlavaj, 2013; Morris, Avila & Allen, 1993) found so far. These studies focus on the psychoanalysis of ‘collectivism’ and individualism for inventive activities. Although the term ‘collectivism’ is not mentioned, Fujimoto (2007) indicates that among product-process architecture (integral, modular, closed, and open types), integral architecture is Japan specific way of product-process design. It is carried out through integration of various ideas from various divisions in the company. This is a social and cultural proceeding. The integral architecture may show a type of ‘collectivism’ representative of Japanese cultural values. This aspect further leads to the principles of the keiretsu relationships as the cultural core values in Japanese society (Oikawa, 2011). The keiretsu relationships between suppliers and users would be said to be interdependent in terms of innovation. The relationships are based on the cultural core values – trust and dependence as social relations in Japan. These values are embodied in the keiretsu relationships and could be at the national level (Oikawa, 2011).

Basically as an abstract concept, ‘collectivism’ in Southeast Asian countries and Japan may be interpreted in relation to innovation when it is approached from the viewpoints of history, political economy and social anthropology. In historicization of culture and social organization as observed ethnographically, the point is to try to make sense of why things were how they were, how they got to be that way, and what was making them change (Wolf, 1982).

Other studies with regard to the relationships between ‘collectivism’ and innovation as empirical studies (Goncalo & Staw, 2006; Yao, Wang, Dang & Wng, 2012) may not necessarily be positive about the linkage between ‘collectivism’ and innovation. The former (Goncalo & Staw, 2006) compares individualism with ‘collectivism’ in terms of group creativity, and concludes that individualistic groups are more creative than collectivistic groups. The latter investigates Chinese employees’ individualism – ‘collectivism’ culture orientation and their idea generation behavior. It concluded that partial correlation results showed that both horizontal individualism and horizontal ‘collectivism’ had positive influences on idea generation, but vertical ‘collectivism’ had a positive impact on idea implementation. All in all, most of these

studies shown above have taken the approach from psychological and managerial viewpoint in organizational settings – established company.

(2) Classification of SMEs

SMEs can be classified depending on **i.** nature, **ii.** activity in relation to innovation. Concerning (**i.**), Kiyonari (1972) classified SMEs into four categories: 1. local industry, 2. community-based industry, 3. production related big business, 4. none of the above. Activity in relation to innovation is divided into three categories: suppliers, independent enterprises or entrepreneur, and ‘between’ (White Paper on Small and Medium Enterprises in Japan).

In fact community-based enterprises may be mingled with local SMEs, for example, in the case of rural/local economy revitalization movement in Japan (Nakamura, 2009).

3. ‘One Village One Product (OVOP)’ movement in Japan

It originally started in 1961 in a village, Oyama in the Oita Prefecture in south-western Japan as a ‘village revitalization movement’. Its catch phrase was ‘Let’s go to Hawaii on holidays planting plums and chestnuts. This is called NPC (new plum and chestnuts) movement. The village is mountainous and each farmer’s rice field was very small. 80 per cent of the village is forested mountains and fields. Despite of such circumstances both the central and prefectural government encouraged the increase of rice production and of livestock farming. Many villagers were working in forested mountains and as seasonal workers to earn additional income. The villagers with the agricultural cooperative and the mayor of the village started the campaign to contribute to local economy development and poverty alleviation. The original concept of this movement was to select products unique to the region. The village is naturally suitable for plums and chestnuts ubiquitous, which require light labor and earn much income. At present, the main focus is mushroom – *enoki* and *shiitake* added – for which saw dust is used and it is plentiful in the village. In addition, wild herbs are on the list. Older people are joining to collect herbs, which are highly valued in the market. OVOP movement has developed into enhancing local communities’ entrepreneurial skills to utilize local resources and knowledge, creating value-adding activities through branding of local products in local economy. The basic principle of this movement is that the grassroots in the community are the leading driver of self-reliance, and the administration is for indirect support, not financial but technical help. The governor of Oita prefecture subsequently backed this movement. In this movement the education of people to be resourceful is most important, which makes it feasible to be self-reliant and creative for

sustainable development, ‘local link, global reach.’ There have arisen problems, depopulation for example, but they have found a solution. The principle is the ‘product must be super best quality and local people must be employed (Yahata Kenji, the president of the Oyama Agriculture Cooperative, 2009).

4. One Tambon (villages) One Product movement and policy in Thailand

In 2001 the Thai government introduced ‘One Village One Product (OVOP)’ scheme in Japan as ‘One Tambon One Product (OTOP)’ in Thailand to promote rural and local development as part of economic policies. By that time Thai had fulfilled a high economic growth rate through industrialization policy relying on foreign direct investment inflows and export expansion through multinational corporations. However, on the other hand, this high economic growth caused inequalities between urban and rural areas. While having supported Thai economy, supplying a plenty of resources and cheap labor force, rural areas had suffered poverty, depopulation, and destruction of environment. Further the Asian economic crisis in 1997 and its aftermath have exhausted these areas. In order to make a breakthrough and to revitalize rural economy, the government loaned to every village for development projects and established a Village and Rural Revolving Fund, which serves as a source of capital for the OTOP project (Kaewmanotham, 2008).

However, the OTOP project is distinctive basically from the OVOP movement in terms of drive (Fujioka, 2007). It is the Thaksin government that had taken the initiative throughout the process. The distinction is obvious in particular in terms of the relationships between grassroots community, local government and the central government. The OVOP in Japan is by and for local people, who are the subject of the movement, and the local government was the main helper even against the central government. The OTOP project in Thailand took priority to achieve visible outcome over encouraging and promoting the grassroots’ initiative. In fact no new organization was established in Tambon, the base of the grassroots community. It is noted that in most communities there had been only limited people who participated in local products in terms of labor force, raw materials, design and market before the OTOP project is introduced and the project had no actual attempt to break such a situation. The OTOP project targeted at the support for superior, promising producers rather than for strengthening weak ones’ technology and group management. As a whole, the project even had created the gap expanding between local producers rather than alleviating. The grassroots communities did not take a keen interest in

sharing the benefit from the project. It is getting difficult for the local people to maintain solidarity, and mutual aid. Self-reliance spirit also is getting weak (Kaewmanotham, 2008). Recently, the Thai government launched the “sufficient economy policy”, in which the government claims to strengthen rural communities. However, this does not necessarily result in the strengthening of rural communities (Rakyutidharm, 2009). It is the reality that OTOP project created new job and chance to be employed. People are not necessarily to work away from home (Kaewmanotham, 2008), but there also exists the fact the income is not enough for their living, depending on the types of process where they are engaged in and whether they have access to get financial supports (Takei, 2007).

5. Community-based innovation in rural industry, West Java in Indonesia

- *Silk industry in Tasikmalaya Prefecture, in West Java* (Yokomoto, 2005, 2008).

The Sericulture Cooperative took the lead in the silk industry, buying cocoons from farmers, producing silk and selling the silk products and the sericulture farmers play the role of suppliers of raw material. In doing so, the industry secured stable supply of raw material and created new job opportunities. In short, the Sericulture Cooperative is establishing social division of labor of local industry in *Tasikmalaya* Prefecture. This is outstanding.

West Java is one of the most prosperous in silk industry in Indonesia. In 1993 PT Indo Jado Sutera Pratama started operation of silk mill, which is the largest in Indonesia. This company bought cocoons from sericulture farmers and sold silk mill to silk industry in Indonesia. In fact most cocoons are imported. However, since the Asian economic crisis it became impossible to import because of the dramatic depreciation of Indonesian currency and increase of imported cocoon price. The company was closed down in 2003, October. This has led to integrated system of silk production. The Sericulture Cooperative has succeeded in this production system based on cocoon production as raw material since January in 2004, thus incorporating raw material producers in division of labor system, and forming social division of labor of local industry. Such rural/local industry subdivides production process and entrusts it to specialists and ordinary workers. It creates low-cost production system and chance of employment for ordinary workers.

- *A Case Study of community-based weaving industry in West Java* (Mizuno, 1996)

The Majalaya region in West Java has a long history as weavers. During the late 1960s the weavers were not able to continue the factory system they had organized up until that time. It

was not until 1976 that this surveyed village began to see any chance of recovery from the disastrous situation that had occurred in its weaving industry over the previous three years. The villagers and surrounding areas took the following measures to overcome the crisis. (i) They experimented with a number of new products, the market for had not yet been monopolized by the large textile firms and power-loom weaving firms, and attempted to make existing products cheaper than power-loom weaving firms. (ii) For this purpose they made concerted efforts to cut production costs. (iii) They organized a new division of labor among themselves. (iv) Many weavers turned to commerce in an attempt to open new urban markets for their products among middle- and low-end consumers. And a large number of locally based traders took innovative measures to open up new marketing networks. Measures (iii) and (iv) were especially effective. As a result a weaving production area/community centering around the village was formed, which was freed from dependence on either factories or wholesalers in other regions. The weaving business within this new division of labor put out some work to home workers and hired very little wages labor, thus realizing a system of production that must be classified as “petty commodity production”. This new division of labor reflects the village’s economic status differences. This makes it possible for members of the village’s lower and middle strata to easily set up weaving and cloth trading businesses with very small amounts of initial capital.

6. Significance of community-based rural/local industry – historical and cultural background of collectivism and innovation

The ‘OVOP’ movement in Japan has a long history as the background of mainly agriculture cooperatives’ movement which may ascend to before the Second World War (Matsui & Yamagami, 2006). Through such rural areas’ organization, rural economy improvement, agricultural and life improvement have continued slowly but steadily. In fact there have existed a lot of similar movements in local areas in Japan at present. They are not always limited in OVOP policy, but their targets are same, revitalizing the rural/local economy to be independent and sustainable through establishment of the basic rural/local industry (Nakamura, 2013). For this a lot of local villages/towns and local SMEs are challenging for independence and sustainability through innovative activity to establish local economic circulation. The keiretsu principles, as cultural core values, should provide a solid foundation for these movements. Thailand has a distinctive community culture, depending on the district, based on traditional mutual cooperation and friendships as community. Around the 1980s rural people created new type of economic

organization such as 'saving cooperative' and 'rice bank'. Indonesia has two outstanding cultural values, 'mutual and reciprocal assistance', and 'consensus and unanimous' which goes back to the village ordinance in 1906. This is a kind of Indonesian village-level democracy (Mizuno, 2008).

It is interesting to learn the institution of a long and well-established tradition in Eastern Europe. For example, the institution of the village representative in Poland is in the self-government of each commune (Matysiak, 2014). The village community in Romania took place for a longer period of time and it was stronger than most of European countries (Kurtuhuz et al., 2010). There is an empirical study that investigates the reasons behind large differences in regional growth performance for the period from the start of transition to the 1998 crisis in Russia. It claims that a region's initial industrial structure as well as its natural and human resource endowments, had a large impact on its economic growth performance during the 1990s (Ahrend, 2005). This may suggest the importance of traditional institutions and values for economic performance.

7. Conclusion

The community-based rural/local industry needs to persevere in their effort for innovation. Their innovation is in the process of people's consensus formation in community. Also it is important for the prospective people to have education of entrepreneurship and skills. The salient features of rural/local industry are that these community-based enterprises employ local people, and use rural/local resources. For the development they could expand their market from domestic to international. These people involved in such community-based industries are concerned about protecting environment. They are attached their surroundings.

Important, they can make rural/local economy independent and sustainable by creating regional economic circulation. At the very bottom of these community-based movements the cultural core values should exist. These cultural values have sustained and characterize the foundation of innovation.

The author recognizes the distinction between community and 'commune' which are discussed in this paper. However this issue will be beyond the argument in this paper and for further research.

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DOES ENGAGING CUSTOMERS SUPPORT SMEs' INNOVATION? A SURVEY OF POLISH MANUFACTURING AND SERVICE COMPANIES

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Abstract

The paper presents a study aiming to test the hypothesis that firms engaging customers in their business activities tend to display more innovativeness. In our approach, customers' engagement was operationalized as a multiple scale following the DART framework, originally developed by Prahalad and Ramaswamy (2000). Engaged customers are knowledgeable decision makers, who create (co-create) value by using products in the most suitable and unique way. DART acronym denotes four salient dimensions of co-creation: Dialog, Access, Risk and Transparency. Innovativeness was represented by a share of revenues from new and modified products. The data for the study was gathered in July and August 2014 through CATI interviews with managers of SMEs involved in manufacturing (food and beverage production) and services (hospitality and catering). The statistical methods, including EFA, CFA and multiple regression modeling, revealed that certain DART dimensions, such as Dialog and elements of Access and Risk, did coincide with increased levels of innovativeness.

Keywords: co-creation, DART model, innovation, SMEs, Poland

JEL Classification: D84, D220, L21, L25

1. Introduction

In the current knowledge driven economy, with its intense competitive pressures and growing power of consumers, more knowledgeable and connected via Internet, two themes are often cited as possible sources of a lasting business success: engaging customers through co-creation and constant innovation.

Co-creation emerged relatively recently out of the core competences theory (Prahalad & Hammel, 1991) and is considered to be part of the more general theoretical framework of Service Dominant Logic (SDL), originated by Vargo and Lush (2004). SDL stands in opposition to the

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traditional goods dominant logic in that – among other things – it postulates a different role for customers, who are supposed to become value co-creators and equal partners to companies, as value is not embedded in either the factory or the distribution process but is derived from the use of products and interactions between the company and customer (Vargo & Lush, 2006). In line with this reasoning, Prahalad and Ramaswamy proposed their DART model as an aid in implementing the co-creation in companies to enhance customers' role in value creation and innovation processes (Prahalad & Ramaswamy, 2004b). DART is an acronym that refers to the main components of the model:

1. **Dialog** that represents ongoing interactions between a company and its consumers in an unrestricted, content rich fashion and on equal terms.
2. **Access** which stands for tools and procedures – mostly communication related – that facilitate co-creation and increase freedom of choice for customers.
3. **Risk assessment** are measures that allow customers to fully evaluate risk involved in accepting a value proposition.
4. **Transparency** is the extent to which a firm has managed to mitigate the information asymmetry in relations between the company and its customers.

Even though there were other attempts at conceptualizing and operationalizing co-creation (e.g. by Grönroos, 2009; Yi & Gong, 2013) DART seems to have been most extensively described in the literature, though chiefly in conceptual papers or empirical studies that relied on qualitative evidence.

In previous studies, the relationship between co-creation and innovativeness was mostly concerned with the consequences of involving customers directly in innovation processes in companies. They usually reported positive results in that the share of innovative products was higher and failure rates lower in firms that sourced novel ideas as well as other insights from their customers (an extensive review of works in this area can be found in Bogers et al., 2010). This kind of co-creation is known as “innovation co-creation” or “co-creation for others”, which is contrasted with “experience co-creation” or “co-creation for use” (Gustafsson et al., 2012). To our knowledge, the latter type of co-creation, which corresponds to everyday consumption or use of products and services, was not investigated so far in the context of innovation on a large sample of service and manufacturing companies, which makes it a valid area for research. In our

study, by using DART as the operationalization scheme we attempted to account for a wide range of co-creation practices, in particular co-creation for use.

With regard to the outcomes of innovation activities, we choose to focus on broadly considered product innovations, which comprise any modification to existing product or service structure, functional features, aesthetics or utility, as well as introduction of entirely new offerings. In particular, as a measure of innovative success we used the percentage of revenues from new and modified products in sales for the whole year (2013) preceding the moment of data collection. This and similar metrics were employed in several other studies where performance of innovation processes was measured (e.g. Zeng et al., 2010, Ebersberger et al., 2012).

Considering the growing prominence of co-creation principles in business and the constant critical role of innovation in sustained competitive success, it is interesting to know how those two concepts interact. For that purpose, following the guidelines from the literature and our own observations, **we propose that involvement in co-creation is associated with higher innovativeness**. We undertook to verify this hypothesis in the rest of the paper by first discussing employed research methods, then summarizing the findings, to close with presenting our conclusions and outlining limitations of the study.

2. Research method

Data for the study were collected in July and August 2014 with CATI method and encompassed 408 fully usable cases (i.e. without missing values and obvious reply errors) for a response rate of 30%. The interviewed managers represented Polish small and medium companies involved in manufacturing of food and beverage (n = 201), and hospitality, tourism and catering services (n = 207). To ensure representativeness the sample was drawn from a database comprising almost every manufacturing and service company in Poland, maintained by a research agency that was hired to conduct the interviews.

To test our hypothesis of a positive link between involvement of firms in co-creation with consumers and innovativeness we used exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and multiple linear regression.

The central part of our research instrument was a multi-item Likert scale for establishing the extent of the DART model implementation (Table 1). In developing the statements for that scale we were informed by several earlier works, in particular Mazur & Zaborek (2014), Albinsson et al. (2011), Ruso Spena et al. (2012), Prahalad & Ramaswamy (2000, 2004a, 2004b,

2004c). The DART framework, even though it is admittedly a popular way to conceptualize co-creation, does not have a fully validated set of scale items for use in quantitative research. In addition, there is controversy as to the underlying structure of the latent variables (Mazur & Zaborek, 2014). In particular it is not clear in the face of extant empirical evidence if the scope of the DART concept is best represented by only four constructs – as originally proposed by Prahalad and Ramaswamy (2004) – or it is a more complex composition with more hidden variables, accounting for various aspects of co-creation. One of the apparent reasons for this uncertainty is owing to the fact that DART was first developed through a series of case studies and most of later research, where it served as a guiding framework, was also of qualitative nature. Considering that scale validation methods are distinctly different in the qualitative versus quantitative approach (qualitative researchers cannot look at covariance matrices, but have to rely instead on various pattern matching schemes, as suggested by Yin, 2011), it seems warranted to start the analysis with EFA. In our study we used the maximum likelihood EFA procedure in SPSS 22 to see if the theoretical, four latent variable structure also holds for our data. As it turned out, we identified seven hidden variables that correspond to Dialog, Transparency, two different aspects of Access, two aspects of Risk and a single new factor that depicts the use of internet in consumer communication. Consequently, in the second step, we used that latent variable structure to build and validate the measurement model via CFA, with the AMOS 22 software (see Table 1 for the results). Once the measurement model yielded acceptable fit metrics we saved the factor scores as new variables and used them as predictors in the multiple regression modeling, which concluded the statistical data processing for this study.

A word of explanation is needed as to why we decided against building a full structural equation model (SEM) to verify our hypothesis. The main reason was that in our particular case the displays for the equivalent SEM would be too complex to present concisely in such a short paper, while not providing any substantial advantage over a regular regression analysis. Specifically, we would have to present two models, separately for manufacturing and service companies. Each of them would have to accommodate a set of rather confusing covariance links between the seven first order factors since it was impossible to fit an adequate model with a single second level construct standing for a hypothetical unified co-creation involvement variable, which would simplify the displays markedly. Also, the regular multiple regression makes it easier to represent interactions between predictors, which we suspected could be present in our data.

3. Research findings

As a starting point we will report our CFA results. Here, the major issue was to establish if the manufacturing and services firms exhibited any distinct differences in their respective DART measurement models. If they turned out to be the same, then a single, pooled measurement model could be used; otherwise two models would be needed. To address this issue a measurement invariance test was performed. In that test two models were statistically compared: the one with each group having independently estimated parameters (the so called unconstrained model assuming that the firms are different) and the second having the same regression weights for both groups (i.e. the specification with constrained measurement weights that asserts that both kinds of companies were described by the same DART model). The resulting chi-square value of 22.066 ($p = 0.106$) indicated that the firms could not be pooled together and treated as a single group and instead the models should be estimated separately. The unconstrained model had significantly better data fit as compared with the constrained one, but that does not mean that each and every parameter was different across both models. The significance of specific pairwise differences was assumed whenever critical ratios fell beyond the range of -1.96 and 1.96. In those cases where significance was established regression weights were marked in bold.

Table 1. CFA measurement model of DART framework for manufacturing and services firms

Indicator content	Regression weights from parent construct to indicator	
	for manufacturers	for service providers
Dialog (Manufacturers: AVE = 0.62, Cronbach's Alpha = 0.81, MSV = 0.18; Services: AVE = 0.56, Cronbach's Alpha = 0.76, MSV = 0.48)		
D_1: We systematically engage in dialog with consumers of our products / services.	0.92	0.89
D_2: We use special means to encourage consumers to have dialog with us.	0.98	0.89
D_3: One objective of our dialog with customers is generating ideas for new and modified products / services.	0.59	0.45
D_4: Dialog with consumers enables us to learn about their experiences with our products / services.	0.58	0.66
Access 1 (Manufacturers: AVE = 0.54, Cronbach's Alpha = 0.68, MSV = 0.14; Services: AVE = 0.60, Cronbach's Alpha = 0.62, MSV = 0.09)		
A_1: Consumers can freely choose the time of product delivery / service provision.	0.74	0.98

A_2: Consumers can decide about certain elements of our products/services that influence their looks and/or utility.	0.68	0.48
Access 2 (Manufacturers: AVE = 0.51, Cronbach's Alpha = 0.65, MSV = 0.22 ; Services: AVE = 0.28, Cronbach's Alpha = 0.61, MSV = 0.56)		
A_3: Consumers can always choose their preferred payment method.	0.41	0.28
A_4: Consumers can always choose their preferred method of communicating with us.	0.76	0.58
A_5: Consumers can readily learn specifics of our offer.	0.88	0.66
Risk 1 (Manufacturers: AVE = 0.72, Cronbach's Alpha = 0.71. MSV = 0.31; Services: AVE = 0.56, Cronbach's Alpha = 0.64, MSV = 0.53)		
R_1: Consumers can entirely consciously make their purchasing decisions because we inform them fully about the benefits of our products/services.	0.69	0.72
R_2: Consumers can entirely consciously make their purchasing decisions because we inform them fully about the risks from using our products/services	0.98	0.77
Risk 2 (Manufacturers: AVE = 0.52 Cronbach's Alpha = 0.82, MSV = 0.31; Services: AVE = 0.61, Cronbach's Alpha = 0.79, MSV = 0.35)		
R_3: We discourage from buying those consumers for whom we believe our products/services are not appropriate.	0.74	0.80
R_4: We encourage consumers to learn the detailed information about using our products/services.	0.77	0.84
R_5: We sometimes modify user manuals and/or other information based on negative feedback from consumers about their product/service experiences	0.64	0.69
Transparency (Manufacturers: AVE = 0.44, Cronbach's Alpha = 0.63, MSV = 0.25; Services: AVE = 0.28, Cronbach's Alpha = 0.48, MSV = 0.56)		
T_1: All information that we disseminate is reliable.	0.78	0.68
T_3: We follow an open information policy since we have nothing to hide.	0.88	0.71
T_5: We don't try to hide when we are blamed for something; we address such charges openly.	0.48	0.32
T_6: If we happen to make mistakes we admit to them publicly.	0.43	0.23
Internet Use in Customer Communication (Manufacturers: AVE = 0.68 Cronbach's Alpha = 0.82, MSV = 0.25; Services: AVE = 0.51, Cronbach's Alpha = 0.75, MSV = 0.46)		
A_6: Information about our offer are readily available for consumers on our web site.	0.89	0.84
T_2: Information published on our web site is up to date.	0.81	0.76
T_4: We immediately reply to questions from our current and potential customers.	0.77	0.49
Overall fit metrics for the entire measurement model: Chi-squared/df=1.344; GFI=0.908; AGFI=0.869; CFI=0.928; RMSEA=0.028; PCLOSE=0.876.		

Source: own work.

According to threshold levels given in Garson (2012), general fit indices given at the bottom of the table show that the measurement model fits the data well, which in this case means that the covariance matrix computed from the model closely resembles the empirical covariance matrix. However, it cannot be missed that indicators obtained for individual constructs clearly point at some deficiencies in the model. Most notably, it is clear that DART is better suited for manufacturing companies than for service providers. Among manufacturers, each construct has a satisfactory level of average variance extracted from its indicators (AVE of more than 50%) and there are no issues with discriminant validity (AVE was greater than MSV which stands for maximum shared variance). On the other hand, with service companies some constructs are rather difficult to interpret due to low AVE coefficients and AVE being lower than MSV. Specifically, the factors Risk 2 and Transparency explain little variance in its indicators and are too similar to other factors. This finding is consistent with our previous research on DART (Mazur & Zaborek, 2014), where – using different sample – we concluded that the DART framework works better for manufacturing companies, possibly because it was originally developed from a qualitative investigation of several manufacturing firms. Even though services firms are generally worse represented by the model, for other factors then the problematic Risk 2 and Transparency, reliability and validity is at least adequate, and Dialog and Risk 1 have measurement models equivalent to manufacturers' (as indicated by insignificant differences between regression weights). This could imply that those two aspects of co-creation are universal and valid regardless of the nature of business operations.

As a general note, the regression weights in Table 1 should not be interpreted as telling which indicators are more prevalent among which type of firms, or that manufacturing firms are involved more in co-creation. Rather, they show where the DART model is more accurate and reliable and where it is somewhat lacking.

What also needs to be commented on are the interpretations of the “split” factors labeled Risk 1 and 2, and Access 1 and 2. Risk 1 seems to encapsulate the more passive aspects of addressing the danger and inconvenience involved in purchasing wrong products or inadequate services, as it calls for providing right information to consumers. In contrast, Risk 2 is more dynamic, since it requires specific activities targeted at particular needs and circumstances of individual customers. Access 1 concerns practices that can provide substantial benefits to customers, such as home delivery or custom made products. On the other hand, Access 2

components are about more intangible characteristics, which mostly rely on availability and transfer of information. Hence, it appears that dividing Risk and Access had well founded substantive reasons and was not performed only due to statistical criteria.

To enable further analysis, the regression weights of Table 1 were used to create factor scores for each case in the sample, which resulted in 7 new variables representing aspects of co-creation based on DART. These new variables were entered into a regression equation as predictors. In addition, to control for two important characteristics of firms, the regression model was supplemented by the economic sector variable (0 for manufacturing and 1 for services) and size of the company measured by the number of employees. The last model specification task was to check for interactions between economic sector and other variables and input significant ones into the equation. The resultant model is depicted in Table 2.

Table 2. Parameter estimates of the multiple regression model

Dependent Variable: Percentage of New and Modified Products in Total Revenues; R-squared for the model = 0.181

Parameter	B	Std. Error	t	p-values	95% Confidence Interval		Partial Eta Squared
					Lower Bound	Upper Bound	
Intercept	24.894	1.915	13.002	.000	21.130	28.658	.299
Dialog	4.290	1.662	2.581	.010	1.022	7.558	.016
Access 1	3.802	1.719	2.211	.028	.422	7.182	.012
Access 2	-4.169	3.370	-1.237	.217	-10.795	2.457	.004
Risk 1	1.418	2.302	.616	.538	-3.107	5.943	.001
Risk 2	5.197	1.814	2.864	.004	1.630	8.763	.020
Transparency	-1.527	2.733	-.559	.577	-6.899	3.845	.001
Internet Use	3.487	3.371	1.034	.302	-3.141	10.115	.003
Economic Sector	14.962	2.868	5.217	.000	9.324	20.600	.064
No. of Employees	1.405	1.267	1.109	.268	-1.086	3.896	.003
Internet Use * Economic Sector	-7.035	3.280	-2.145	.033	-13.484	-.587	.011

Source: own work.

As indicated by the R-squared value, the whole set of predictors accounted for 18.1% of the variance in the dependent variable. Further investigation of model quality did not show any problems with multicollinearity, non-normal distribution of residuals or heteroscedasticity (due to space constraints we chose not to enclose specifics of these tests in the paper).

There were six significant parameters in the model: the intercept, Dialog, Access 1, Risk 2, Economic Sector and the interaction between Internet Use and Economic Sector. Effect sizes of individual predictors can be determined from eta squared coefficients, which reflect the proportion of unique variance in the dependent variable explained by each predictor (Field, 2013). The variable with the apparently strongest effect on Percentage of New and Modified Products was Economic Sector, which was a dichotomous attribute coded 0 for manufacturing and 1 for services. Here, with all the other predictors held constant, service providers had, on average, 14.96% more revenues from new and modified products than manufacturers. The second most important predictor was Risk 2, closely followed by Dialog 1, and Access 1. For these aspects of co-creation the b values were positive, meaning that increased levels of involvement, *ceteris paribus*, corresponded with higher levels of innovativeness. Relatively weakest was the effect of the interaction, whereby the increased Use of Internet in consumer relations was more characteristic of less innovative service companies (coded as 1 on the Economic Sector variable), while in manufacturing firms Internet Use was not linked with any systematic differences in innovativeness. The intercept had an actual practical interpretation since all the metric predictors were standardized before being entered into the model and the only categorical variable – Economic Sector – could legitimately take a 0 value. As such, the intercept was the percentage of new and modified products in revenues for a hypothetical manufacturing company with all the metric predictors set at their means (which equal 0 for standardized variables). This number (24.89%) was very close to the average for all manufacturers (23.99%) and quite distinct from the mean for service companies (38.95%).

To conclude the overview of the model, **there was a significant positive effect between involvement in co-creation, as operationalized by the DART model, and innovativeness. However not all aspects of co-creation were associated with higher levels of innovation, which gives only partial support to our research hypothesis.**

4. Conclusions and limitations

Our study findings are in general agreement with Gustafsson et al. (2012), who surveyed 334 managers to investigate communicative aspects of co-creation in terms of frequency, direction, modality and content (it should be noted, though, that in contrast to our project the scales employed by those authors were more concerned with innovation co-creation than experience co-creation). They found that frequency, direction and content of communication with customers was

corresponding to higher innovation success rates when innovations were incremental. For radical innovations, only frequency of communication mattered. Even though we did not distinguish in our survey instrument between radical and incremental innovations, it seems certain that the vast majority of innovations in the investigated industries were of the latter kind.

Considering that dialog is “a form of reflective conversation that enables actors to alter managers’ mental models through conscious, critical exploration” (Jacobs & Heracleous, 2005) it is not surprising that its association with innovation was positive. After all, innovation – especially that of a strategic kind – calls for shifts in existing mental models. Intense dialog with customers was found before to be conducive to more intense and effective innovation practices (e.g. see a case study by Ayuso et al., 2006).

The other significant predictor in the model (Access 1) involved highly interactive practices that engaged consumers in the process of determining the features of their desired offerings. Such interactions, in addition to providing increased utility to customers, are information rich for firms, which naturally leads to a higher chance of acquiring useful insights for product innovation.

The Risk 2 variable represents an active involvement on the part of the company to ensure that its products are bought only by customers who can fully benefit from their features, sometimes at the cost of discouraging those customers for whom the products would not be appropriate. Such an attitude and behavior promotes trust (which facilitates dialog) and gives additional opportunity to glean insights from customers, which can inspire creative ideas for modifications and completely novel offerings.

Interestingly, for service firms the internet use had a mildly negative association with revenues from innovative products. One possible explanation is that many service companies in hospitality, tourism and catering rely on the internet as a sales channel, and so it may not be uncommon for them to mostly exchange only such information that is necessary for closing transactions. It can be argued that such exchanges, tending to be routine and mechanical, do not support the true dialog and thus have no positive effect on innovativeness. In addition, the studied firms were involved in services that at some point required a face-to-face contact. These direct interactions provided ample opportunities for dialog with consumers, that arguably could make for a richer communication than internet exchanges.

From the academic perspective, the study contributed by provided further empirical evidence for the validity of the DART model, suggesting that its actual measurement structure could involve 7 instead of 4 hidden variables. Moreover, this conceptualization of co-creation appears to be more suitable for description of manufactures than service providers, but in terms of its Dialog and Risk 2 components both industries seem to show similar association patterns.

Among the limitations of the current study the most obvious is the used conceptualization of the co-creation concept. Admittedly, the DART model is not perfect and it is not unconceivable that a different approach could bring unlike results. However, seeing that Dialog or its close equivalents are central elements of any co-creation concept, we are convinced that with alternative methods of operationalizing the possible differences will likely concern the magnitude of the effect sizes and not their direction, which should remain positive. Finally, the fact that the study was carried out in a single country and on a limited selection of industries (food, beverage, hotels and travel services) do not guarantee that the same patterns are to be found in other countries and industries.

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SUSTAINABLE TOURISM IN TIMES OF CRISES – ROMANIAN TOURISM PERSPECTIVE

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Abstract

The role of tourism in development process is undeniably proved by the continuous growth of its direct and indirect contribution to macroeconomic indicators. Fulfilment the prerequisites for sustainability in the development of tourism industry, raises new challenges that need to be taken into account by planners, practitioners and policy makers in all countries.

Through its specific, tourism industry is exposed to negative influences exerted by various phenomena of crisis : economic or financial, climatic (global warming , extreme weather events), energetic, feed crises, environmental (pollution, degradation of ecosystems and biodiversity etc), political. Statistics show a higher vulnerability of the touristic sector of Romania to the effects of the recent financial crisis, than other sectors of the economy. In these conditions all entities involved in the development of this sector (public authorities or private entities) should promote sustainable business models, leading to increase tourism's contribution to economic and social welfare in the long term .

Based the experiences and studies conducted in countries with developed tourism, this study aims identify ways to decrease the vulnerability of this sector towards various phenomena crisis and to increase the contribution of tourism to economic and social welfare, according of significant potential that tourism has in Romania.

Keywords: sustainable development, tourism, crises

JEL Classification: O11, L83, E61

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1. Introduction

Tourism is one of the most dynamic and volatile economic sectors, its contribution to the general process of development registering a substantial increase in all countries, regardless of their stage of development. The importance of tourism for the welfare of mankind is reflected by the continuous increase of tourism industry share in employment and GDP in the interval 1988-2014, as well as by the permanent growth of labour productivity in tourism. If the data related to the evolution of world tourism show a continuous development process without large fluctuations of macroeconomic indicators from one year to another, in the analysis carried out at the level of countries, regions or tourist destinations we may notice a long-term increase of tourism contribution and the manifestation of some fluctuating evolutions for short periods of time. These fluctuations may be attributed to some conjuncture factors and phenomena that have induced periods of crisis for the operators in the tourism industry.

The current world conjuncture characterized by globalization and the liberalization of world markets (of merchandises/services, labour and capitals), the increase of interdependencies between the states of the world, the manifestation of some political instability phenomena and conflict states in different regions, the manifestation of some climatic changes leading to the appearance of more and more frequent extreme climatic phenomena, the proliferation of terrorism acts, accentuates the complexity and instability of tourism environment and results in the increase of vulnerability of the tourism industry to diverse phenomena that may cause crisis situations. The tourism industry, by its particularities, is one of the most sensitive and vulnerable economic sectors in terms of such crisis generating phenomena. Thus, the decision makers have the difficult task to identify solutions for the prevention of manifestation of the crisis situations and to limit their negative effects on tourism operators (Blake & Sinclair, 2003; Salem Hyasat et al., 2010).

The goal of this study is to identify the main risk factors that may generate critical situations for the Romanian tourism, to analyse the vulnerability of tourism towards different types of crises that manifested in the past, to identify solutions for the efficient control thereof and the sustainable development of the Romanian tourism in a more and more stable economic, political, intuitional, social and natural environment.

For this purpose have been used studies on the experiences of other countries that have faced various touristic crises which recorded progresses in tourism crisis management. They

have been used also statistical data on tourism's contribution to macroeconomic indicators provided by the World Tourism Organization, and on international competitiveness of tourism industry provided by World Economic Forum. By studying the evolution of Romanian tourism macroeconomic indicators such as: direct contribution to employment, direct contribution to GDP, GDP/employee, internal T&T Consumption, Outbound Travel & Tourism Expenditure, Domestic Tourism Spending, Investment (Capital investment), Leisure Tourism Spending, Government Individual Expenditures, Visitor Exports (Foreign spending); we intend to identify the periods of touristic crisis, the hazard that generated it and the effects on tourism sector.

2. Sustainable development of tourism in crisis situations – Literature review

More and more papers in literature underline the importance of promoting sustainable tourism and the sustainable development of the tourism industry. Sustainable tourism supposes the adoption of certain practices by all operators in the tourism industry in concordance with the sustainable development principles. Thus, sustainable development of tourism requires the full taking into account of the present and future economic, social and environmental impact, the need to act reasonably, the active involvement and collaboration between all stakeholders interested in the development of tourism phenomenon (UNEP/WTO, 2005; Waligo et al., 2013). We are speaking about the conclusion of some forms of partnership which may promote a type of tourism (one planet tourism), offer advantages to people, the economy and environment and act within the limits of financial, social and natural resources they have (the triple bottom line) (Waligo et al., 2013).

Sustainable development of tourism means the continuous improvement of economic-financial benefits of stakeholders by promoting those practices and types of tourism that comply with different aspects of the concept of sustainability (economic, social, environmental and cultural). Thus, we must identify solutions to neutralize the factors that may result in the occurrence of sectorial crises and adopt practices that may allow a better management of the crisis situations, so that tourism contribution to the welfare of mankind might be amplified on a long term (Janusz, 2013; Harris et al., 2002).

The study of tourism crises, causes, the ways to prevent, control and diminish their negative effects suscite the interest of many theorists and practitioners in the field. Tourism crisis may be defined as an unforeseen event having a disruptive character that effects the trust of a tourist into destination (WTTO, 1998); may affect the capacity of an organization or

destination to function normally (Robertson et al., 2006); may impair the destination image in terms of safety, attractiveness and comfort, may negatively affect visitors' perceptions and result in the reduction of tourist arrivals and expenses (Sonmez, 1998); may require radical management measures (marketing or operational practices) by which they may reestablish stakeholders' trust in the viability of the destination (Beirman, 2003); a unwanted, extraordinary and limited in time process that requires immediate decisions and countermeasures to limit the negative consequences and to ensure the development process (Glaesser, 2005); may alter or disturb the operation of markets, tourism industry or tourism services and may strongly compromise the reputation of a tourism destination or region (Hapenciuc et al., 2005).

Crisis triggers in the tourism sector are numerous. They may come from natural causes or from actions having an anthropogenic character. Most often, crisis situations in tourism originate in the diversity of human actions that hallmark health and balances of the macroeconomic, political, social, legal, institutional and natural environment (Hapenciuc et al., 2009).

Following the globalization, the tourism industry is facing a multitude of phenomena with a disruptive character that have unfavorable effects on its sustainable development (Robertson et al., 2006). To identify solutions to control and attenuate the negative effects of tourism crises, it is important to find out the potential risks that may result in the occurrence of tourism crises, the sources, the predictable and unpredictable character, the controllable or uncontrollable character, their manner of manifestation and consequences.

Vulnerability of tourism towards the action of these phenomena having a disruptive character that may induce crisis situations and their effects on the tourism industry has been the subject matter of many studies. Their effects on tourism manifest in more limited areas, they are complex and materialize into different forms such as the loss of income and jobs, destruction of businesses, specific infrastructures, of some elements on which the life of residential population depends, serious injuries or deaths among tourists and residents (Hapenciuc et al., 2009; Robertson et al., 2006; Dorasamy et al., 2010).

Other studies have approached the effects of tourism crises caused by economic risks. Their consequences may manifest at world level (financial crisis and economic recession after 2007) or at national or regional level (the ones induced by the processes of economic restructuring or transition). They have a predictable character, they are controllable and their consequences on tourism industry are purely economic: loss of income and jobs, bankruptcies,

dwindling of tourist flows, investments and tourism expenses etc. (Okumus & Karamustafa, 2005; Hapenciuc et al., 2009; Pizane & Kozmina, 2010).

Another category of risks that may result in tourism crises are the related to the social environment: acts of minor delinquency, violence acts, organized crimes acts, social conflicts and other forms of social instability. They usually have a local, regional national character at most, they are more easily to foresee, their manifestation may be prevented and effects can be diminished by real actions. The negative effects on the tourism sector manifest preponderantly on a social level by the diminishing of tourists' safety and security, their trust in the tourism destination, and on an economic level by the reduction of income following the decrease of tourist flows or the disturbance of the business operations making up the tourism industry (Robertson, 2006; Hapenciuc, 2009).

A category of crises having very serious implications on tourism and economies as a whole are the ones induced by political risks such as terrorist attacks (USA 2001 and the subsequent ones in the west European countries), armed conflicts (Afghanistan, the Arabian world, Ukraine etc.), civil wars (the ones in the Arabian world after 2010). Most of the times, they have a predictable character and their negative effects on tourism are extremely complex manifesting on the economic level by the rerouting of tourist flows to other destinations, destructions of businesses and specific infrastructures, on the social and cultural level: insecurity of population and tourists, serious injuries and deaths, the alteration of life conditions, damages caused to cultural objectives and on an environmental level by the degradation of the natural environment. The negative effects may have repercussions on some vast geographical areas by affecting the tourism from the countries composing the affected region or even the tourist flows at world level (Robertson, 2006; Sönmez, 1998; Sönmez et al., 1999; Causevic & Lynch, 2011; Novelli et al., 2012).

Tourism crises induced by biological risks represent a special category by the fact that they manifest through the reduction of international flows of tourist under the threat of some extremely contagious biological agents, most of the times with a fast evolution and lethal effects: Severe Acute Respiratory Syndrome from Asia Pacific region (2003), the pandemic foci of avian flu from the SE Asia and swine flu from Mexico (2003-2004), Ebola virus crisis in the African countries (2014) etc. Biological risks may take the shape of contamination of the environment with biological agents or with toxic substances dangerous for the human body. Their negative

effects also manifest on the economic level by the reduction of income as the result of dwindling of tourist flows, and on the social level by the reduction of the tourists' trust in the affected destinations and by the threat they represent for tourists' and residents' health and life.

Among other crisis triggers, some authors mention the technological risks represented by the dangers determined by the development of information and communications technologies, nuclear accidents (Chernobyl 1986, Japan 2011), and the diverse forms of pollution of the environment following the increase of intensity of the economic activities (Bennett, 2012). Their effects manifest by the information insecurity of tourists and tourism businesses, the risk of frauds determined by the use of information systems or economic losses (income, infrastructures), on the social level (deaths, alteration of health of tourists, employees and residents) or on the ecologic level by the irreversible degradation of ecosystems and natural landscapes.

3. Implications of crises for the development of Romanian tourism

In the light of potential, Romania has all the data to become an attractive tourist attraction on the tourism map of the world. To support this affirmation, we may bring the following arguments: the balanced distribution of landforms, with about one third of mountainous landscapes, two thirds (over 60%) from the length of Carpathian chain and about 40% of its surface offering spectacular natural landscapes, many of them unaltered yet; a well represented and evenly distributed hydrographic network (a large part of Danube's course and its Delta, the vicinity of the Black Sea, numerous natural and anthropic lakes etc.); the traditional (patriarchal) rural way of life well preserved in many parts of the country with the traditional cuisine presenting some ecologic valences; the natural environment with a high esthetic and recreational value, rich in flora and fauna elements and less affected by anthropization; the favorable geostrategic position with special relations in the Muslim and Arabic world which has maintained Romania outside the risks of some terrorist attacks (Hapenciuc, 2009); incidence, intensity and more reduced gravity of natural risks; the cultural heritage with numerous and valuable objectives belonging to UNESCO heritage (monasteries, medieval castles, palaces, ruins of other fortresses and mines from the Dacian epoch etc.), traditions and customs etc.

Despite the fact that its tourism potential is an exceptional one, we may affirm that, in the era of globalized tourist destinations, Romania is nowhere on the tourist map of the big operators in the tourism industry. Thus, the interest of foreign tourists for the tourism destinations in Romania is quite low, the interest of foreign entrepreneurs in relation to the privatizations from

the hotel sector from Romania was also very low, and the competitiveness of the Romanian tourism industry in the international markets is a pretty low one, namely the 68th place out of 140 economies in 2013 in terms of the Travel and Tourism Competitiveness Index (World Economic Forum 2014).

The economic importance of the Romanian tourism industry remains a modest one as compared to the medium values registered at world level. Thus, according to WTO, in 2014, the situation of economic contribution of the Romanian tourism industry as compared to the world tourism was as follows: the direct contribution of tourism to world GDP was 3.08%, whereas in Romania it was only 1.56%; total contribution to the world GDP was 9.83%, whereas in Romania it was only 4.85%; the direct contribution to employment was at world level of 3.58%, and in Romanian it was 2.41; the total contribution of tourism to employment at world level was 9.83%, and in Romanian it was only 4.85%; the average work productivity in world tourism was 22,434.44 USD/employed person and in Romania it was 15539.5 USD/employed person.

As for the trend towards the sustainable development of tourism, we may affirm that this is not true for Romania. Thus, the main macroeconomic indicators related to tourism have registered a fluctuating evolution in the period 1988-2015. The growth periods (the longest one was 2000-2005) alternated with numerous decline periods: 1989-1991, 1993, 1996-1999, 2006, 2009-2011.

Taking into account the evolutions presented, we may assert that the Romanian tourism industry is a very vulnerable one to crisis situations and incapable to manage them efficiently. The frequent crisis periods that affected the Romanian tourism may be associated to some external risks of the tourism industry (environment), but they are largely owed to the sectorial risks determined, on one hand, by the incapacity of the authorities governing the destiny of tourism to identify efficacious solutions for the control of crises and to find solutions for the sustainable development thereof, and on the other hand, by the management weaknesses of the companies from the tourism industry or the reduced propensity of stakeholders from the tourism industry for collaboration and cooperation in order to identify some solutions for the management of the crisis situations and some more efficient control methods.

The periods of decline registered by the Romanian tourism in the interval 1989-1991 may be explained by causes related to the environmental risks. Thus, the crisis in the period 1989-1991 may be associated to the political risks: the violent revolution from 1989, the political

instability in all the countries of the region, the Russian-Moldovan war from Transnistria in 1990; the economic risks associated to the long period of transition to the market economy and to a small extent to the risks associated to the instability of the social environment: strikes, demonstrations and protests, miners' rebellions, interethnic conflicts (the one from Târgu Mureș in 1990 between the Romanian and Magyar ethnics).

The crisis periods from 1993 and 1996-1999 may be explained by causes related to the economic context associated the transition period and the attempts to lay all economic sectors on capitalist bases, but also to the instability of the social environment.

The 2006 crisis might be associated to the overlapping of two categories of risks: biological ones – the avian flu from 2005, and natural ones – floods and high floods throughout 2005, which destroyed the specific infrastructures that ensured the connections between the historical regions of Romania in 31 counties of the country.

The latest crisis period that Romanian tourism crossed in 2009-2010 is the result of the global economic crisis that started at the end of 2007 and of the subsequent economic recession. The Romanian tourism sector was more seriously affected than other economic sectors, all tourism indicators registering accentuated decreases (Table 1).

Table 1. Evoluția indicatorilor turistici în România în perioada 2007-2014 (% growth)

Indicators	2007	2008	2009	2010	2011	2012	2013	2014
Dir. contrib. employ.	-1.1	0.0	-5.5	-4.0	-1.9	-1.0	1.3	4.1
Dir. contrib. GDP	3.4	4.8	-10.5	-4.4	4.3	4.7	2.2	7.0
Internal T&T Cons.	1.9	4.0	-16.1	-4.6	1.9	1.4	-1.4	7.1
Dom. Tour. Spend.	6.9	-0.1	-9.4	-4.1	-2.4	0.9	3.1	7.4
Invest. (Capit. invest.)	26.8	14.5	-19.1	-6.7	2.6	5.1	-6.0	0.2
Leisure Tour. Spend.	-2.9	-0.8	-10.7	-0.3	-6.9	1.5	3.2	5.5
Gov. Individ. Expend.	-0.4	15.9	2.1	-13.4	-8.9	5.5	0.7	0.1
Outbound T&T Expend.	-9.5	23.8	-14.3	5.4	7.1	-0.4	-7.6	8.3
Visitor. Exp.	-4.7	9.6	-25.8	-5.0	9.5	2.1	-7.9	7.0
GDP/tour. empl. (USD)	11,938	14,120	11,448	11,595	13,930	13,597	14,847	15,539

Source: Own work on WTO statistics.

Beyond the negative implications of tourism crises, we may also show some of their positive aspects. Thus, stakeholders may acquire new knowledge in terms of crisis situation management starting from the anticipation and control phase of their manifestation, continuing with the response and control phase for the neutralization or diminution of the negative effects

and closing with the phase of adoption of some solutions so as to eliminate the consequences in the post-crisis period. Moreover, the capacity of collaboration, working together and involvement of companies, authorities, NGOs, inhabitants and tourists may be improved so as to establish some procedures and to jointly initiate some actions that may contribute to the more effective and efficient control of crises.

4. Conclusion

In the period 1990-2014 the Romanian tourism industry experienced a hesitant evolution, with periods of growth and decline, mainly due to exposure at political and economical risks, and, only to a small extent, to other categories of hazards. Judging by the light of exposure to natural, social and political (terrorist attacks) hazards, Romania is among the safest tourist destinations. However, the orientation of Romanian tourism industry towards sustainability is very limited, without notable progress. We can say, without fear of being mistaken, that tourism has gone through a long period of crisis, judging by the fact that the decline of tourism indicators recorded since 1989, was recovered only after 2003. This fact can be explained by lack of knowledge and the limited capacity of tourism industry stakeholders to manage the exogenous and/or endogenous risks they are confronted, and to identify solutions for the transformation of Romania into an attractive tourist destination, with a favorable image.

The frequent crises confronted by the tourism industry in Romania have exogenous causes, but also endogenous:

- Lack of proper knowledge on prevention, behaviour in crisis situations and the methods/procedures to be followed to neutralize their effects;
- Inability, even indolence, of public authorities entrusted with the management of Romanian tourism destinies to adopt measures to better exploitation of the touristic potential, to support the business environment, to attract foreign entrepreneurs or investments (which would bring experience and knowledge on touristic crisis management).
- Lack of coordination between different public authorities involved in management of exogenous and endogenous tourism crisis (environmental, tourism, safety and security, local or regional, financial authorities etc.)

- Tour operators have poor knowledge concerning crisis management. In most of cases they have not established clear procedures about the behaviour in crisis situations, and they have lack of knowledge, experience and capabilities to counteract them.
- Low level of social capital (Romania is characterized by the worst results of European states in this chapter), since effectively combating the effects of tourism crises requires the involvement and collaboration of all stakeholders.

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Chapter VII – THE RETAIL SECTOR ANALYSIS

SMARTPHONES AND MOBILE APPLICATIONS AS SHOPPING TOOLS – ATTITUDES OF YOUNG RETAIL CONSUMERS IN CROATIA

Blaženka Knežević¹, Mia Delić², Nikola Knego³

Abstract

Modern information and communication technology has a very strong influence on retail customers, especially in younger generation. The majority of younger retail consumers in Croatia is using smartphones in everyday life, not only for communication and fun, but also to search, collect and compare information about desired products. The usage of smartphones and mobile applications as shopping tools within this population is of a great interest for future retail marketers and managers. In this paper we will analyze perceptions of younger consumers on smartphones and mobile applications in order to explain their potentials as retail shopping tools. Therefore, an empirical survey is undertaken in order to answer several research questions such as: how frequent young consumers use smartphones and mobile applications in general, what are main motives and what is the scope of their usage, how often do they shop via smartphones, what motivates them to use applications for mobile shopping and what are their attitudes towards mobile purchasing benefits.

Keywords: retail, m-commerce, mobile applications, buying behavior, younger consumers

JEL classification: L8, L81, L86, M31, M15

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1. Introduction

According to eMarketer (2015) the number of smartphone users was 1.91 billion in 2015 which is almost one quarter of the world population and forecasts are that the figure will increase

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another 12.6% to near 2.16 billion in 2016. And according to Eurostat (2014a) more than a half of population used mobile access to Internet in 2014 (see Figure 1) and the usage of mobile Internet access grew significantly in all EU countries in comparison to 2012 no matter on the level of economic development. Moreover, Eurostat (2014b) shows that on EU-27 average 7% of population use handheld devices for purchasing and that in some countries penetration of mobile purchasing has even exceeded 15% of population (UK, Sweden, Denmark and Norway).

Therefore, we can claim that smartphones and mobile applications are opening new opportunities for marketing and retail on a global scale and that there is a need to research global and local trends in behavior of mobile-centric consumers who are using smartphones in a various ways starting from calling throughout shopping towards to content creating and sharing.

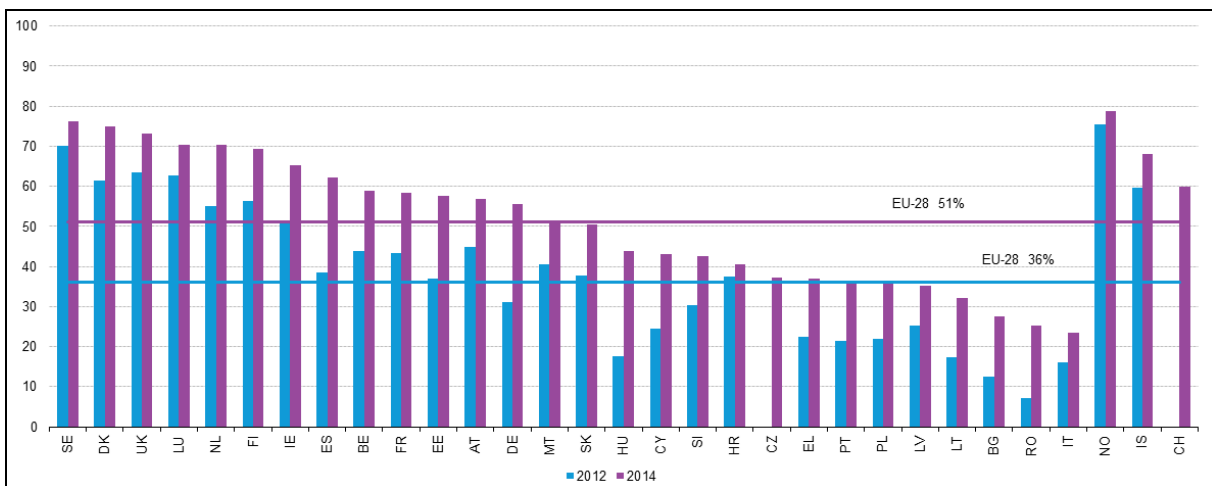


Fig. 1. Individuals who used the Internet away from home or work, 2012 and 2014 (% of individuals)

Source: Eurostat (2014a): Internet usage by individuals in 2014, [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Individuals_who_used_the_internet_away_from_home_or_work,_2012_and_2014_\(%25_of_individuals\)2.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Individuals_who_used_the_internet_away_from_home_or_work,_2012_and_2014_(%25_of_individuals)2.png) (accessed: 16th April 2015).

In the literature student population is referred to as a large part of consumer generation “Y”. This generation is technologically highly aware and willing to use digital tools in all spheres of life (Archana & Heejin, 2008; Lazarevic, 2012; Rahman & Azar, 2011; Knezevic et al., 2014), thus it is worthwhile to research how students, as a waste part of generation Y, are using modern technologies in their everyday life and to investigate their behavior as shoppers that intensively use mobile devices such as smartphones and mobile applications.

For retailers and marketers it is particularly important to investigate how young consumers use mobile devices and mobile applications as a source of information on companies

and products and what are their attitudes towards suitability, convenience and availability of mobile technology regarding retail purchasing processes, but also, it is important to investigate how do they perceive risks and security issues associated with mobile technology.

In this paper, on the basis of secondary resources, we will give a theoretical overview of m-commerce starting with key definitions and attributes of m-commerce. Then we are going to explain development drivers of m-commerce. Afterwards, we will describe sample and methodology of a primary research on usage of smartphones and mobile application among student population in Croatia. Finally, we will discuss the results of the primary research and draw conclusions on opportunities of m-commerce application for retailers when targeting young consumers.

The aim of the primary research (survey) was to answer several research questions such as: what motivates students to use smartphones and mobile application, how do they use smartphones as a shopping tool, do they research and shop via mobile devices, what is their attitude towards mobile applications in area of retail, and do they perceive opportunities of the mobile environment comparing to the traditional retailing.

2. Mobile commerce definitions and attributes

Chaffey (2007, p.132) states that mobile technologies are not new because for many years was possible to access to networks via laptop and modems. But in a full sense, mobile commerce is fully enabled throughout wireless technology and handheld devices such as PDAs (personal digital assistants), palmtop computers and mobile phones. Therefore, Chaffey (2007, p. 132) adds a wireless connection to a mobile commerce definition and he defines mobile commerce as electronic transactions and communications conducted by using different mobile devices and typically with a wireless connection. In addition, Laundon and Traver (2007, p. 84) state that mobile commerce takes traditional electronic commerce models and leverages wireless technologies to ensure mobile access to the Web and that the major advantage of m-commerce is possibility to access Internet by anyone, from anywhere using wireless devices.

Turban et al. (2008, p. 8) define mobile commerce as electronic commerce transactions and activities conducted in full or in part in a wireless environment. While Laundon and Traver (2007, p. 17) emphasize that conducted transactions are commercial. Turban et al. (2008, p. 8) set aside a specific form of m-commerce in which transactions are oriented towards individuals in specific location, i.e. based on location. This type of m-commerce is called L-commerce.

In addition, Turban et al. (2008, p. 431) emphasize that m-commerce includes B2C, B2B commercial transactions and transfer of information and services via wireless mobile devices in intrabusiness, as well. Therefore, m-commerce is considered as an extension of e-commerce. Moreover, Turban et al. (2012) suggest that there is a possibility to introduce the concept of mobile enterprise in order to improve the operations of the employees, the facilities, and the supply chains, within the enterprise and with its business partners, i.e. to apply mobile technologies in activities that are not directly oriented towards final consumer.

Chaffey (2007, p. 133) describes six main propositions of mobile Internet access from the consumer point of view:

1. There is no need of fixed location.
2. Enables location-based services when integrated with global positioning system.
3. Provides instant access to information and improves convenience because user can access Internet throughout wireless services wherever they are available.
4. Increase privacy of the individual user in comparison to the desktop Internet access.
5. There is possibility of service personalization as usage of a mobile device is usually used by only one individual.
6. There are security issues to be resolved in the next period because mobile devices can store a lot of personal data, even data on access to bank accounts (if user is accessing mobile banking system via mobile device).

According to Turban et al. (2008, p. 432) m-commerce has several value-added attributes: ubiquity, convenience, interactivity and personalization. Ubiquity refers to accessibility of information from any location in a real time. Convenience refers to ease of use of mobile devices in comparison to desktop devices which are smaller and thus more usable for information access on the move. Mobile devices improve interactivity because users are able to communicate, search for information and use services in a real time. Moreover, the individual usage of mobile devices enables a high level of personalization according needs and requests of an individual user which gives a business opportunity for delivering personalized information, products and services. The knowledge on users' physical locations in a real time creates a business opportunity to offer location-based information, services and products.

2.1. M-commerce development drivers

In 1999 the newest generation of mobile phones started to utilize WAP (wireless application protocol) as a technical standard to access Internet and World Wide Web on a mobile phone. Even though this protocol required simple web contents, that year can be recognized as a starting year of a rapid development of m-commerce. The first device that was marketed as a “smartphone” was Ericsson R380 offering features such as: calculator, address book, sending/receiving faxes and e-mails, and pager services in addition to calling and SMS services. While the first cell phone with integrated camera was launched in 2002 by Sanyo.

Increased features and possibilities required higher speed of access, thus 3G networks (introduced in 2001) enabled speeds that supported multimedia Internet connectivity and support for video calls. Since 2007 when Apple introduced iPhone the growth of mobile revolution is taken onto another level because smart phones are getting more intuitive and user friendly. And another milestone of mobile commerce development was the emergence and commercial usage of Android operation system in 2008 by several large mobile devices producers which significantly contributed to openness and price reduction of mobile devices, but also caused the revolution in mobile application development. Since 2011 large players are turning to 4G network standards at ultra-high speeds which will enable even more complex mobile services and applications.

We have to mention one more technology that supported mobile revolution. It is Wi-Fi (wireless-fidelity) enabled massive development of m-commerce because the speed of access to Internet increased rapidly. Chaffey (2007, p. 34) claims that airports, coffee bars and hotels started to offer Wi-Fi hotspots as a part of their consumer services which was a way to differentiate from other competitors, nowadays even in less developed economies in tourism it is a standard service and cannot be considered as a differentiation factor. In addition, Chaffey (2007, p. 34) points to several research studies showing that Wi-Fi was introduced in homes and offices as a technology that eliminates wires needed for networking and he claims that research studies shows that users are rather using home or office Wi-Fi networks than Wi-Fi hotspots.

According to Nielsen (2014) the significant portion of online shoppers use mobile devices as a shopping tool and this percentage is significantly growing over the time. In 2013, 44% of online shoppers were using mobile devices to shop online on the global level, while in Europe this percentage was 33%.

Turban et al. (2008, p. 433) distinct several drivers of m-commerce. The first is widespread availability and more powerful devices; the second is so called “the handset culture” which refers to the spread of mobile phones in population between the ages 15 and 25 years who are almost born with a handset in their hands. Then, the service economy which is transferring to mobile device usage more and more by offering a wide range of mobile services (such as: mobile banking, mobile parking payment, mobile travel and event tickets reservation and payment and so on). Another driver of m-commerce refers to vendors who are pushing their devices, services and products throughout m-commerce channel intensively. A will of people to work from outside of office is also an important driver of m-commerce development creating a bunch of m-workers and provoking the necessity of a new managerial approach. On the other hand, companies perceived that increased mobility of workers enables the improvement of business efficiency because business transactions are done in field and in a real time with smaller error rate. Finally, the improved in bandwidths and improved price/performance indicators are also contributing to faster growth of m-commerce, as well.

3. Methodology and sample

In this research the survey was taken on student population. Research took place in April 2015. The quantitative data was collected through online questionnaire in Google Docs. Questionnaire was distributed through social networking platform – Facebook and Google Classroom. The objective of conducting questionnaire is to understand young Smartphone users’ perception and attitude towards Apps-commerce, in order to obtain consumers’ opinions to give proper suggestions to retailers for development/improvement in Apps features.

Based on the questionnaire components of prior studies, a modified-questionnaire is developed, which consisted of four main parts: (1) General information, (2) Smartphone and mobile applications usage, (3) Users’ attitude towards Apps-commerce adoption and (4) Attitude of non-Smartphone users. Questionnaire constructs and objectives of each section are detailed in the table 1. An online questionnaire included questions of different types: one choice question, multiple choice questions and Likert scale ranking questions.

Questionnaire was structured on the basis of following literature review:

1. For modalities and motives of Smartphone and mobile applications usage: Knezevic et al. (2014).

2. For mobile applications shopping behavior, mobile shop structure and contents at online shops: Knezevic et al. (2014); Wai (2012).
3. For attitudes towards mobile applications shopping problems, obstacles and risks: Knezevic et al. (2014); Wai (2012).

Table 1. Questionnaire construct and objective

	Content	Objective
Section I	Personal information	- to collect demography information
Section II	Smartphone and mobile applications usage	- to eliminate non-Smartphone users - to examine the Smartphone penetration rate in Croatia - to gather mobile applications usage pattern
Section III	Users' perception towards mobile applications for buying products/services (motivation for using, usefulness, ease of use, risk, perceived value)	- to gather respondents' attitude towards mobile applications for buying products/services based on different consequences - to examine the relative importance of these consequences - to examine satisfaction level in different aspects (e.g. time /money)
Section IV	Attitude of Non-Smartphone users	- to examine their attitude towards future usage of Smartphone and mobile applications

Source: own work.

Male and female respondents aged between 18 and 35 were surveyed. According to the Pew Research Center's Internet & American Life Project (2011) about Smartphone adoption, working group aged between 25 and 34 is the highest Smartphone adoption group with 58%, followed by the young generation aged between 18 and 24 with 37%. With similar adoption trend within Croatian market, target group of the questionnaire focuses on the Smartphone users aged between 18 and 35. This target group is suggested with highest potential of Smartphone apps adoption due to their high acceptance to new technology and purchasing power. Large sample size provides more data for analysis. To ensure high explanatory power of result, the target respondents of this survey is 285. Table 2 shows relative frequency of sample characteristics.

Table 2. Characteristics of the sample

CHARACTERISTIC	OPTIONS	RELATIVE FREQUENCY (%)
gender	male	26
	female	74
years	18-24	58.9
	25-30	37.2
	31-35	3.9
monthly income (including allowances, scholarships, wages and/or part time job fees)	less than 65 EUR	15.1
	65 - 130 EUR	27.4
	130.1 - 260 EUR	23.5
	more than 260 EUR	34
highest level of education	high school	37.5
	bachelor	55.1
	master or more	7.4
Smartphone usage	yes	96.8
	no	3.2

Source: own work.

The gender structure of the sample was in the accordance to the student population within faculties of economics and business in Croatia. There were 74% of female and 26% of male students at the sample. As shown in table 2 above, all respondents aged between 18 and 35, in which almost 60% of respondents are from the age group of 18-24, followed by the group of 25-30, which occupied 37.2% of the population. The largest proportion of students (34%) have monthly income (in terms of allowances, scholarships, wages and/or part time job fees) more than 2000 kunas (i.e. more than 260 EUR), while there is a certain proportion of working students (27.4%) that have a smaller amount of money available for monthly spending (i.e. 130.1-260 EUR). About 55% of the participants in survey were in bachelor education level, followed by the groups of high school education accounted for 37.5% correspondingly, while 7.4% owned master degree or above.

4. Smartphone and mobile applications usage pattern

In this section, Smartphone and mobile applications usage pattern are discussed in details, including mobile applications for buying products/services.

The majority of students use Smartphones as a primary mobile device (96.8%). There are only a few non-Smartphone users at the sample (3.2%).

Among the population of Smartphone users (276), 225 respondents (81.5%) with over 2 years' experience of Smartphone usage, followed by the group with 1-2 years' usage experience (14.5%). The remaining part of sample (4%) was the users with up to one year experience. So we can conclude that this student generation has been familiar with mobile technology from their teenage ages.

The distribution of mobile applications daily (Apps) usage time was shown in figure 2. Most of the respondents spend one to two hours on Apps in a day (40.2%), while 77 respondents (27.9%) spend less than one hour on Apps on daily basis. Around 20% of respondents spend two to three hours on Apps, while only 12% of respondents may spend over 3 hours on Apps in a day, which proportion was unexpectedly low.

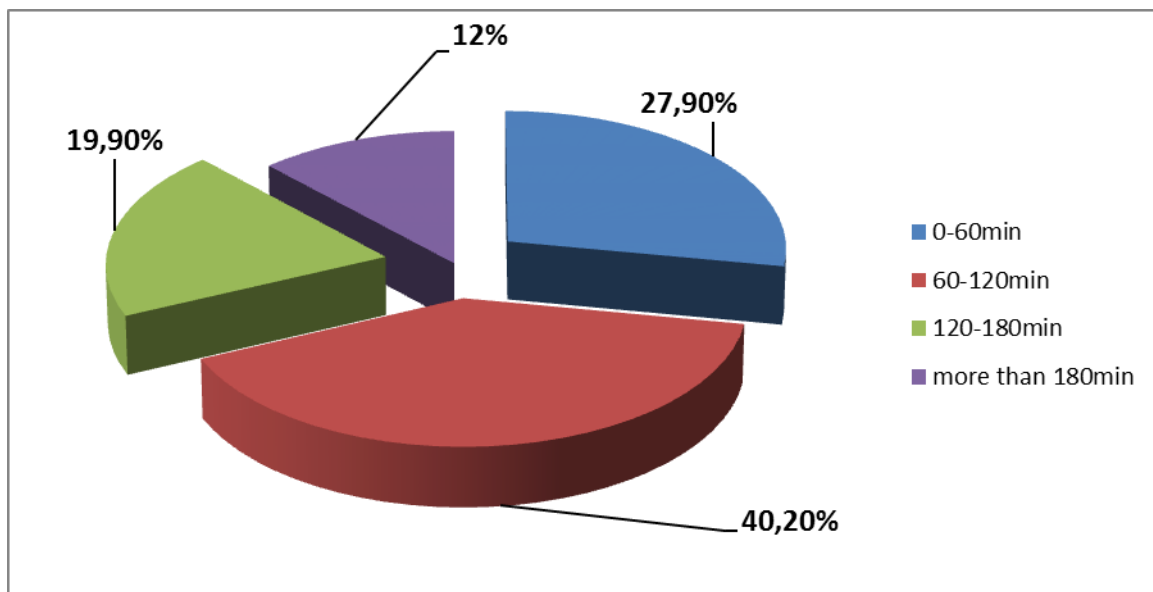


Fig. 2. Distribution of mobile applications daily usage

Source: own work.

It is interesting that Wai (2012) in his research came to very similar numbers for all categories of mobile applications users, except in the category that spends less than one hour on mobile applications. In this category falls almost 50% of its respondents.

When analyzing the types of mobile application downloaded in terms of payment, 86.2% of respondents use only free mobile applications, while 12.7% of respondents use payable mobile applications in the situation of an actual emergency. Only 1.1% of respondents download payable Apps almost always.

Majority of students in Croatia never pay for additional content within mobile applications (92.8%); only 4% of respondents sometimes pay for additional content within mobile applications.

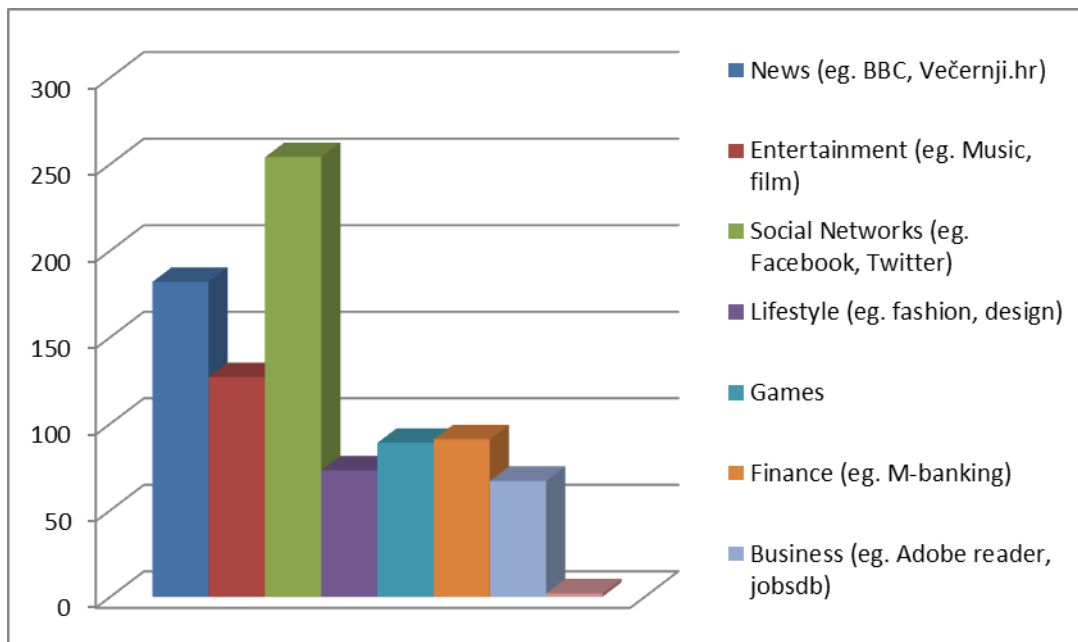


Fig. 3. Distribution of commonly used types of mobile applications

Source: own work.

Figure 3 showed the distribution of commonly used types of Apps. Not surprisingly, social network Apps was the most popular Apps category (91.9%), followed by news Apps (66.3%) and entertainment (46.2%). Balance types of Apps including lifestyle, finance, business, and games shared similar proportion, with 25%-33% respectively.

When reconsidering mobile applications as a communication channel with a targeted market, it is important to know what are motives for using mobile applications and common online activities.

In terms of motivation for using mobile applications, most of the respondents evaluated the use of mobile applications for communication with friends on social networks (64%), finding general information of personal interest (46.7%), tracking news of social events through the application of the public media (38.2%), watching and listening free multimedia content (32.7%) and finding information about desired products and services (32.4%) as the most important

motives for of using mobile applications (see Figure 4). On the other hand, playing the lottery (54.5%), shopping 24/7 (28%) and playing online games (26.9%) are evaluated as the least important motives of using mobile applications.

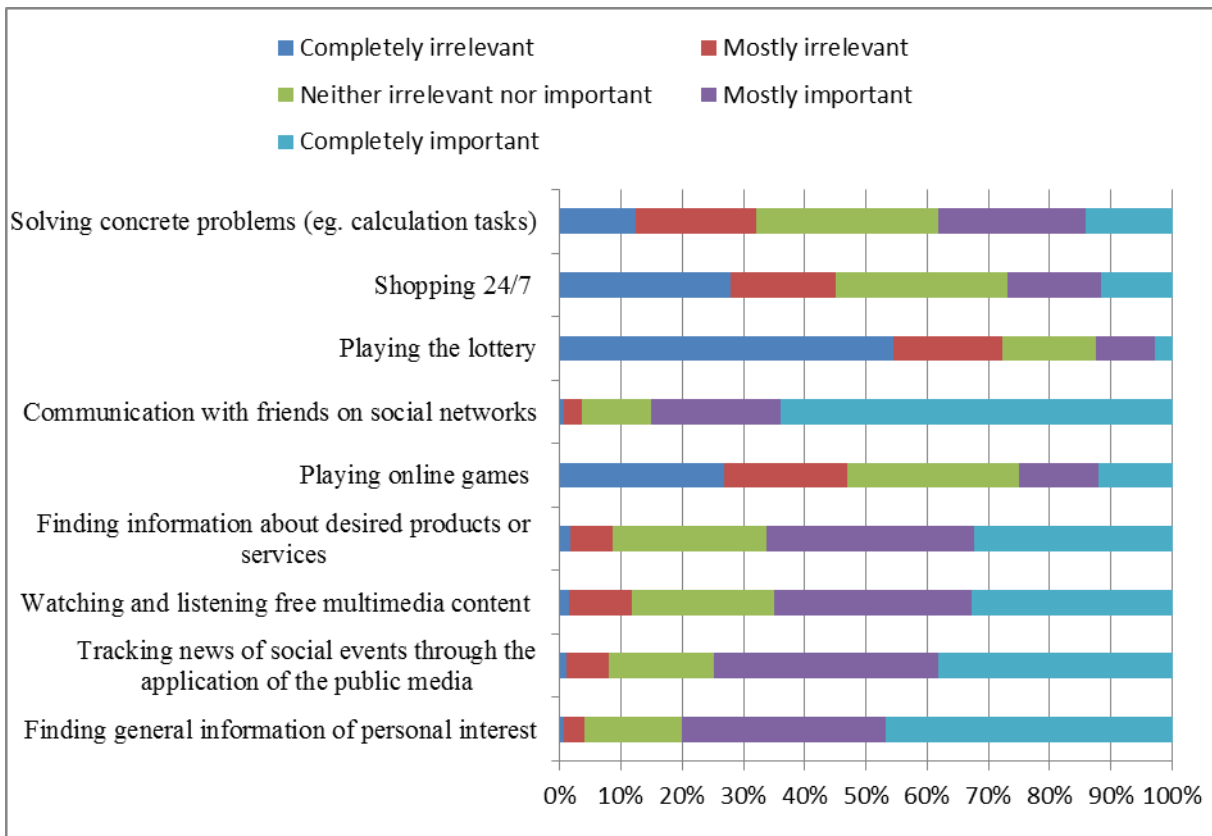


Fig. 4. Motives of using mobile applications

Source: own work.

4.1. Motives for using mobile applications for buying products and services

Majority of students in Croatia do not purchase via mobile devices (35.5%), while 30.4% of them are purchasing 2 to 6 times per year. 26.4% of respondents are purchasing once per year, while only 7.6% are online shoppers on a regular basis (more than 6 times per year).

There are great differences when analyzing types of products and services that students buy via mobile devices. Mobile shoppers within student population usually buy tickets (63.8% mobile shoppers within population). Next product group is “clothing, footwear and fashion accessories” (42.4% online shoppers within population). Around 19% of respondents are buying travel arrangements and products/services for health and beauty. While in the group food and beverages, consumer electronics, books and computer equipment there are less than 10% mobile

shoppers within student population. Present student population will become significant category of consumers in the near future, and their attitudes are important not only for present but also for future retailers.

When reconsidering mobile applications as a shopping channel, majority of students in Croatia do not purchase via mobile applications (58.2%), while 18% of respondents purchase once or two to six times per year. Respondents who have never purchased via mobile applications have not even downloaded any mobile application for buying products/services.

All students are asked to evaluate motives of using mobile applications for buying products/services (see Table 3). Saving time and benefit 24/7, which is the most quoted benefit in e-commerce literature, are recognized to be most important motives for using mobile applications for buying products/services within student population. Then follows the possibility of finding interesting products/services, comparing prices and products and checking the reviews of products/services. Benefit “checking the reviews of products/services through mobile applications” have the mod “very important” in 36.3% cases, but comparing to other benefits it is only at sixth place at the list for student population.

Table 3. Motives of using mobile applications for buying products/services

Mobile shopping benefits	Rating Average	Mod	Mod/Total
It is easier to compare prices and product information	3.96	important	37.2%
It is easier to find interesting products/services	4.07	important	48.7%
There is no pressure by salesmen like in traditional stores	3.99	important	38.9%
I save my time	4.21	very important	46%
I can shop 24/7	4.17	very important	45.1%
I can find products/services which are not available at traditional stores	3.80	moderate	31.9%
Offers are more favorable	3.83	important	32.7%
Process of purchasing is more simple and takes less effort than via mobile browsers	3.78	important	31%
The ability to locate traditional stores via mobile app	3.68	moderate	39.8%
Using mobile coupons for discounts when shopping in traditional stores	3.37	moderate	35.4%
Finding working hours of traditional stores through mobile applications	3.83	important	37.2%
Checking the availability of the product in traditional stores through mobile apps	3.77	important	30.1%
Checking the reviews of products/services through mobile applications	3.92	very important	36.3%

Note: 1 – not important; 5 – very important

Source: own work.

Examinees were also asked to describe their value on the usefulness of mobile applications to purchase products/services. For each sentence regarding problem, they were asked to choose a level of agreement starting from 1 to 5, where 1 was “I strongly disagree” and 5 was “I strongly agree”. In Table 4 we can observe statements on usefulness of mobile apps for purchasing products/services.

Table 4. Value on the usefulness of mobile applications to purchase products/services

Statement	Rating Average	Mod	Mod/Total
Apps providing wide range of information help me to make better purchase decision	3.84	agree	44.2%
Apps providing real-time and updated information help me to make better purchase decision	3.90	agree	47.8%
Apps making products recommendation based on my browsing/shopping history is useful to me	3.63	agree	43.4%
I prefer advance availability or exclusiveness of products in Apps	3.30	agree	32.7%
The Apps channel is more convenient for shopping than other channels (e.g. Internet, physical store)	3.20	neutral	44.2%
Using Apps for purchasing products/services enable me to finish my task of shopping efficiently	3.39	agree	40.7%
In general, I believe the use of Apps channel for purchasing fashion products is useful to me.	3.61	agree	38.9%

Note: 1 – strongly disagree; 5 – strongly agree

Source: own work.

Three main values of mobile apps shopping in comparison to traditional shopping are as follows: (1) providing wide range of information, (2) providing real-time and updated information and (3) making products recommendation based on my browsing/shopping history.

5. Conclusion

Mobile technology and related services influence the way in which consumers are behaving and, thus, change the way in which markets are functioning. There are predictions that by year 2020 the number of mobile users will reach one third of world population.

Therefore, there is a necessity to observe different aspects of mobile devices and applications and their usage in doing business. In this paper we explored attitudes of younger consumers in Croatia towards smartphones and mobile applications as shopping tools.

Primary research shows that almost the whole population of younger consumers in Croatia is using smartphones on very frequent basis and for a longer period. Thus, mobile technology should be reconsidered as a technology with a huge potential to generate value added

and to improve efficiency in retail industry. On the other hand there is a challenging situation of population who enjoys benefits of mobile “freebies”, thus they are becoming very hard consumer to sell something to. In addition this generation is oriented on digital socializing, so modern marketers should find the way how to use this fact for efficient marketing communication.

In Croatia in younger population there 30.4% are active mobile buyers that are purchasing several times a year via their mobile phones, and there 18% are using specialized mobile applications for retail purchases. From the aspect of young mobile shoppers, the most popular product group bought online is “tickets”.

Saving of time and availability of service 24/7 are recognized to be most important motives for using mobile applications in retail purchasing within student population in Croatia. While main values of mobile applications shopping in comparison to traditional shopping are wide range of information, real-time and updated information and available products recommendation based on individual history.

All findings presented in this paper can be used by retailers in order to adjust their communication and sales strategies towards younger consumers throughout mobile technology usage in all three purchasing phases (1) prior to purchasing, (2) in purchasing process, and (3) after purchasing. However, some future research should be oriented towards explanation and suggestion to retailers how can they adapt these findings.

Nonetheless, this paper discusses motives and benefits of mobile commerce observed by younger consumers, but there are numerous risks and obstacles of mobile commerce perceived by this population. Even though, they were the object of the survey, but are not discussed in this particular paper and have to be scrutinized in following analyses.

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INTER-SECTORAL AND SUB-SECTORAL IT BUSINESS ECOSYSTEM VS. SYSTEMIC RELATIONSHIPS PROFILE IN SELECTED CASES

Izabela Sztangret¹

Abstract

The global, innovative firms have been using new tools to create relations based on value-changing, especially knowledge, because global customers are more exacting and they take decisions more knowingly. The systemic business ecosystems shows the possibility to gain synergy effects that are result of competencies' combination of systemic partners. It has been observed for example in IT sector. The entities of studied sector implement the goal in the so-called business eco-systems based on non-competitive relationships of companies and the identified systemic business ecosystems model in IT producers sector and distributors is precisely defined. The results have practical application due to the fact that the article contains practices of sectoral leaders. The social value is shown by finding innovative way of meeting customers' needs.

Keywords: systemic business ecosystem, systemic/net products, ecosystems model

JEL Classification: L14

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1. Introduction

Global, innovative firms have been using new tools to create relationships based on value exchange, especially knowledge, because global customers are more exacting and they take decisions more knowingly. The systemic business ecosystems show the possibility to gain synergy effects that are a result of combination of competencies of systemic partners. This has been observed for example in IT sector. **The purpose** of this article is to identify the structure and profile of business ecosystem as well as its dynamics, in selected IT leaders and their trade co-operators, in the area of IT systemic/net products.

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Material product (computer) satisfies customer needs only together with accompanying services (software as well as assembly and installation). This determines the features of *subsector systemic character* of the computer product. Systemic offer is implemented by the entity that also operates in computer sector subsectors: production/assembly, integration services, training, distribution, etc. or by several enterprises – participants in these subsectors that join together in network relationship². Complementary nature of teleinformation sector services that is definitely not mutually exclusive, results in the fact that integration, implementation or advisory contracts usually bring agreements of training, IT system maintenance or control of work and effects. Therefore the tendency of disappearance of submarkets of computer sector, and thus disappearance of independent production subsectors, integration services, software, training, etc., is observed. This is why we can speak about a specific **subsector business ecosystem**. It is supposed that such a pro-service trend of development of the sector will be predominant in the nearest future³.

The need of an individual and business customer in the sphere of integrated voice, image and data transmission, independently of the type of used networks and distance between subscribers, brought the necessity to offer convergent products and services that serve their provision. This is the demand of their competitiveness in integrated sector of landline and mobile telephony, computer equipment and network, as well as media, which definitely determines *intersector systemic character of IT products*. Convergent/systemic offer is provided on the basis of integrated teleinformation network that enables transmission of all types of electronic communication signals independently of their source, by means of interweaving technologies. A uniform teleinformation or information infrastructure is formed, the quality of which determines the competitiveness of economies and communities. Market dimension of *convergence* in IT sector is expressed by creation of offer packages by operators and service providers that constitute an integrated commercial product, the so-called IT network service. *Service convergence* concerns among others the use of services regardless of the access

² The companies “are placed in the networks of values because their products are usually embedded or hierarchically set – as components in other products and finally in end systems of use” (Marples, 1961; Alexander, 1964; Christensen, 2010).

³ Potential of ICT sector growth in Poland, in the perspective of 10 years. The Ministry of Economy Retrieved from <http://www.mg.gov.pl/node/20043> [accessed: 7.01.2014].

techniques. *Technical convergence*⁴ lies among others in application of uniform common technical solutions that serve implementation of functionally diversified services. And so we face the situation in which the limits between sectors of telecommunication, IT and electronic media disappear (Usługi konwergentne w środowisku heterogenicznym [Convergent services in heterogeneous environment], 2008; Konwergencja – przegląd usług konwergentnych w Europie I na świecie [Convergence – review of convergent services in Europe and in the world], 2006).

With respect to the above, economic entities unite, or have shares in enterprises operating so far in various sectors, or they separate new entities from their structures that are supposed to be engaged in a new type of activity. In this case it is *business convergence*, for the purpose of complementing the market offer of one-sector entities, which is also referred to as **intersector business ecosystem**.

2. Data and Methodology

The purpose of this article is to identify the structure and profile of business ecosystem and its dynamics, in the case of selected IT leaders and their co-operators, in the area of IT systemic/net products. As it is supposed, the identified systemic business ecosystems model in IT sector is dynamic, multi-sectoral and multi-core, a profile of cooperative knowledge communities diversified by studied groups of entities. A brief critical analysis of literature in the field of studied category is conducted in the article and qualitative method of empirical studies (case study) is applied for practical illustration of researched systemic relationship model. During the studies of the entities that form net business environment for creation of convergent systemic offer under the patronage of computer sector leaders, including HP, Intel, Microsoft, IBM and Apple, over 400 entities were identified that, according to studied leaders, were involved in direct network relationships. They are entities of various (narrow or broad) range of offer functioning within computer subsectors or telecommunication and / or media sectors, in the sphere of production, assembly and / or distribution. In-depth case study method was applied with reference to purposely selected group of enterprises representing the core of network relationship, the so-called extended core of network and entities of the circle of IT sector networks (table 1).

⁴ Some evolution of the notion of convergence in IT sector in technological dimension ought to be indicated. Convergence of technology in IT sector was mainly identified with communication technologies and diffusion of services of landline and mobile networks. Currently increasingly more often this notion is used with reference to stricte network solutions, associated with Ethernet, mass memories, Fibre Channel protocols (including FC over Ethernet) or iSCSI. In other words it is integration of servers, mass memories, network solutions and management systems ("Konwergencja w sieciach komputerowych" ["Convergence in computer networks"], 2015).

Table 1. Basic information about performed research

Specification	Characteristics of performed study
Research technique	analysis of Internet pages, analysis of sponsored interviews in IT journals
Sample selection	purposeful selection
Sample size	5 promoters of network relationship
	9 entities of extended network core
	9 entities of network circle
	11 entities of distribution sphere
Criteria of selection of sample group	purposeful selection by indications of promoters and / or position in the ranking of companies by turnover
Spatial range of research	Poland
Time range of research	2000-2014

3. Profile of cooperative network relationships on the example of IT business ecosystem

According to the concept of network marketing, intersector enterprises of IT business ecosystem are defined through relationships with the entities of the sectors of telephony, media and IT sub-sectors, and also with consumers and all other cooperating parties, including trade entities. The network partners are defined by their relationships with other enterprises and their role in these relationships (Żabiński, 2007), established for creation of *convergent products*.

IT business ecosystem identified during research is based on knowledge-based relationships that are established between all network participants. At the same time, qualitative and quantitative dynamics of the structure is observed that was characterised by stable number of coordinating centres and lack of circulation of competences in this sphere, and growing number of entities in the network. In the last period of the studies, dual character of the structure appeared. It was a result of relationships of the network entities with Apple Company that stayed isolated before. Relationships in the studied structure are based on the synergy of chains of values and complementary character of resources of network participants.

The entities of the core of studied chain definitely and explicitly apply qualified certification system in cooperative knowledge-based relationships. Open access to communities and resources of network knowledge let some entities of extended core of studied network and almost all entities of the network circle in. In the case of studied entities characteristics of asymmetrical bureaucratic networks and in the case of network circle – asymmetrical social network were diagnosed. The group of business partners, including distributors in the case of

entities of extended network core constitute the recipients of actions stimulating knowledge-based relationships mostly of technological knowledge-based and financial character. For the group of network leaders, they are entities diversified by products or areas of cooperation. The entities of network circle, including distributors, are focused on technological knowledge in network relationships.

Activities aiming at establishment of knowledge-based relationships are most often an individual initiative of studied entities according to their declarations. Some of the entities in the network circle take advantage of experiences of the network Promoters in this sphere⁵.

4. Effects of knowledge diffusion and inter-processing in relationships of IT product sector entities and trade sector partners

Activities in the sphere of knowledge diffusion between promoters and other knowledge network entities in the sector of IT products and their partners (distributors) that are the expression of realisation of one of the subsystems of holistic MKM (Marketing Knowledge Management) model are one of the reactions to the will to face demands of increasingly demanding target customer. This customer very frequently expects business and technical consultancy and thereby specialist knowledge. This is the reason for growing significance of the so-called VARs (Value Added Reseller)⁶ and VADs (Value Added Distribution) in IT market that eagerly make use of knowledge-based relationships, its promoters or entities of extended network core. Together with development of IT sector, it turned out that only larger or specialised enterprises, the turnover of which with a particular producer was so high that the income covered the costs of maintenance of technical teams, can afford to maintain highly-qualified staff. This is why there occurred the need to have a partner that could provide resellers with technical knowledge and resources for the purpose of common implementation of projects that a particular reseller could not implement independently due to the lack of resources and lack of knowledge. *From the point of view of resellers the benefit consists in the fact that they can serve the customer in a complex way while not bearing the long-term costs related to appropriate staff because it is what is provided by the enterprise of VAD type. VAD is a distributor creating the market in the sphere of appliances and solutions they sell. VAD is an active support for sale together with*

⁵ More on this subject in publications of the author: Sztangret, Bilińska-Reformat, 2015; Sztangret, Bilińska-Reformat, 2014.

⁶ VAR status is obtained by companies that guarantee the producer appropriate turnover and good implementation references at their minimal involvement through close cooperation with usually one producer, high technological competences and involvement in a particular sphere (Smoktunowicz, 2014).

partners through sharing knowledge, creation of solutions or after-sales service. VAD type company offers pre-sales support, assistance in preparation of appropriate offer documentation, participation in implementation and specialised technical training. Besides, as a distributor of frequently several product lines, they are often an initiator and author of many conferences and technical workshops to which both the partners and their customers are invited. The aim of this is to educate the market in the sphere of the latest IT solutions. Producers also benefit from cooperation with VAD, particularly if they do not have expanded structure because most of the tasks concerning training, pre-sales support and implementation is performed just by VAD. At the same time, value-added distributor contributes in this way to significant expansions of sales channel of resellers who, while having close relationships with customers, can implement jointly with VADs practically any information technology projects.

VAD distributors work in development and education of entities of the sales channel, technical support, marketing and generation of new project. Financing and logistics is a standard in distribution. They transfer knowledge to reseller channel and enhance competences and offer complex solutions that are looked for by end-users. Therefore VAD offers include trainings, consultancy, technical knowledge sharing, and assistance in configuring, providing demo equipment that is used by the reseller both to present the solution to the end-user and to get knowledge about the equipment capabilities. They also include technical pre, and after-sales assistance. VAD company must have the whole range of products and services intended for sales channels they serve, including specialist shops, commercial chains and telecommunication operators, among others (Smoktunowicz, 2014).

According to managers of IT companies these are the years after which activities favouring value added in the form of specialist knowledge and consultancy as well as active participation and/or development of competence centres were intensified. It is noticed that the very strict but deep specialisation can be the strength of smaller distributors, which is illustrated by dynamics of incomes in relatively young companies in recent years. The value of knowledge is also noticed by the so-called distributors-broadliners⁷, who expand the portfolio of services for integrators and develop demo equipment resources. The significance of value added in the form

⁷ Activity of typical broadliners assumes the necessity of formation of demand in the market by the producers themselves. This results from adopted business model that assumes ensuring of only financing and logistics support, and this is why, investments in creation of logistic centres occur. In this case, producers have to form their own expensive resources.

of knowledge by distributors finds its expression in investments in training centres in researched enterprises⁸.

5. Conclusion

Systemic character of computer product demands inter- and sub-sector cooperation from its suppliers to create such a bundle of profits that will satisfy the target customer. The entities of studied sector implement the goal in the so-called business eco-systems based on non-competitive relationships of companies. Such business ecosystems that constitute the network of complementary chains of values resulting from partners' knowledge representing subsectors of computer sectors as well as telephony and media, and also distributors, are actually structures of three various groups of entities with respect to implemented model of cooperation knowledge-based relationships. Efficiency of such network knowledge-based relationships is illustrated by results achieved by entities of VAD and VAR type, especially in Polish market.

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⁸ Own case study on the basis of Computerworld TOP200, Ranking of information technology and telecommunication companies 2006-2014.

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THE ROLE OF KNOWLEDGE DIFFUSION IN INNOVATIONS IN RETAIL CHAINS

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Abstract

Knowledge diffusion is the basis for innovation processes in business. In Polish retail industry the expansion of foreign commercial chains has contributed to dynamic knowledge transfer in the sphere of management of buying and selling processes. The standards appropriate for global and international commercial chains have been introduced within several years as the result of integration, concentration and globalization. Retail trade is a sector of high capacity to implement innovations. In the paper the authors are planning to verify phenomena associated with knowledge diffusion on the example of retail chains and to characterise its role for their innovation processes. Therefore, the areas related to knowledge diffusion in retail chains on selected examples constitute the subject area of the paper. In the study selected commercial enterprises were research entities. Analyses included in the paper concern the years between 2009 and 2014 that were the period of unstable economy development (time range). Presented results of conducted analyses concern Poland (spatial range).

In the paper, the following goals of cognitive and descriptive character are assumed:

1. The cognitive goal of proposed paper is to identify the key stakeholders (external) who are the source of knowledge diffusion for retail chains.
2. Descriptive goal of the paper is to indicate innovations, applied by selected retail chains, based on knowledge diffusion coming from the customers, the competitors and the suppliers.

In the paper the assumption has been made that customers and suppliers as well as the providers of IT solutions are the main sources of knowledge diffusion that allow for implementation of innovations. Also competitors are an important knowledge source for innovation while using benchmarking procedures.

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The following research methods were applied for the purpose of implementation of assumed goals: critical analysis of the literature of the subject, results of own research method concerning the impact of knowledge diffusion on innovation processes in selected retail chains, and the case study method that showed the best marketing practices associated with developing innovations by retail chains on the grounds of knowledge diffusion.

Keywords: retail chains, knowledge diffusion, key stakeholders

JEL Classification: L14

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1. Knowledge diffusion as the basis for innovation in retail industry

Knowledge becomes a resource for commercial networks, which is compliant with resource theory of management and also refers to positional school while assuming that knowledge determines the source of competitive advantage for commercial networks.

Knowledge diffusion (knowledge transfer, knowledge sharing) is the key element of the process of knowledge management in an organisation/network. It consists in its dissemination within or outside the organisation. Knowledge transfer is a complex process because it concerns:

- knowledge found in human resources of an organisation as well as tools, tasks and their relationships (Argote, Ingram, 2000, pp. 150-169) ;
- a large amount of knowledge in an organisation is implicit or difficult to articulate (Nonaka, Takeuchi, 1995).

We can find opinions indicating a broad specification of knowledge management in commercial networks where diffusion proceeds from “a larger number of stakeholders” because of location of trade between suppliers/producers of goods and customers, and because of “only” intermediation in the flow of goods³.

There are several reasons developing innovation processes in retail sector:

1. Trade sector was first to be fully privatised between the years from 1990 to 1993.

³ See more at: Knowledge Management, Practice of Knowledge Management; Case Study of Wal-Mart Inc., <http://seo-kisumu.hubpages.com/hub/KNOWLEDGE-MANAGEMENT-A-CASE-STUDY-OF-WALLMART>.

2. Expansion of foreign commercial chains contributed to dynamic knowledge transfer from the sphere of management of the processes of buying and selling, the result of which is the affluence of formats and qualitative changes in channels of distribution as well as modernisation of commercial premises and the process of sale.
3. The standards of global and international commercial chains were introduced in Poland within several years as a result of integration, concentration and globalisation.
4. The pace of quantitative and qualitative changes between the years from 1990 to 2013, which are broadly described in literature, proves that it is the sector of a high capacity to adapt knowledge.

2. Innovations in commercial chains – specific character and sources

Innovations in retail trade enterprises concern the solutions that differ from existing methods of acting and are implemented by retailers deliberately, purposely and often also durably (Chwalek, 1992; Kucharska, 2014).

We can adopt general guidelines of EUROSTAT and OECD in the sphere of innovations in the case of retailers conducting activity within multi-branch companies, that is, commercial chains. They state that innovation concerns changes that are fundamental, significant, new or remarkably improved, developed for the first time, but also adopted from other enterprises. Innovations must be associated with uncertainty, they demand investments, they are related to transfer, and result in using new knowledge or new application, or in combining existing knowledge. Innovation ought to aim at improvement of efficiency of enterprise activity through acquisition of competitive advantage or maintenance of competitiveness thanks to moving the demand curve on the enterprise products or increase in the enterprise innovative capability (Oslo Handbook 2008).

Innovations in retail trade are rarely creative innovations. Original innovations are a result of work conducted almost exclusively by largest commercial enterprises that have appropriate research and development resources and that have resources that allow for implementation of innovative solutions. Predominant group of medium-sized and small enterprises take over, imitates and adapts solutions that can be applied in their activity. Technological barrier and high costs of implementation of changes, particularly in the case of crucial solutions for commercial trade are most frequently a barrier for imitation of solutions applied by retailers. Streamlining innovations (evolving, modifying) are typical of retail trade.

Diversity is characteristic of the sources of innovations in retail trade chains. The sources of innovations applied by retail trade chains most generally can be divided into internal and external. External sources of innovations include entities from market environment of the retailer (the so-called external market), commercial sources, sources of public sector and general sources of information. Among external sources of innovations those that are associated with such entities of retailers' environment as customers, competitors and suppliers, are particularly significant. As it is assumed in the article, they constitute fundamental points of reference in undertaking innovative activities in commercial chains.

These entities contribute to implementation of innovative solutions in retail trade in a different way:

- changes occurring in behaviours of entities in the environment inspire retailers to develop and implement new solutions. Observations of trends and megatrends in consumer behaviours that become the reason for implementation of many significant solutions (including comfort appreciated by the customers contributed, among others, to development of online trade) are an explicit example here;
- entities in the environment force the retailers to implement innovative changes – for example suppliers expect more effective and efficient logistic solutions;
- retailers involve the customers and suppliers in the process of innovation, while engaging them in generation of new ideas, testing and assessment of prepared offers. Involvement of other entities in innovative activity of the enterprise is described with the notion of open innovation (Nambisan, Sawhney, 2008; Sawin, Rudolf, 2008).

Innovations in retail trade can also come from leaders – the largest commercial enterprises create innovative solutions that are copied by other enterprises or applied by them in the range that allows them to solve the problems of their customers or satisfy their needs.

Furthermore, depending on financial capabilities, commercial chains in different degree make use of commercial (paid) and public (often free) sources of innovations. The examples here are innovations associated with diffusion of knowledge of commercial chains. As it has been mentioned the elements of close environment of commercial chains are very important sources of knowledge acquisition.

3. Examples of application of various sources of innovations by commercial chains

In the case of customers constituting the point of reference for activities of marketing-oriented enterprises, we can observe activities associated with dynamic acquisition of knowledge about customers where the customers are its important source. This knowledge is acquired for the need of construction of a particular commercial offer. Apart from such concepts as CCR (Customer Relationship Management) and CSR (Corporate Social Responsibility), CCR (Customer Centric Retailing) is gaining importance. CCR represents strong focus on customer's needs (consumer Goods and Retail Insights, 2011, p. 7). We can distinguish four degrees of retailer's involvement in creation of orientation focused on customers.

- Firstly, it is necessary to create a database of customers (initial stage – retailers start to notice the importance of possessed information and apply it in the process of sale and offer creation).
- The second step in development of the concept is sorting out the information about customers, considering the criteria associated with transactions (by means of what channel the sale was conducted, whether the payment was made in cash or by card), demographic criterion and data associated with the customers' approach to purchase.
- In the third stage the data about customers is treated as an important hint concerning future sale, there occurs integration of knowledge about the customers with strategic profile of the retailer.
- In the last stage, we have to do with full integration of possessed knowledge about the customer, and retailer's strategy. On the grounds of acquired information decisions concerning applied channels of distribution, sold brands and policy in the sphere of Category Management are made (Smith, 2009).

Using the example of Tesco we can indicate segmentation procedures that allow for better recognition of target customers' needs and for stating that they are consistent with CCR concept (Consumer Centric Retailing) (Sonneck, Cirk Sören Ott, 2010, p. 190). Segmentation in Tesco takes place on the basis of "Club Card" Tesco database including the holders of loyalty cards. In the case of Great Britain the number of card holders is assessed to be 10,000.

In segmentation procedure economic criteria were adopted, and with reference to them, 6 market segments were distinguished: Finer Food, Healthy, Traditional, Mainstream, Convenience and Price sensitive. Specific brands satisfying customers' expectations, and

providing them with value, were addressed with reference to these market segments. From the point of view of marketing innovations, implementation of new brands constitutes product innovation and additionally allows for implementation of CSR assumptions (fair trade brands).

Tesco chain is also an example of application of knowledge about customers and its implementation in the sphere of creation of hybrid distribution systems and application of social media in communication with customers. Tesco chain started e-shopping in Poland in 2012 and the dynamics of sale through this channel is still observing a growing tendency (WWW.tesco.pl, accessed 13.12.2013).

Recognised, changing consumer behaviours are the reason for implementation of new forms of communication between retailers and customers. The importance of Internet channel is growing; it is used both as a sales channel and as a communication channel. Applying FB in promotional activity is a very good example of formation of relations with customers through involving them in the chain activity. The customers become loyal proponents of a particular chain and often lobby in its favour while encouraging friends to like it (Fanpage Trends, June 2013, accessed 12.05.2014).

Retail chains apply new technologies in various areas related to management processes. The IT knowledge comes from IT providers (suppliers). Following technological solutions are most often applied:

1. ERP solutions – serving management of enterprise resources.
2. Business Intelligence – tools of business analytics and reporting.
3. CRM – tools of management of relationships with customer.

Knowledge diffusion related to undertaking innovative activities, is strongly associated with the orientation of commercial chains on competitors. Solutions applied by Biedronka chain (www.biedronka.pl, accessed, 05.05.2015) that followed Lidl chain in many areas (www.lidl.pl, accessed, 05.05.2015) are very good examples here. The examples may include:

- Change in the selling area, the so-called remodelling of the selling area.
- Development of the category of non-food products and “upscale exclusive” products.
- Implementation of similar promotional activities (the so-called National Day, for example Selling Italian food).

4. Summary and conclusions

Development and implementation of innovations in commercial chains becomes possible thanks to knowledge diffusion. Such entities in the retailers' environment as customers, competitors and IT providers are particularly important as its sources. Information concerning trends in consumers' behaviours and their current purchasing decisions allow for development of both innovative business models and new solutions in the sphere of currently applied form of activity. Key stakeholders can also inspire retailers to search for and implement their own, innovative solutions. Knowledge sources presented in the paper are varied and they make innovative changes in retail trade dynamic while overlapping and supplementing each other.

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SUSTAINABLE DEVELOPMENT IN THE RETAIL SECTOR – A LOCAL PERSPECTIVE

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Abstract

In recent years, the concept of sustainable development (SD) has become an important determinant in the activities of enterprises and the authorities, at both central and local levels. The transference of many tasks from a central to a local government level has meant that local authorities have become the principal decision-makers, determining the directions for the development of individual territorial units. They also specify the conditions under which companies can participate in this process. A particular role in terms of implementing the sustainable development concept rests on retail enterprises. The purpose of this paper is to explain how the concept of sustainable development determines the policies of local governments with regard to developing a commercial network in a given area; and on the other hand, how it affects the development strategies of retail enterprises. The paper presents examples from selected countries illustrating how the SD concept is implemented at the local level in relation to the retail sector.

Keywords: sustainable development, retail trade, local authorities, Agenda 21

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1. Introduction

Sustainable development is most commonly defined as a concept according to which present generations should manage the Earth's resources in such a way as to ensure that the needs of future generations can also be satisfied (Kates, Parris & Leiserowitz, 2005, pp. 8-21). At its root lies the assertion that through the over-exploitation of natural resources people have disrupted the environmental balance, thus threatening the future of subsequent generations. Originally, the concept related to maintaining a balance between the number of trees cut and new ones planted. In practice, the essence of the definition has not changed in much modern times (Bartkowiak & Koszel, 2011, pp. 30-31). In view of environmental degradation and the environmental risks associated with the progress of civilization, it is necessary to undertake measures to protect both the environment and people.

In this paper the authors have narrowed down the topic and focused the discussion on the issue of implementing the concept of sustainable development in the relationships between local authorities and retailers. Defining such a scope of discussion was dictated by several factors. Firstly, sustainable development is the direction recommended by the European Union for the development of societies and economies. However, ideas of a global nature tend to be quite abstract; they have a fairly general content and are open to various interpretations. Therefore, it is necessary to translate them into more pragmatic terms, thus bringing them closer to local decision makers. Secondly, the responsibility for popularizing global concepts in societies and local communities rests with the local authorities because of their direct impact on the lives of community members and the activities of business enterprises. It is the local authority that is in charge of a given area and it makes decisions relating to its management and development. This is also confirmed by the Agenda 21 document, formulated in 1992 at the Earth Summit in Rio de Janeiro, which provides guidelines for the implementation of sustainable development programmes (Agenda 21³). In one of the points it designates local authorities as the bodies responsible for familiarizing both the residents and entrepreneurs with the strategic guidelines

³ The document consists of 4 sections, each devoted to a different area: Social and Economic Dimensions – which refers to the interactions between environmental issues and poverty, health, trade, debt, consumption and demographics; Conservation and Management of Resources for Development – which outlines the ways in which natural resources, including land, sea, energy and waste, must be managed to ensure sustainable development; Strengthening the Role of Major Groups – regarding work for sustainable development (including disadvantaged groups); Means of Implementation – including the role of different types of governmental and non-governmental activities as well as the sources and methods of funding. More in: United Nations Conference on Environment and Development, Rio de Janeiro 1992, pp. 1-351.

contained in the Agenda 21 document⁴. Thirdly, in order to implement the concept of sustainable development it is necessary to meet the needs of the population of a given area, including the basic existential needs which constitute a priority for sustainable development, as well as taking into account environmental barriers in planning economic development (Bartkowiak & Koszel, 2011, p. 31). Another factor is connected with the concept of Corporate Social Responsibility, which constitutes an integral part of the strategy for global retailers. Socially responsible commercial enterprises ideologically fit the trend of sustainable development. An analysis of the CSR reports of the largest global retailers shows that they all include the CSR concept in their strategies through adopting a responsible approach towards stakeholders as well as accepting economic, legal, ethical and philanthropic responsibility for the consequences of their activities (Stefańska, 2014, pp. 684-692). The final reason for the choice of the focal point for this paper is the fact that there are few publications relating to the cooperation between local authorities and retail companies in the context of ensuring regional development and maintaining a balance between traditional local trade and the expansive policies of large-scale retailers. This issue was partially addressed by Ciechomski (2010), Szulce (1998), as well as Kłosiewicz-Górecka and Słomińska (2001), but in this paper the authors concentrate on the current problems associated with the lack of a plan in terms of retail chain development.

2. Local government and the sustainable development of retail networks

Local authorities are responsible for economic and social development as well as environmental protection in order to improve the quality of residents' lives. Local authorities play a key role in ensuring order and harmony in the development of an area because they have the necessary tools to influence the form and direction of this development. In practice this involves, among other things, solving the environmental, social, economic and spatial problems and challenges facing today's urban centres and rural areas. Sustainable development of these spaces requires creating local regulations defining the conditions for the development of a given space, including land-use planning.

⁴ Paragraph 28.3 reads "Each local authority should enter into a dialogue with its citizens, local organizations and private enterprises and adopt 'a local Agenda 21'. Through consultation and consensus-building, local authorities would learn from citizens and from local, civic, community, business and industrial organizations and acquire the information needed for formulating the best strategies. The process of consultation would increase household awareness of sustainable development issues. Local authority programmes, policies, laws and regulations to achieve Agenda 21 objectives would be assessed and modified, based on local programmes adopted. Strategies could also be used in supporting proposals for local, national, regional and international funding".

The retail trade is a sector of the economy which plays a substantial role in the functioning of settlements, especially cities (Zakrzewski et al., 1984; Grzesiuk, 2010, pp. 31-80). It is often assumed, with good reason, that retail plays a contributory role in the formation of cities, which is directly related to the trading functions implemented within cities, such as (Budner, 2014):

- ensuring the possibility of exchanging goods for money and thus creating a business environment,
- providing consumers with convenient access to product offerings,
- creating jobs,
- contributing to revenue generation for a settlement,
- integrating the local community through trade,
- cultural functions – offering (as a complement to shops) a range of leisure activities (particularly noticeable in shopping centres),
- contributing to the urban design and architectural attractiveness of cities.

The multidirectional impact of retail means that in order to apply the concept of sustainable development in this sector, several conditions must be met. These include the following:

- avoiding any forms of monopolisation in local markets, which can manifest itself through the dominance of certain retail forms,
- ensuring the diversity of retail, including different store formats, forms of ownership and forms of retail trade concentration (not only modern shopping centres but also marketplaces and bazaars), which provides customers with access to a diverse range of products as well as giving producers (especially local) access to the market,
- adjusting the location of retail outlets to the current and projected road infrastructure as well as the number and distribution of potential customers. On the one hand, this is connected with adjusting the number and area of shops to market needs; and on the other, with ensuring that the location of the shops will not overburden the transport routes thus making them inefficient; and that it will not result in the disappearance of green areas or a reduction of the public space to an absolute minimum,
- contributing to the welfare of a settlement through creating attractive jobs as well as contributing to its revenue,
- contributing to the architectural and cultural attractiveness of settlements,

- minimising any negative impact on the environment and promoting intelligent buildings which use their own sources of energy.

Unfortunately, the processes of increasing capital, technological and organizational concentration observed throughout the economy also affect the retail sector and are not conducive to the implementation of sustainable development. This is also evident in the local aspect of retail operations, with an increasing number of usually large-scale chain stores and shopping centres, and a decreasing number of stores owned by independent retailers. Because of the growing importance of chain stores, the retail offering is becoming more and more homogeneous, leaving less and less room for local production. In many cases, this often leads to conflicts between local communities and the local authorities, especially that local communities are not monoliths but rather collections of stakeholders with often conflicting objectives. While local entrepreneurs (shop owners) are typically against large retail chains, ordinary residents who are professionally unrelated to trade expect convenient access to a range of products, which usually can more easily be provided by large retail chains (longer opening hours; a larger area enabling one-stop shopping; better storage technologies; lower prices).

As a result of the processes observed in the retail sector, modern cities have also experienced a number of other phenomena which are a negation of the concept of sustainable development within a city, such as (see: Budner, 2014; Turner & Gardner 2014):

- degradation of city centres,
- perpetuation of social divisions within cities through hindering access to certain facilities by elderly or indigent people, for example because they do not possess cars,
- degradation of public spaces as a result of the primitive or incongruous architecture of retail establishments, or as a result of inadequate commercialisation of retail spaces,
- traffic congestion caused by building large retail establishments in an area with inadequate road infrastructure,
- restriction of public space, green areas and recreation grounds is used as land to build retail facilities.

The scale of these phenomena is so large that it is becoming increasingly urgent, particularly for local authorities, to conduct active policies that will ensure the implementation of the sustainable development concept. For many years in some European countries, special permits have been required to set up a new retail establishment in order to protect already

existing facilities, provided there is a diversity of retail forms, and investors are forced to adopt pro-environmental attitudes with the impact of investments on the local labour market being taken into account (Ciechomski, 2010, p. 266). Such policies show how the idea of sustainable development can be incorporated into the context of retail trade.

It has to be noted, however, that in Poland the influence of local authorities on the development of retail networks has been fairly low in recent years, which is a result of either the lack of a strategy with regard to the development of retail trade in the local market, or an inability to block large-scale investments (Kłosiewicz-Górecka & Słomińska 2001, p. 77). One can assume that now, with the relatively low assessments regarding cooperation between enterprises and local authorities, not much has changed in this respect (Starczewska-Krzysztozek, 2014). Thus, the issues which cause conflicts between stakeholders and which, above all, hinder the implementation of sustainable development at the local level still remain to be resolved.

3. Instruments for implementing the concept of sustainable development in the retail sector

The principal instrument at the disposal of local governments for the implementation of policies relating to sustainable development and spatial order is spatial planning. Although it might seem that spatial planning is mainly concerned with the creation of spatial order, it actually plays a major role in shaping the socio-economic environment, especially with regard to sectors which are very strongly linked with space, as is the case with retail trade⁵. Implementing the concept of sustainable development that was adopted in 1992 required a holistic and interdisciplinary way of addressing economic, social, environmental and zoning issues within territorial units. This is when spatial planning became integrated with various general, broader urban (municipal) development policies (Topczewska, 2010). Integrated planning makes it possible to control development processes. Its essence lies in “building networks rather than performing atomised actions or relinquishing initiatives by municipal authorities to market mechanisms” (Mierzejewska, 2008). This means that spatial planning is a strategic function of the utmost importance, requiring a high level of competence from local government, particularly city and municipal councils.

According to Polish law (The Act on Spatial Planning and Development, 2003), the process of spatial planning consists of two stages. In the first stage a study on the conditions and

⁵ When retail trade is conducted through bricks-and-mortar shops, the place where services are produced cannot be separated from the place where they are offered to customers, as is the case in manufacturing sectors.

directions for land use is developed and adopted by the municipal council in the form of a resolution. In the second stage a local zoning plan is developed and adopted. Additionally, in the absence of a local plan, municipalities may issue administrative decisions regarding planning permissions and the location of public purpose investments.

A study on the conditions and directions of land use determines the spatial policy of a municipality and the local principles of land-use management. It takes into account the principles of national spatial planning, the development strategy and spatial development plan of the region, and the development strategy of the municipality, if the municipality has such a strategy. Such a study is not an instrument of local law but in accordance with Article 9 paragraph 4 of the Act on Spatial Planning and Development its provisions are binding on the municipal authorities in the preparation of local plans. The second stage in the process of local space management is the local zoning plan. It designates specific uses of land, including areas of land for public and private investment. The document comprises mandatory and optional content, the latter including the areas of land earmarked for the construction of large-scale retail establishments⁶ (Kwartnik-Pruc & Przewięźlikowska, 2007). In practice there is a dispute concerning the interpretation of the Act on Spatial Planning and Development as regards the development of the local zoning plan as a condition for the construction of large-scale retail stores⁷. It has to be said, however, that the dominant interpretation gives local authorities much greater powers in terms of determining the spatial, economic and social aspects of the local environment⁸, which is the principal postulate of this paper.

⁶ These are stores with an area of over 2,000m².

⁷ The essence of the dispute is whether the existence of a local zoning plan is a precondition for building a large-scale retail facility. The statute and a significant part of case law indicate that this is indeed the case. Adopting such an interpretation means that such facilities cannot be built on the basis of planning permission. However, this interpretation of the relevant paragraph of the Act on Spatial Planning and Development is not universally accepted. Opponents argue that the wording clearly indicates that the obligation to draw up a zoning plan must be defined in a separate regulation, and no separate regulation includes such an obligation for large-scale retail facilities, as is the case, for example, in relation to public-use airports. Another argument is that it is difficult to justify the more restrictive treatment of large-scale retail establishments in comparison to, for example, manufacturing or office facilities. This, however, is not necessarily true as the potential impact of a large store on the local environment is much greater than, for example, that of an office building (Czy wystarczy decyzja o zabudowie [Is planning permission enough?], 2014, <http://prawo.rp.pl/artykul/1091387.html>, accessed: 4.05.2015).

⁸ Generally, the influence of the local authorities on the shape of the retail network is currently weaker than the provisions of the Act on the Establishment and Operation of Large-scale Commercial Facilities intended (Journal of Laws of 2007, No. 127, item 880). This law, which was annulled by the Constitutional Court in July 2008, gave local authorities much greater power with regard to the spatial arrangement of the retail network than the law which is in force today.

In the interests of spatial order, local authorities indicate in their land-use plan what commercial activities may take place in selected locations. Thus, conducting retail operations requires the fulfilment of certain conditions (Grzesiek, 2014). The local zoning plan defines how the land can be used, what kinds of activity are permitted on particular lots, the size of the buildings, the type of architecture, the height of the buildings, the proportion of space the buildings can occupy, as well as, for example, the kind of fence surrounding the plot. On the one hand, this protects the interests of people who wish to buy neighbouring plots as they can find out what their potential neighbourhood is likely look like in the future; on the other hand, it is helpful to the people who already own adjacent plots because, as neighbours, they may have the right to lodge a protest if the activity undertaken on a particular plot is contrary to its purpose (assuming that they will be recognized as a party in the proceedings). From the point of view of an investor, a municipal zoning plan facilitates investment decisions. If no such plan exists, an investor has to follow a long course of administrative procedures, which includes applying for a construction permit as well as a decision to establish public purpose. This may generate concerns among local residents as to the character of the future neighbourhood; thus being a potential source of conflict.

4. Practice in other countries

Both in Germany and in the United Kingdom there are rules concerning land development (Zagospodarowanie przestrzenne [Spatial planning], p. 30). In Germany, it is vital to observe two principles: preventing conflicts and considering individual interests. In the UK there is the principle of balancing public and private interests, although some freedom of decision is left to local authorities. In Germany, it is also important to observe the regulations with regard to preventing the scattering of settlements and buildings as well as dealing with the revitalization of existing buildings. In Britain, in turn, there is the principle of planning permission which must be obtained to erect new buildings or change the use of land. The procedure is not strictly binding in nature, and applications are assessed on merit. In addition, in the UK there are also entrepreneurial zones and simplified planning zones, where investors do not have to apply for planning permission. The principal difference between the German and British solutions, however, is that in Germany the specific conditions for a plot of land are very clearly defined, while in the UK the application of every prospective investor is assessed on merit and the advantages and drawbacks of each potential investment are assessed. An interesting fact is that in the solutions that exist in Germany and the UK with regard to land development any investment

decisions must be accompanied by an assessment of the capacity of the existing infrastructure, and if the infrastructure is not sufficiently developed it is necessary to plan its expansion.

Zoning plans create a framework for local entrepreneurship. However, in the context of sustainable development it must be noted that satisfying the requirements of a plan is not everything. The spectrum of retailers' initiatives for the benefit of the local community can be much broader than investing in pavements and roads around the store, or conducting promotional campaigns with an underlying social mission. The United Kingdom boasts particularly extensive experience in this respect because its government puts great emphasis on the development of partnerships in the area of sustainable development. In 2001 the Business Excellence Through Resource Efficiency (BETRE) project was launched, which was run by the local authorities in East Sussex, the Environmental Protection Agency, and business organizations. The project included organizing seminars and training sessions, environmental audits, grants for the implementation of pro-environmental actions, as well as various forms of support, advice and information (Teneta-Skwiercz, 2013, p. 128). As another example, according to research conducted in the UK, shopping centres undertake a number of initiatives, which include the following (Medway, Alexander, Bennison & Warnaby 1999, pp. 246-255):

- placing advertisements in the local media promoting town centres as locations for shopping and leisure activities,
- establishing, maintaining and managing car parks in town centres,
- expanding and maintaining CCTV systems to ensure the safety of residents,
- installing illuminations to celebrate festivals,
- implementing programmes for crime prevention and improving safety,
- increasing awareness in the community with regard to safety and crime prevention,
- organising places where children can spend time,
- preparing and distributing materials which promote the city and its tourist attractions,
- managing *park&ride* car parks,
- creating pedestrian precincts,
- including retail outlets in the early warning system for local residents,
- employing city centre guards to perform certain duties, for example cleaning (removing graffiti, emptying waste bins etc.),

- implementing *shopmobility* schemes, which provide, for example, electric wheelchairs to people with limited mobility,
- improving the signposting of cities and creating unmanned public information points,
- employing street artists for promotional purposes,
- improving and maintaining street furniture (such as waste bins, benches, street lamps, sculptures, fountains etc.).

5. Final remarks

In conclusion, local and regional authorities are able to influence the development of retail networks through implementing long-term development policies with regard to retail space, complementing the development of residential space. Above all, it is necessary to observe the principle of sustainable development in its economic, social and environmental dimensions and to translate this concept into solutions at the municipal level, in particular to ensure their inclusion in development plans. Examples from abroad show the many different levels of cooperation and methods of joint implementation for sustainable development that can be utilised. The main barrier of it is connected with low level of diffusion of knowledge about the implementation of the SD idea among local authorities and lack of solutions how to integrate corporate and public affords to improve quality of life.

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CITY CENTRES AS PLACES FOR STRATEGIC COOPERATION THROUGH ACTIVE CITY MANAGEMENT – THE SIGNIFICANCE OF TRADE ENTITIES

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Abstract

The growing mobility of human, physical and financial resources has resulted in competition not only among entrepreneurs but also among countries, cities, regions and other administrative entities. These entities compete in meeting the needs of local communities, investors, tourists and other stakeholders. This paper posits that the contemporary city should be viewed as a common space that needs the effort of many various stakeholders (e.g. local authorities, private local businesses) in order to satisfy the diverse (and changing) needs of its stakeholders. Yet, achieving this effectively requires active management and coordination of a range of activities. This is often delivered by professionals often referred to as city managers. This paper discusses three examples of recent activities in Cracow (Poland) that reflect strategic approach. The first of these case studies is based on research conducted with students in Cracow and it focuses on identifying the factors encouraging students to remain in this city after completing their studies. Whilst it was found that the most important factors were economic or financial ones, retail infrastructure is rarely considered one of the most significant factors, in spite of its relevance to place attractiveness. On the other hand, when compared to other cities, Cracow's atmosphere was deemed nearly as attractive as high salary levels. The survey results suggest that only a strategic approach to managing the city and/or city centre guarantees success in retaining university graduates as future long-term residents. The second case study explored here corresponds to Galeria Krakowska – a shopping centre opened in 2006, which has been ranked as the city's top attraction by domestic visitors. This major retail investment offers visitors a shopping experience enhanced by dining and easy access to the city's nearby world-class cultural heritage. The last of the Cracow-based case studies shows the recent application of

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the cultural park legal framework to the UNESCO World Heritage-ranked city centre of Cracow. This legislation allows local government to regulate and control business advertising in the city centre. This law was created to protect the urban landscape and perception of the city centre and to curb the amount of visual advertising carried out by businesses in public spaces.

Keywords: city manager, town centre management, destination management, retail development, urban tourism, city attractiveness

JEL Classification: R10, R38, L81

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1. Introduction

The significance and role of cities and other administrative units is changing rapidly along with the growing mobility of physical, human and financial resources not only on a European scale but also globally. The effects of this have led to loss of residents in city centres, as well as capital and manpower flows towards more attractive places. These issues are affecting places at a micro, meso and macroeconomic levels. As a result of this, there is a growing need for more synergy in the coordination of strategic responses by key decision makers particularly given the rapid change in the nature of stakeholder needs given the development of increasingly diverse local communities. There is a need to counteract these global socio-economic trends and develop common tools supporting management in local, regional and national government. The awareness among stakeholders of the evolving nature of urban spaces and their ability to co-operate play an important role in this multidisciplinary process, which has been taking place in Poland over the last two decades (Rouba & Markowski, 1995; Zuziak, 1998; Young & Kaczmarek, 1999; Strzelecka, 2008; Coca-Stefaniak et al., 2009a; Florek & Proszowska-Sala, 2010). These new challenges often demand also new management skills and competences. This study presents examples of recent interventions in Cracow that have invigorated the city and enhanced its offer to local residents as well as tourists. The breadth and scope of the examples used here implies the need for developing managerial competences not only among local government employees but also among other entities shaping the urban space and affecting its development.

2. The city (centre) as an area of conflict and cooperation

A city satisfies the needs of various stakeholder groups as a residential area, a tourism destination, a place of study, a shopping destination, and/or a place for inward investment. At the same time, a city's urban development priorities will depend on the needs of its key stakeholders. City may therefore be viewed as a network that may and should be managed for the joint success of all the stakeholders involved (Brańka, Plichta, 2014, p. 199). This is one of the main challenges for city management and city development as expectations will vary considerably across stakeholder groups and conflict may often arise between local residents and tourists or local retailers as a result of differing views on issues such as place attractiveness, to mention but one example. This is a potential conflict area between certain stakeholder groups like e.g. residents and tourists or local small retailers and shopping mall investors. Figure 1 depicts the complex interrelations that exist between key city (centre) stakeholder groups with regards to urban development.

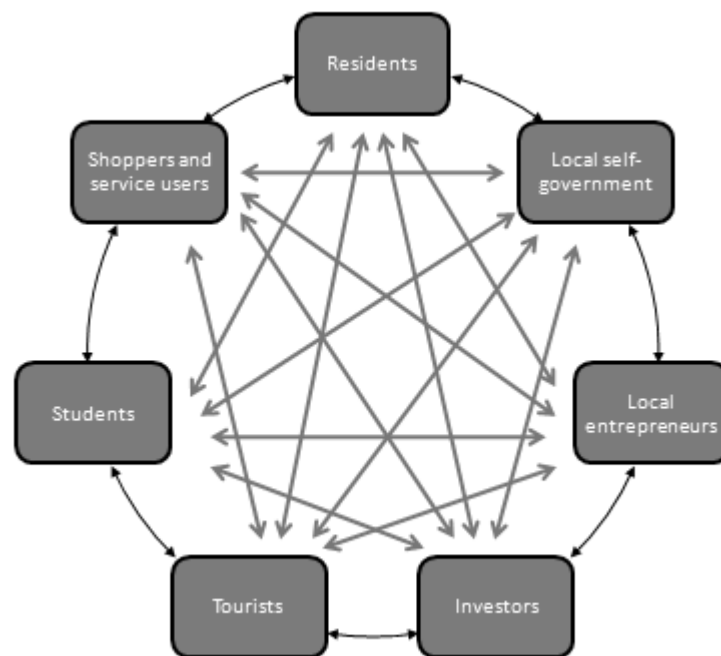


Fig. 1. The city as a network of stakeholders

Source: own elaboration.

In the European Union towns and cities are generally managed by a local authority. Poland is no exception to this and the Local Authorities Act (1990) as well as the Constitution of

the Republic of Poland (1997) state clearly that the responsibility of local government in Poland is “satisfying the collective needs of the community”. Satisfying the needs of the community in the long run is only possible through assuring the socio-economic development of the city, which is normally carried out in consultation with key stakeholders. After a long break (1939-1989), imposed by historical events free market conditions and democratic elections in local authorities were reinstated in Poland in 1989. This situation is in contrast to that of many other European countries where, over time, a more varied set of mechanisms has emerged to facilitate local development. While the role of local authorities remains pivotal in this, market forces were allowed to influence local development mechanisms since the 1980s. This has included, for instance, strategic tools such as Town Centre Management (Wells, 1991), where retail has played traditionally a key role in countries such as Spain, Italy, France and the UK (Coca-Stefaniak et al., 2009b) even if initial simplistic views of town and city centres as mere shopping destinations (Figure 2) have evolved since towards much more strategically savvy approaches (Coca-Stefaniak & Carroll, 2014). In spite of the country’s relative isolation from global markets until 1989, Poland has also started exploring novel approaches such as Town Centre Management (Radominski & Coca-Stefaniak, 2007), with embryonic pilots started in 2008 in Toruń and Łódź.

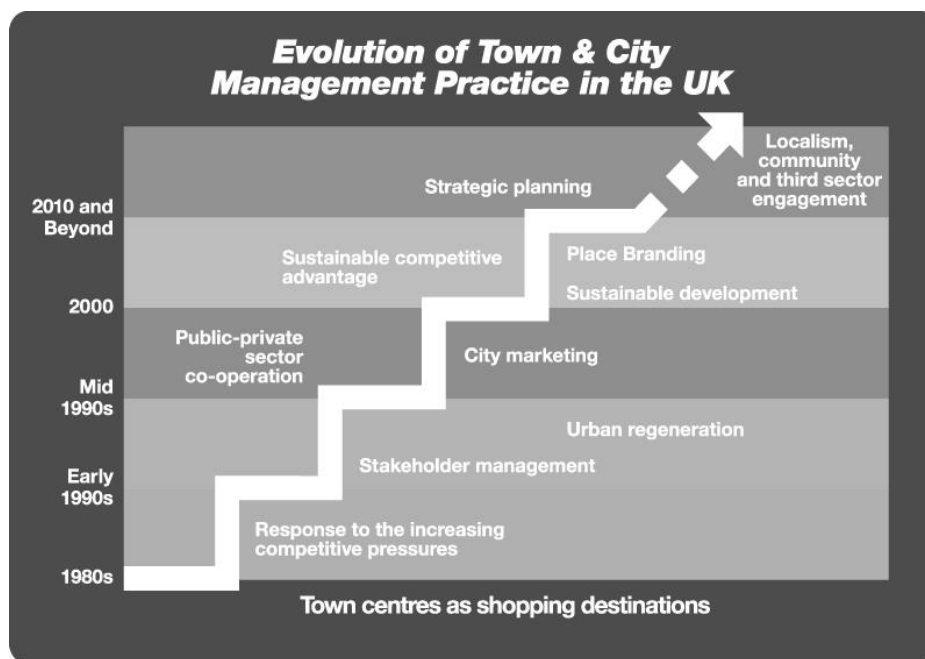


Fig. 2. Evolution of town centre management practice in the UK

Source: Coca-Stefaniak, 2013.

Today, the city manager's role across Europe involves managing key stakeholders that may often represent different 'layers' of a town or city centre, including managers of smaller places within the urban realm, such as shopping centres and shopping malls, universities, cultural institutions, third sector organisations, housing associations, residential areas under development (construction), and special funding models of Town Centre Management such as Business Improvement Districts (Morcol et al., 2008) that often include various small independent retailers. This requires a special set of skills and competences that often go beyond those normally available among local authority employees. Therefore, the identification of these competences remains a key area of on-going research (Coca-Stefaniak et al., 2008; Coca-Stefaniak & Parker, 2010) and a key element for supporting future successful urban development in a competitive global market.

3. Retail as an element of city attractiveness for new residents

The provision of an offer that satisfies consumers' needs is one of the key functions of retail today, even if property development is set to become a key area of growth and investment for the retail sector in the not-so-distant future. The availability and mix of goods and services coupled with a positive customer experience in convenient locations form key elements of today's retail offer (Śmigielska, 2013). As a result of this, retail remains an essential part of the city both in terms of function and place.

Students eager to settle down in the university's host town/city following the completion of their studies are a potential source of human capital and future prosperity for the city. In view of this, a survey was conducted in June 2011 with 633 full-time students of Cracow University of Economics (CUE) (Brańka, 2013, pp. 87-97). CUE is the third largest university in Cracow with approximately 20 000 students. The purpose of the study was to identify the factors influencing graduates' decisions with respect to their intended place of residence after graduation.

Although economic factors such as employment, salaries and property prices were clearly the most important ones for the students surveyed, two thirds of respondents indicated the importance of city atmosphere on their decision to settle down locally. Thus, when comparing cities with similar economic parameters, this factor may become pivotal. Given that city atmosphere is shaped by many components, and that retail infrastructure is one of its foundations, access to the right mix of shops and services (e.g. cafes, restaurants) in the city centre along with

an enticing cultural offer remain key to success with tourists and residents alike. Retail structure and offer may influence not only residents' quality of life but also tourist perceptions.

4. A shopping centre that became a tourist attraction of the city centre– the case of the Cracow's Galeria Krakowska

Galeria Krakowska is a shopping centre opened in the year 2006 in Cracow. It includes 270 shops and service businesses with total surface of 60,000 m² and 4,500 m² of office space⁴. The exceptional feature of this building complex is the location near the UNESCO-listed historic centre of the city. With the approximate walking distance of less than 10 minutes. Since its establishment the above mentioned shopping centre has been regularly indicated as one of the important attractions for the city visitors. As one may see in table 1, in the years 2008-2013 the mentioned shopping centre was ranked between 7th and 11th. It was perceived as an important attraction mainly by domestic visitors (up to 8.6% of them in 2011). The top 10 attractions indicated in these years were dominated by historical districts, monuments, museums and religious centres, what is not a surprise as Cracow is a city full of historic sites and cultural attractions. It is worth underlining that in the year 2013 Cracow was visited by 9.3 mln people, including 2.6 mln foreigners (Borkowski et al., 2013, p. 43).

Obviously almost 8% of the domestic visitors to Cracow found this shopping centre more attractive than many other cultural attractions that didn't make it to the top 10. It may be considered an evidence that modern retail is a desirable element of the contemporary city for the visitors. What surely increases footfall in the mentioned centre is (among others) the unique location – next to the historic city centre, railway and bus stations. In this case, the investor managed to create an attractive retail and service offer that is directly linked with the pedestrian traffic, mass transportation and the cultural offer of the city.

The project was feasible due to the decision of the local authorities to revitalize the degraded space located next to the main railway station. After eight years of existence the shopping centre is much appreciated not only by the tourists but also the city's residents. Although there has been criticism of the project regarding Galeria Krakowska as a threat to the local small retail, there has been no significant decline in small retail, restaurants or cafes in the historic city centre.

⁴ www.galeriakrakowska.pl/en/ogalerii/informacje.html (access on 20th August 2014).

Table 1. The “Galeria Krakowska” shopping centre among Cracow’s top attractions for domestic and foreign visitors⁵

	2013	2012	2011	2010	2009	2008	2006
Rank	11 th	11 th	9 th	7 th	9 th	10 th	14 th
% of domestic visitors	7.6%	2.9%	8.6%	8%	6.1%	6.8%	4.5%
% of foreign visitors	0.8%	1%	1.2%	1.7%	0.8%	1.5%	1.5%

Sources: own elaboration based on (Borkowski et al., 2013, p. 102); (Grabiński et al., 2011, p. 148); (Grabiński et al., 2009, p. 123); (Grabiński et al., 2006, p. 101).

5. Cultural park as legal framework allowing spatial order in the landscape of city centres

Since 1989 the Polish cities have a problem with the presence of abundant advertising in the public space. Before the World War II the advertising in Poland developed similarly to other European countries due to the market economy. After the war, in centrally planned economy, marketing, including advertising, was redundant. Having returned to the market economy in 1989 the advertising in Poland has expanded but the authorities had neither instruments nor experiences to assure a balanced advertising presence in the public space. “The city, where promotion fills space excessively is perceived as chaotic and unfriendly. (...) The posters, placards, billboards, citylights, but also signboards and neons has become a dominating component of the information landscape in the Polish big cities” (cf. Dudek-Mańkowska, 2007, pp. 107-109; 302). Unfortunately so far the local authorities lacked legal instruments that would enable the regulation of advertising in city centres and preventing the excessive and chaotic actions of private businesses.

On 3rd November 2010 the City Council of Cracow implemented the cultural park legal framework for the historic city centre of Cracow (Rada Miasta Krakowa. *Uchwała...*, 2010). The act was implemented in order “to protect the cultural landscape, monuments and historic urban system” of the UNESCO-listed city centre. This act imposed many new obligations on retail and service businesses in the historic city centre and the entities had to conform to the new law in 6 months. An important aspect of the framework was to regulate advertising in the centre of the city. Therefore, each company located in the cultural park was allowed to have only one information board located in the building with its premises. The information board on the building must not be too large (as there is a surface limit) and its form should be adapted to the

⁵In the year 2006 there was a general answer: “shopping (shopping centres, shopping, souvenirs, prices)” referring not only to Galeria Krakowska. In the year 2007 the question was not asked due to a different survey methodology.

architecture of the building. As excessive advertising placed on scaffoldings during construction works was one of the major advertising-related problems in the past, the cultural park imposed limitations in the size and duration of such advertisements.

Today, the city authorities are able to manage the landscape of the historic city centre as a whole, even though it consists mainly of private-owned buildings. Unlike before, the cultural park legal framework provides the local authorities with legal instruments that may prevent all the entities located in the city centre (mainly private businesses) from excessive advertising and deterioration of the culture landscape and city image.

The experiences of more than two years show that the overall number of the information-boards and/or advertisements dropped in the historic city centre between the year 2011 and 2013 (Sprawozdanie..., 2013). Furthermore a much higher percentage of the present advertising media conforms with all the local laws.

The primary benefit from the adopted legal framework is protection of the city's heritage. The improvement in the urban design is furthermore a benefit for both residents and tourists visiting the city. Paradoxically even if the limitations imposed by the self-government limit the freedom of the property-owners and entrepreneurs (e.g. small retail), the improvements in the urban design may result in improving the footfall of the residents and tourists. Therefore all the local stakeholders seems to benefit from the imposed regulations. In this case, there was no bottom-up activity and the self-government played the role of the city centre manager.

6. Conclusion

The experiences of many European countries reflect the necessity of investing in town and city centres. This should consist of integration and cooperation between various entities, including the public, private and voluntary sectors. The presented Cracow-based examples show that retail plays an important role for stakeholders both directly and indirectly (e.g. shaping city atmosphere and design). Furthermore the case studies indicate the necessity of not only building awareness of common goals among different local stakeholders. Promoting cooperation between them is key and so is the need for a shared access to knowledge and competence-related resources. The rapidly changing socio-economic landscape of many town and city centres across Europe means that knowledge and managerial competences should not remain the sole responsibility of local authority employees but instead a shared approach with other public institutions and entrepreneurs.

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INNOVATIONS IN RETAIL SECTOR AND THEIR INFLUENCE ON THE MARKET

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Abstract

In the article the main points of Schumpeterian view on innovation are presented as well as its development presented by W. J. Abernathy and K.B. Clark in their article *Innovation Mapping the Winds of Creative Destruction*. Then the idea of retail innovations and their classification are proposed. Thus along with disruptive innovation and both technological and non-technological innovations in retailing, the architectural, niche creation, regular and revolutionary innovations are identified and their influence on the market – established system of production and marketing – is shown. By such an approach the J. Schumpeterian theory of innovations is expanded and implemented to the retail sector. The focus is on retail changes on meso level.

Keywords: innovation, retailing, meso level, competitiveness

JEL Classification: O31

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1. Introduction

In modern economy which is also called the knowledge based economy a lot of attention is paid to innovations, as one of its main drives. They are usually associated with the tech and telecom industries which take the leading position on The Boston Consulting Group Survey of the most innovative industries (BCG). Yet it should be mentioned that they have also played the crucial role in the retail sector development, raising the productivity of retail enterprises and by the same token the whole economy. In the article the wide spectrum of retail innovations is presented. The special attention is paid to their relations to existing competences and market influence.

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2. The role of innovations in the development of market structures

According to J. Schumpeter innovation is “doing things differently in the realm of economic live” (Sweezy, 1943, p. 93). He considered innovation as a cause of economic development which is impulsive change of existing circular movement, which in irreversible way modifies the preexisting balance (Schumpeter, 1960, p. 101). This process is called creative destruction due to the fact that the old knowledge is destroyed and the new one is necessary to operate in the new environment. It takes some time to get the new economics balance but the progress is achieved.

In Schumpeter view innovation is the “outstanding fact in the economic history of capitalism society (Bostaph, 2014, p. 429)” that changes the production function and “that requires new plants or the rebuilding of old plants and New Firms” (Bostaph, 2014, p. 430).

The crucial role in innovations’ introduction is given to the entrepreneur who takes the risk but also expects supernormal profits as the reward. In Schumpeterian theory he (or the business) plays an active role whereas the role of consumers is rather passive – they are often reluctant to changes and should be convinced to accept them.

Taking this view W. J. Abernathy and K.B. Clark have developed the following definition of innovation: “An innovation is the initial market introduction of a new product or process whose design departs radically from the past practices. It is derived from the advances in science and its introduction makes existing knowledge in that application obsolete. It creates new markets, supports freshly articulated user’s needs in the function it offers and in practice demands new channels of distribution and aftermarket support. In its wake it leaves obsolete firms, practices and factors of production, while creating a new industry” (Abernathy & Clark, 1985, p. 6).

It should be pointed out that although the Schumpeterian view is still very important in innovation analysis not all innovations could be considered as radical – some of them have the other nature, what was noticed inter alia by W. J. Abernathy and K.B. Clark who also developed the framework for analyzing the competitive implication of innovations presented later in this paper. They also stressed the role of the consumer which sometimes is very important. On the threshold of these assumptions they distinguished: architectural, niche phase, regular and revolutionary innovations.

Architectural innovation is the new technology that departs from established systems of production and opens up new linkages to markets thus users. The most important phenomenon is

that development of this innovation is rather stimulated by market needs not by science. Architectural innovations could create new industries as well as reform the old ones.

The idea of niche phase innovation is to open new market opportunities through the use of existing technology. As technology is generally defined – there are only small changes in it - the established technical competences are sufficient. The examples of niche phase innovation include new product introduction with new features like shapes, colors, functions which could provide the company implementing them competitive advantage and encourage competitors to copy these ideas and in this way change the patterns of competition. In case of regular innovation the established technical and production competences are applied to existing markets and consumers.

Revolutionary innovation disturbs and renders established technological and production competences whereas it is applied to existing markets and customers. It is incremental change in process technology which raises productivity and increases the process capacity which results in economies of scale but also requirements for the capital necessary to compete.

3. The characteristics of retail innovations

When trying to define retail innovations the specificity and function of retail sector in the economy should be taken into account. The innovation in retailing could be defined as a change in the way the retail functions (being the intermediate in exchange) is fulfilled which is accepted by the consumers which operate the criterion “value for money” (Tallman & Blomstrom, 1962).

B. Kucharska indicates some characteristics of retail innovations which include, that (Kucharska, 2014, p. 23):

- Changes are related to the different aspects of the ways of doing things and thinking about the enterprise, supply chain, market, which means changing the previous routine and they are introduced intentionally, consciously and often long lasting.
- Generally solutions implemented by other enterprises (in other sectors) are copied.
- Due to the fact that a successful solution could not be prevented by patents it is often copied; only technological and capital requirements could constitute barriers.
- They are beneficial for consumers, retail companies, retail sector and the whole economy.
- Often research and development are not necessary to be innovative; knowledge, capabilities and experiences of managers, employees, suppliers, competitors could be the source of innovation.

- Innovations could be risky and expensive, especially if they are radical.
- In the retail companies there is not an utterly integrated system of innovation management like in the case of industry companies.

Innovations could be classified in different ways, according to the adopted criterion. So, depending on their impact on the market, one could distinguish radical (disruptive) and incremental innovations. Radical innovations have significant impact on the market and on the economics activity of the companies operating on it whereas the incremental innovations only upgrade or enhance an existing product, process or service. In J. Schumpeter's view the most important are the radical innovations which create disruptive changes; the incremental innovations only advance the process of changes.

In case of retailing development of new retail forms, e.g. department store in the mid of nineteenth century, then mail order (end of nineteenth century), chains stores (1912) and supermarkets (after the II World War) constituted radical innovations. Their changed the market structure due to the fact that close competitors that did not adjust to new methods of doing business were eliminated from the market. They also forced changes in the behavior of suppliers and consumers. For example, development of department store caused many bankruptcies of concept stores, organized delivery directly from producers which had to provide storage for goods whereas clients had to get used to new methods of selling products. The new forms of retailing (which also include discount stores, hypermarkets and then e-commerce which appeared on the market scene later) have been in the words of J. Schumpeter the main competitive force which determined the direction of changes of market structure and the ways profits have been distributed (Schumpeter, 1947, p. 85). It was due to the fact that economics of scale was not very important as it started to be in the end of the twentieth century when the information technologies (IT) allowed to monitor and control the spread activities of retail chains even in the global scale.

The incremental innovation in case of retail forms are all changes which have taken place in the way they operated, and allowed e.g. some of department store companies survive. They include implementation of some promotional tools or addition of food into assortment.

Innovations could be also divided according to their nature into: technological one and non technological. Technological group includes innovations in product and processes caused by the involvement of new technology, non technological – important changes in the marketing and organization of the enterprise.

There are two main processes which effectiveness is core for the success of a retail company – the supply and selling process. Introducing innovations in these processes has been stimulated by the development of information and communication technologies (ICT). It has started by implementing in retail business the invention of bar code, which then became crucial for development of other technologies increasing the productivity of logistics and selling processes. In logistics processes there are such technologies as Electronic Data Interchange (EDI), Quick Response (QR), Efficient Consumer Response (ECR). In spite of some weaknesses and development of Internet technology they are still widely used in retailing. Their implementation not only reduces costs but also improves the level of consumers service due to the fact that assortment better fits their needs. Scanning system has also directly influenced selling processes by the improvement of checkout.

Product in retail is new retail form (wide meaning) as well as the new product in assortment (narrow meaning). New retail forms as innovations has already been discussed. As far as the new product in assortment is concerned the opportunities to be innovative came together with the idea of own brands. Some of them created the assortment which distinguished the retailer from competitors' and influences the whole market structure when copied³.

Parallel to technological innovations the non technological innovations involving marketing activities and organization of enterprises have been introduced. Marketing innovation concerns all elements of marketing mix but mainly promotion. They evinced in assortment policy – scrambling merchandising policy (e.g. assortment of department stores was enriched with food whereas the assortment of supermarkets with household chemicals), location policy (malls outside the city centres), pricing policy (odd prices – e.g. \$1.99), merchandising (new ways of displaying products), and promotional policy (loss leaders, stamps). They were very easy to copy so as a result many of them very fast became standards in mass merchandisers policies.

Organizational innovation could involve the changes in organizational structures. Since 1912 when the first chain was founded this structure has started to evolve. Later, due to development of ICT different networks have appeared – the most important has been the franchise system which could provide the same benefits as chains without investing a lot of capital in founding own stores. The other important retail structure is the shopping centre which

³ The examples include Ikea which changed the market for furniture by offering the wooden piece of furniture sold not in sets and Benetton with its colorful and comfortable clothing.

is a type of cluster, which follows the idea of shopping streets, but is generally located outside the city and offers the clients many services beside shopping.

In the second part of the twentieth century, as far as the new forms of retailing are concerned, discount stores and hypermarkets were founded and they turned out to be radical innovations. It could be noticed that Wal-Mart which was the follower of the first discounters is now the biggest retailer in the world whereas Carrefour which was first to introduce the hypermarket concept for many years occupied second position (in 2014 it was the fourth) (Baranowska-Skimina). Their success would not have been possible if this innovation had not been fostered by ICT technologies and non technological innovation. It is due to the fact that this period was also the era of technological innovations introduced in logistics and selling processes, development of new own brand products as well as non technological innovation – marketing and organizational ones. Many of them could be considered as radical innovation as they have dramatically changed the market structure and become standards.

The twenty-first century started as the era of Internet which stimulated the development of e-commerce and development of networks. It has been creating new rules of competition which challenges the old structures based on physical assets with new ones rich with knowledge – virtual networks, logistics and selling processes as well as marketing activities. The prevailing trend is virtualization of all retail activities. The question arises how it could change the retail market?

Sometimes product development into other industries is viewed as innovation for the company due to the fact that there is quite a new activity and there is some risk connected with implementing such a strategy. Retailers innovate in this way where they start to offer financial, catering or other services as it was e.g. the case of M&S company.

The ways of operating business which are well known in well developed countries could be innovation in the less developed ones. A good example is Poland, where since the mid of the nineties foreign companies have developed new forms which have not been present in Polish market like: discount stores, hypermarkets, category killer, concept stores, direct selling as well as new forms of retail organization: chains, shopping centers; new marketing tools: loss leaders, loyalty programs, odd pricing. They have changed the market structure destroying the former system and creating the new one with the new rules of competition. Yet new retail structure does not completely reflect retail system in well developed countries because it has been developed in quite different circumstances.

4. The competitive implication of retail innovations. The case of Poland

For the analyzing the competitive implication of retail innovations the concept presented by W. J. Abernathy and K.B. Clark has been adopted and proposed by them division into four groups: architectural, niche phase, regular and revolutionary innovations.

Good examples of architectural innovations in retailing are new forms, which implement new ways of selling goods as well as new ways of supplying them e. g discounts stores and supermarkets discussed before. To be successful they have to be visible on the market and their existence depends on consumer preferences. They have been very durable –some of the department stores still exist, mainly in U.S. due to the fact that they have reacted to changes in consumer behavior, implementing new marketing tools and technologies. Architectural innovations change consumer behavior as well as whole market structure.

It was visible in Poland when retailers (mostly foreign companies) started to develop chains of hypermarkets, discount stores, supermarkets, category killers in the mid of the nineties. They have changed:

- consumer behavior (shopping during week-ends, expectations of sales promotions and price reductions),
- market position of wholesalers who have started to develop franchise systems to survive,
- market position of small shops – some of them have tried to implement the techniques used by big competitors like e.g. self service, some have gone bankrupt, some have joined franchise systems, others have been looking for market niches,
- market position of suppliers who have had to negotiate contracts and often have turned not to be very satisfactory for them.

Thus new retail forms being the architectural innovations in retailing have changed radically the retail market in Poland. The niche phase innovation in retailing is, for example, introducing new assortment for new market segments – like clothing for overweight people – by using the same technology. The other example could be the assortment of organic products – offering such kind of assortment is stimulated by the growing trend for a healthy life style. Organic food is offered not only in the specialty stores but also hypermarket chains such as Carrefour and Tesco, which have decided to widen their assortment. This decision was supported by the set of promotional activities which are necessary to reach a market niche. In 2007 Carrefour signed a contract with the producers (affiliated by the Association of Polish Ecology)

to supply food without chemicals; the range of products bearing the Carrefour Quality label. Tesco's own brand 'Organic' products have typical packaging features and labels so that customers can easily recognize them. The sign of organic farming is displayed on labels.

Niche creation as well as architectural innovations should be visible to the customers whereas other kinds of innovations (revolutionary and regular) are almost invisible although it could have an important effect on product costs and performance. The examples of regular innovation in retail include the changes which take place in the interior of the stores, technology enhancement, introducing innovations in assortment and other marketing tools to stay competitive and strengthen the linkages to the market. They are often easy to be copied so they cannot assure long term competitiveness and must be continuously refreshed. They fit the retailer's policy so they are not very visible to consumers yet without them the company could lose the market position. Due to the intensive competition in Polish retail market companies operating here are forced to introduce such innovations.

The revolutionary innovation increases economics of scale and rises productivity. New technologies like scanning when applied to retailing improved logistics processes as well as the processes of consumer services. They do rather not affect the existing consumer preferences but companies needed new competencies (technical competencies) to apply systems based on this technology into practice. There was also the need for capital and economics of scale when the retailer wanted to develop new technologies based on scanning like EDI, QR, ECR. So these new technologies affected the way the companies operated and competed, but not directly, consumer preferences. Although EDI was first implemented by Wal-Mart to cooperate with Procter and Gamble long time ago and still companies operated in Poland use this technology in spite of its drawbacks. The examples include foreign retailers as well as Polish retailers like Topaz, the chain of FMCG which introduced it in 2012 (INFINITE).

5. Final remarks

In the paper different aspect of retail innovations are presented. It has been found that theory of innovations, although developed for production sector, could be also applied to retailing. The process of introducing important innovations, which have decided in its nowadays structure started in the mid of XIX by introducing the department store. It was followed by the other new forms as well some incremental innovations (scrambling merchandising, promotional techniques). In retailing it is also possible to distinguish technological (new product, ITC) and

non technological (marketing and organizational) innovations. New technologies since 60. last century have been played an important very important role in rising productivity but also marketing innovations become very popular tools for encourage clients to make purchases and keep them as loyal customers. As far as the visibility for the consumers and need for the new competences are concerned four group of innovations could be identified. Revolutionary and regular innovations could not be very visible. Revolutionary affect the internal processes of the retailers like supply chain management and new competencies are needed whereas regular could affect internal as well external processes and there is no need for new competencies because they involve small changes. Niche phase and architectural innovations are visible for the consumers. Niche phase, like for example developing assortment for the new, small market segment do not need new competencies. Contrary is in the case of architectural innovations, like development of the new forms which haven't exist on the market before.

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Chapter VIII – TEACHING AND E-LEARNING

TEACHING ENTREPRENEURSHIP IN INNOVATIVE WAYS

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Abstract

Usually teaching entrepreneurship includes business plans, economic theories and accounting analysis, subjects that they do not answer questions which are crucial for students, i.e. *how can I create an innovative idea for a new business and how can I convert this idea into business?* Questions of this kind are especially important in an era where new ideas are the most valuable capital and new business models based on low initial capital, but with innovative character, are the norm. In our contribution we seek to answer these questions by presenting a course which combines teaching innovation, creativity and entrepreneurship in an appropriate way. During this course that has been taught for some years until now, we have organized some qualitative research projects with our students ending to valuable conclusions. The most important is that, under specific conditions and circumstances, the combined teaching of creativity, innovation and entrepreneurship proved to be very challenging, but achievable.

Keywords: teaching entrepreneurship, teaching innovation, teaching creativity

JEL Classification: A2, O3, Y8

1. Introduction

Teaching entrepreneurship is not a new phenomenon but it has a long history despite the fact that nowadays many universities design, organize and offer courses concerning teaching entrepreneurship, innovation and creativity as new and interesting courses. Indeed, entrepreneurship education has a big history, especially in the United States, where the first entrepreneurship class held at Harvard Business School in February 1947. It seems that American business schools have caused the broader acceptance of entrepreneurship as a discipline of value in academia according to the chronology of the three domains such as courses, supplemental infrastructures and publications through which the growth of the discipline has been described (Katz, 2003). The increasing number of undergraduate and postgraduate courses imprint on the

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one hand, the emerging interest of students to learn about entrepreneurship and on the other hand, the growth of students wanting to be entrepreneurs.

Initially, teaching entrepreneurship was focused on finding the ways to teach it under the belief that entrepreneurship is teachable, later on promoting the best practices and finally, on measuring the impact of entrepreneurship (Katz, 2014). But for decades and even today, there is a debate about which are the most suitable methods for teaching entrepreneurship. On the one hand, there is the perspective of entrepreneurs to teach entrepreneurship as they have real world practical experience. On the other hand, there is a more scholarly approach with the perspective of theory to prevail like all the other business disciplines taught at the universities.

Taking into account the decreasing number of new ventures and novice entrepreneurs we can easily presume that teaching entrepreneurship is rather inefficient and ineffective, too. More precisely, in the United States the proportion of young adult businessmen has fallen to the lowest level of the last twenty four years (Simon, 2015) and almost only 3.6% of adult younger than 30 were shareholders in private companies in 2013. Also, in the European Union even though it has been announced a lot of integrated strategies and programmes for enhancing entrepreneurship not many goals have been achieved. Thus, internationally there is an imperative need for a more effective entrepreneurship education.

To this vein, the present study seeks to give a flexible framework on which a university course of teaching entrepreneurship, including that developed in the web environment, can be designed. Through this framework emphasis was put mainly on teaching objectives, teaching methods, learning outcomes as well as on creativity and innovation enhancement in an attempt of answering the questions such as ‘how can I create an innovative idea for a new business’ and ‘how can I convert this idea into business?’.

2. Teaching entrepreneurship, creativity and innovation: A brief overview

The interest of researchers of any field in entrepreneurial education is increasingly strengthened. One of the reasons is that entrepreneurship is presented as a new career path and as an interesting solution to the unemployment and other emerging problems due to the economic crisis. Additionally, the fostering of entrepreneurship through European strategies, programmes and unions significantly affects the rising interest in entrepreneurship and its teaching.

The European strategies are concentrated on promoting entrepreneurship in all levels of formal education such as primary, secondary and tertiary. The establishment of the European

Youth Union and the EU Youth Strategy (2010-2018), the main objectives of which are the provision of equal opportunities for young people in education, in labour market and in their participation in society (European Commission, 2010) stresses the importance of entrepreneurial education and put an emphasis on the teaching that can help young people to gain entrepreneurial skills.

Teaching entrepreneurship, creativity and innovation is the first priority of the European strategy of 2020 easily emerging from the programmes entitled ‘Youth on the Move’, ‘An Agenda for New Skills and Jobs’ and the ‘Innovation Union’ (Eurydice, 2012) as well as from the establishment of both new Entrepreneurship Hubs for Young Entrepreneurs and Innovation and Entrepreneurship Units attached to higher education institutions.

The question whether entrepreneurship is teachable has already been answered. Certain facets of entrepreneurship or entrepreneurship itself can be taught (Vesper & Gartner, 1997), entrepreneurship is not a magic but a discipline and like any other discipline it can be learned (Drucker, 1985) and entrepreneurship can be taught, or at least encouraged, by entrepreneurship education (Gorman, Hanlon, & King, 1997) are the most common evidences that entrepreneurship is teachable. Furthermore, this particular question concerning the teaching of entrepreneurship can be considered as obsolete (Charney & Libecap, 2000) because modern researchers not only have accepted that it is teachable but they are more concerned on whether entrepreneurship can be characterized as a science or an art. Hence, from its scientific dimension entrepreneurship deals with the acquisition of business skills while from its artistic dimension with the creativity and artistic skills of people (Lee & Wong, 2007).

Current trends of entrepreneurship education have pointed out the importance of adaptability to rapid and frequent technological changes whereas matching of students’ educational needs to selected teaching methods is a key factor of successful teaching (Arasti, Falavarjani & Imanipour, 2012).

Concerning the teaching and learning methods and the objectives of entrepreneurship education there are many suggestions. The categorization in traditional and non traditional methods can be determined by two distinct areas of entrepreneurship education (Laukkanen, 2000) where the first refers to education about entrepreneurship and the second to education for entrepreneurship. The education about entrepreneurship includes developing, constructing and studying the theories related to entrepreneurship and its contribution to economic development,

and firm creation and thus, it is mainly based on the transfer of knowledge about the field. The education for entrepreneurship includes the training of present and potential entrepreneurs on the entrepreneurial process, the provision of all the necessary tools for the start-up of a new venture and thus, it focuses on learning experience and the development of entrepreneurial competencies, skills, attitudes and values.

The objectives of teaching entrepreneurship can determine the appropriate ways through which entrepreneurship education can be offered (Hytti & O’Gorman, 2004). For example, if the objective is to increase the understanding of what entrepreneurship is about the best way will be the provision of information through public channels such as media, seminars, or lectures. If it is to help students to acquire entrepreneurial skills applicable directly to work the education and training based on the involvement of students directly in the entrepreneurial process could be the appropriate way. Finally, if the objective is to prepare students to act as entrepreneurs the most effective practice can be the facilitation of experiments in a controlled environment through business simulation and role playing.

In order to accomplish the various objectives of teaching entrepreneurship active learning can be the appropriate way. Active learning, the main elements of which are talking, listening, reading, writing and reflecting, can help students learn and acquire the appropriate new knowledge (Meyers & Jones, 1993, p. 21) or beyond the knowledge transmission it can help higher order thinking of students and their exploration of values and attitudes through their involvement in activities such as reading, discussing and writing (Bonwell & Eison, 1991, p. 2). Therefore, active learning can transform students to become high order thinkers who are capable to explore new opportunities of learning for entrepreneurship.

A new way of teaching entrepreneurship has been suggested (Brush, 2013), where doing entrepreneurship is the keypoint of teaching and learning entrepreneurship without considering theory as sideline since theory and practice are interdependent and also, influence each other. Doing entrepreneurship is compared with the Montessorian method where a child selects a toy, plays with it and usually finds new ways to play with it. Thus, practice prevails. Using the same analogy, practice is very important to teaching entrepreneurship as it helps students develop their entrepreneurial thinking through play, empathy, experimentation, creation and reflection (Fayolle, 2007) and also help them to learn how to act entrepreneurially by exploiting opportunities of all kinds in an uncertain world (Neck, Greene, & Brush, 2014). Through this

perception, entrepreneurship is taken as a method that forces students not only to understand, know and talk but also to use, apply and act through a portfolio of practice-based pedagogies (Neck & Greene, 2011).

Taking into account all these teaching and learning methods, their objectives and learning outcomes as well as the importance of linking theory, practice, research and quality of learning through serious assessments an innovative framework of teaching entrepreneurship was shaped. This framework came from a course which combines teaching innovation, creativity and entrepreneurship in an appropriate way. During this university course that has been taught for some years until now, we have organized some qualitative research projects with our students ending to valuable conclusions. The most important is that, under specific conditions and circumstances, the combined teaching of creativity, innovation and entrepreneurship proved to be very challenging and helpful to students who are interested in creating innovative ideas for a new business or in converting their ideas into business.

3. A description of the innovative framework of teaching entrepreneurship

Taking into account that entrepreneurship can be defined as a dynamic process of vision, change and creation which mainly combines risk-taking, ability of building venture team and creative skills concerning finding the necessary resources, building a business plan and recognizing and taking advantage of opportunities (Kuratko & Hodgetts, 2007), we tried to shape a framework of teaching entrepreneurship by applying different, flexible, attractive and innovative ways of teaching and learning. This framework was based on a university course entitled ‘Informatics and entrepreneurship 2.0’, the teaching pattern of which was intended to provide a bridge between traditional way of teaching and the emerging way of teaching where technology and its applications and expansions play a crucial role on the active role of students and the quality of learning outcomes (Giossi & Dagdilelis, 2014).

In many courses of teaching entrepreneurship lectures of invited speakers and visits of students to different enterprises complete the traditional way of teaching. But the uniqueness of this particular course was the decision of co-teaching where the first teacher was the major teacher in teaching e-learning and the second was an expert business consultant who simultaneously adopted the twofold role of a teacher and a post-doctoral researcher.

The main focus of teaching was to help students develop an entrepreneurial mindset, entrepreneurial skills and entrepreneurial culture besides the knowledge transfer associated to

entrepreneurship. But before getting to this point we started by teaching creativity and innovation. The main reason for this decision was the new perspective of entrepreneurship where innovative ideas are of great value to both, the creator and the one who will take advantage of the innovative idea that is likely to be someone else except from the creator (Dagdilelis & Giossi, 2014). Another reason was that there are different kinds of competitions concerning business innovative ideas, including those referred to startups, where innovation is closely linked and depended on technology and thus, the development and enhancement of the creativity level of students as potential entrepreneurs are of great importance. Finally, the existence of open innovation, where creators of innovative ideas not only can share their ideas in a community shaped by the use of social media and networks but also can accept their idea evaluation of its members, was considered as crucial to the preparation phase for those students of dreaming themselves as start-up entrepreneurs.

One of the main learning objectives of teaching entrepreneurship was firstly to help students to be aware of entrepreneurship and secondly of e-entrepreneurship and then establish an entrepreneurial mindset which through the intervention of technology could be a technology and innovation-driven approach of teaching entrepreneurship. Thus, the first focus of the proposed approach of teaching entrepreneurship was to connect creativity to innovation. But as creativity includes the inventiveness or the creation of a new idea whereas innovation refers to the commercial application of a new idea or invention, its dissemination and its exploitation (Deakins & Freel, 2006), we moved further to technovation. Technovation involves creativity, the successful implementation of ideas in an organization (Amabile et al., 1996) or better the bringing of creative ideas into life (Davila, Epstein & Shelton, 2006) as well as the influence of technological changes. Thus, we developed a teaching entrepreneurship framework relying on the synthesis of creativity, innovation and technology, which was constituted an evidence of innovative teaching.

Firstly, we have tried to change the way of students' thinking and acting. We have motivated them to change some of their routine habits or to do them in a different way and then to concentrate on studying the effects of this change to their way of thinking and acting. In an attempt of enhancing their creativity we offered students different stimuli in order to help them create innovative ideas by finding out new solutions to their daily problems or to what is considered to be a main trouble to them. Secondly, under the supervision of the teacher who had

a serious experience on business consulting students became able to understand how an innovative idea can be reflected into a business context and then, to shape a business plan or better a more flexible pattern named business canvas or at least a business scenario.

But the central point that identifies all the above mentioned innovative approaches of teaching entrepreneurship was the focus put firstly, on the teaching methods and learning outcomes and secondly, on the new role of the graduate learner. In most cases learner-centered methods overcame teacher-centered methods under taking into consideration the matching of learning outcomes and learning methods and the transformation of students from passive listeners to active participants. Students were prepared to adopt self-managed learning with the aim to take initiatives and enhance their autonomy because this perspective was characterized as the main requirement and preparation of thinking themselves as potential entrepreneurs.

4. Research design, data collection and findings

Observations and critique by the two teachers, the main responsible teacher for the course 'Informatics and entrepreneurship 2.0' and an entrepreneurship consultant acting as co-teacher and post-doctoral researcher on innovation and e-entrepreneurship as well as students' interviews and assessment sheets of four years completed by the students attending the course were the main research methods and the resources of data collection of the present research study.

The analysis of the first year teaching where visits of successful entrepreneurs, including those of startups, accompanied by business simulation, apart from the traditional methods of teaching entrepreneurship, resulted in a deep understanding of entrepreneurship and e-entrepreneurship by the attendants. Students' interviews revealed that they felt insecure to start a business while they really enjoyed their participation in the particular course. The second year curriculum enriched by the presentations of innovative ideas from students who took awards in competitions concerning innovative business ideas. This learning intervention was ended to an increase in the interest of students to attend the particular course, and in the possibility to participate in teams that expected to participate in similar innovative ideas' competitions in the near future. The analysis of the third and fourth year teaching of entrepreneurship showed that students have identified several business skills which they themselves and their fellow students possess and they began to shape an entrepreneurial culture as they seemed to feel confident that they could create innovative ideas, participate as team members in innovative ideas' competitions and accepting the idea that the creation of a start-up might be one of their entrepreneurial plans.

In addition, the longitudinal analysis of the four years teaching of the course entitled ‘Informatics and entrepreneurship 2.0’ was accompanied by a series of assessment where the assessment of each year determines the improvement of the next year teaching approach. Also, the findings of each year research, the observations and the critique of the two teachers as well as their openness and availability of accepting students’ proposals and interventions in teaching and learning activities were expected to enhance the quality of teaching and learning.

5. Conclusions

To the path of fostering innovation-driven entrepreneurship in Europe with the aim of enhancing its competitiveness, we can easily admit that the suggested teaching entrepreneurship course is convergent to these objectives. More precisely, according to the life cycle approach of fostering innovation-driven entrepreneurship which has been described by the three phases stand up, start up and scale up (World Economic Forum, 2014) the suggested ways of teaching can support and develop the “stand up” phase. Through the above mentioned innovative teaching approach the main factors of fostering innovation-driven entrepreneurship such as attitudes, skills and entrepreneurial culture seem to be easily established. Raising awareness of entrepreneurship, risk-taking and the entrepreneurial thinking, where recognition and creation of opportunities are accompanied by the sequent exploitation, may end to the creation of a positive attitude towards entrepreneurial initiatives.

The recognition of students’ skills such as managerial and social ones can be readily accomplished through their acting either independently or cooperatively, in the case of individual or teamwork respectively, where distribution of responsibilities, setting priorities, time management, taking initiatives, creativity, determination, leadership, self-efficacy and public presentation of oneself in class count. The lectures of successful entrepreneurs acting as role models, the presentation of innovative entrepreneurial ideas by students who gained any competition concerning innovative ideas of any kind and the incitement concerning students to think of themselves as potential entrepreneurs with a focus on innovation can create a flourish class climate where an entrepreneurial culture can be built. As a result from this strategy students are expected to choose entrepreneurship as a career, become founders or members of start-ups, or even to enhance their creativity by acquiring the tendency to generate innovative ideas that can provide solutions to problems related to the economy, environment and society.

On the other hand, teachers can embrace different roles compatible and in line with the innovation-driven entrepreneurship teaching. The role of a mentor with high expertise, the role of a change agent and the role of a leader who is committed to enhance students' confidence and autonomy in order to be capable of creating innovative ideas and taking entrepreneurial initiatives could be valuable options (Giossi et al., 2014). In addition, teachers should also develop entrepreneurial skills such as the risk-taking of the course design, the selection of teaching methods compatible to the expected learning outcomes and the type of assessment to measure the quality of education as well as the development of their creativity in order to contribute to the teaching effectiveness.

Finally, the linkage of research, practice and innovation in entrepreneurship education can flourish when students feel responsible for their learning, free to take initiatives and capable of making decisions by considering seriously the value of risk-taking (Giossi et al., 2014, p. 40). In addition, taking under consideration the value of the creation of innovative ideas, the advantage of the recognition and exploitation of opportunities as well as the importance of adopting roles compatible to the innovation-driven entrepreneurship and envisioning the creation of start-ups either individually or collectively where the latter seems to be more appropriate to the start-ups creation students could effectively be prepared for becoming entrepreneurs of any kind.

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THE SIGNIFICANCE OF THE DETECTION AND ASSESSMENT OF ADULT EDUCATIONAL NEEDS IN KNOWLEDGE EFFUSION

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Abstract

The diversity of problems that adult education is approaching, heterogeneity within the target populations, concerning educational level, motivations, expectations and preferred learning styles, as well as different objectives set by the funding institutions and implementing programs require the detection of the participants needs. Therefore, the process of investigation needs is important because it is associated both with the active participation of learners and secondly the effectiveness of the training program.

The aim is to highlight that the process of detection of adult learning needs for the diffusion of knowledge mostly depends on:

- the scientific expertise of specialists who undertake it,
- the characteristics of the target population,
- the adult education strategies, which are developed from the corresponding educational institution.

The learning needs in continuing adult education are usually resulted by changes in the same occupations or working conditions, change in occupation of the people and the inadequate performance of duties in a specific job or career. An educational need is generally determined as the difference of the actual knowledge, skills and attitudes of trainees from the desired ones. In any case, the detection of adult learning needs is also necessary because it contributes to identifying the characteristics of educational programs that attract the interest of learners, contributes to the combination of different interests in an educational activity, provides information on practical issues, while contributes in saving time and resources when planning and, finally, is a mean for ensuring the quality of continuing educational programs, thereby enhancing the diffusion of knowledge.

Keywords: learning needs, continuing adult education, diffusion of knowledge

JEL Classification: A2, O3, Y8

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1. Introduction

Adult continuous education emerges as a necessity in modern society, as it conduces to the renewal and expansion of their knowledge, the reinforcement of their abilities and also, in the development of attitudes which contribute towards a more efficient exercise of their profession. This contribution of continuous education in knowledge effusion and the professional development of adults, has resulted in recent years, in the importance of a more methodical and systematic planning of relevant programmes, thus for them to be more affective.

By the by, it is the full coverage of these needs for adults participating in such educational activities-procedures, that is considered by leading theoretical adult educators (Rogers, 1999; Cafarella, 2002) to be one of the fundamental principles when designing and bringing into materialization such programmes. Adults attend educational procedures by setting targets which are linked to some of their own basic needs, however when they do, they are not regarded as ordinary educational trainees, as only just the sheer consumers of educational services, because they have already been the bearers of some educational, professional and social experience and in their majority they studied up to a certain level in basic education.

Therefore, the adults to whom such educational and training programmes are aimed, are people with certain experiences and personal characteristics, interests, motivations, wishes, needs, practices, behaviour and, at the same time, they may be members of social groups, collective parties or constitutions. Thus, for the planning of such adult educational programmes, it is demanded not only an extensive study of the existing conditions and a definition of the significant data, but also, an investigation on the personal and collective educational needs of the population-target (Jarvis, 2004; Sork & Caffarella, 1989).

As an educational need, is considered to be what the individuals may have to learn either for their own benefit, for an organization or for the society, in other words, the gap between real level of their abilities and a higher more desirable level, which is demanded for the execution of their duties, however may this be defined by themselves, their organization or the society. Therefore, an educational need is the difference between what they (people –organization-society) wish them to be and what they are in reality (Knowles, 1980).

As further educational need is described every knowledge, ability or attitude that is required by the individual, yet not available, for the sufficient and complete execution of a task or, in general, for an activity that comprises a total of tasks. Therefore, a further educational need

is evident whenever the individual is lacking in that particular knowledge and ability which is essential for the satisfactory execution of their duties (Steward, 1999).

The educational needs are presented in three levels (Dalziel, 1994): a) in work level or profession, when this engages knowledge and abilities that are demanded for the effective functioning at their work environment or profession, 2) in personal level, when there exists a difference in the availability of their knowledge, ability or attitude which is required for the execution of a task or for a profession and 3) in organizational training level, when it regards the total of the personal training needs of the employees in an organization or some knowledge, abilities and attitudes that is required for all their members (Kilpatrick & Allen, 2001).

In any case, the choice in approaching the detection of adults' educational needs, most of the times, depends on the scientific specifications of the experts whom have undertaken such a task, the characteristics of the population-target and the strategic for adult training that is developed by the equivalent body.

2. Detection of educational needs

The variety of problems approached by adult education, the diversity in the core of population-target regarding the educational level, motives, expectations and the suggestive learning methods, as well as the difference in targets set by the funding bodies into materializing these programmes, necessitates a further research into the needs of the participants, for two reasons related to the effusion of knowledge:

- the first reason is related to the active participation of the trainees, provided that a programme would be able to cover all participants' needs and so forth their active participation would be promoted, thus alleviating any reduced classes phenomena or even students withdrawals from a course (Rogers, 1999)
- the second reason is related to the effectiveness of the programme, given that a programme is considered effective when its purpose is accomplished. In a reverse situation, when targets do not correspond to the needs or, the problems which are required to be met by this particular intervention, then its accomplishment is rendered uncertain.

The educational needs may identified as: individuals needs, collective body or constitution needs, social group needs, regional area needs, or financial branch needs or employment needs in general.

However, is worth to mention that various classifications have been suggested for the educational needs, one of which proposes the understanding of their nature through the following opposed pairs (Queeney, 1995):

- *perceived and assessed needs*

Perceived needs are the ones that the individuals believe they possess, while the assessed are detected through a structured needs assessment process.

- *felt and expressed needs*

Felt needs are the ones that the individuals may sense but do not express while, on the contrary, the expressed needs initially become alert before they subsequently are expressed. The individuals tend to be preoccupied with the satisfaction of the expressed needs.

- *normative and comparative needs*

The normative needs are defined by certain criteria of knowledge, abilities and potentials that need to be fulfilled and thus they are set by experts. On the contrary, comparative needs occur when some individuals or groups that differ from the level of other individuals or groups, in terms of some knowledge, abilities or potentials.

- *discrepancy and maintenance needs*

The discrepancy need, reflect the distance between the desirable and the existing state and are aimed towards the educational needs. Nevertheless, there are also the maintenance needs of the existing levels of knowledge, abilities and potentials.

- *current and anticipated needs*

Current needs concern the modern activities of the individuals, while the anticipated ones are the needs that will occur in the future and they are related to the future roles and responsibilities of the individual. The anticipated needs are particularly significant to knowledge effusion, when the individuals may seek for training due to career change or in their way of life.

In general, however, when matter arises for the detection of adult training needs, it is evident the necessity to look for the answers into some important issues or, at least that we should have an elementary preoccupation with the issues listed below:

- for whom is this research of the training needs is conducted, namely, which body has requested it, which body will use its outcome and what are their priorities;

- which body is conducting this research, in other words, a state body, a private body, some special researchers or members of a body where the population-target belongs;
- in what environment are these needs detected, work environment, public places or the private space of the individuals in question;
- whose needs are in question, that is, the body to where the population – target belongs, the administration or the individuals who are already included in the population target;
- how we collect evidence for the detection of training needs, that is, by which methods and techniques.

In adult training programmes, in particular, the phase of needs detection is an inseparable element during its planning, because they are planned in such a way, according to their corresponding parameters, analytical content, the choice of trainers, the choice of methods and techniques, thus to satisfy the needs of the population target at which they are aimed.

3. Educational needs assessment

As needs assessment is defined a systematic three phase procedure that includes: a) the detection of all forms of needs, as it was analyzed in the previous chapter b) their identification and recording, their analysis and prioritization and, c) the creation of an educational programme. (Barbazette, 2006). Today, educational needs assessment does not only identify what it should be learned by the individuals but also what should be included and how this knowledge could be accomplished, it means that it should express applicable learning suggestions and strategies. (Dalziel, 1994).

More specifically, adult educational needs assessment is considered as essential and fundamental in the process of planning adult training programmes, because:

- the designers of such programmes focus their attention on important issues and thus it will assist them in their decision making during planning, and the development and formation of training programmes. Besides, the data from needs analysis may be utilized in such a way as to secure the better usage and distribution of time and resources,
- authorizes such a focus of attention in specific needs which describe knowledge, ability and attitudes and are essential yet not available by the individual for adequate performance on a task and,

- it secures this collection of important info, according to which certain levels of change in the performance of the student may be assessed.

At the same time, adult education needs assessment facilitates in the detection of characteristics of equivalent educational programmes in which the trainees are interested, also contributes to the integration of various interests in an educational activity while at the same time provides the information for practical matters, like the formation of time- schedule and the delivery of continuous education.

Lastly, it should be mentioned the adult educational needs assessment for professionals contributes towards time saving and in financial supply during the planning of continuous education training (Queeney, 1996).

However, needs assessment calls for additional members, not only the educators, in decision making in order to facilitate this process.

Nonetheless, educational needs assessment alone is a complex process, granted that the presence of true needs initially must be detected and thus training is demanded for their resolution. For this reason, a variety of methods has been developed which, through a variation in the approach, and possibly by different facts, is in pursue of its verification. It is worth to mention that for the purpose of more reliable results the experts recommend a data analysis, in more than one method in order to verify their outcome. Therefore, the use of a single method alone sometimes may lead to uncertainties regarding training needs and their classification. On the contrary, the employment of two or more methods in collecting evidence for the study of some aspects in human behaviour is offered for the research of educational needs and consists in the usage of quantity as well as quality methods, given that in the modern society of knowledge and information, neither of them is self-evident, in the recent and imminent changes which are rapid and radical. Therefore, educational needs assessment is not merely a natural procedure that gradually results in realization by the individual and its consequent recording by the examining and educational bodies in charge.

Besides, one of the most common problems that may emerge during the educational needs assessment is the gap between the educational needs of an organization and the personal training needs of the participants. The educational needs of a business are referred to as *macro* training needs, while the personal educational needs as *micro* training needs. Frequently, the personal needs are overlooked, which is something that results in negative consequences for the

organization, as it minimizes training motivation and efficiency amongst professionals at work. Therefore, it would be beneficial to respond towards the educational needs of a body without overlooking the original educational needs of the individuals. Thus, it becomes obvious that the educational system is essential to function as a system of preferences between the two parties: the educational planning body and its recipients, who are adults. The preferences of the two parties although they are not necessarily opposing, they are however different. According to the balancing laws the rate of success and the effectiveness of the training may be achieved up the point where, when preferences operating as forces, they overlap. In other words, it is essential that the training planning bodies should draw and apply training strategies according to the needs and targets of the educational policy, yet during planning it would be necessary that they take on account the needs of the final recipients of the training.

Consequently, the detection and assessment of adult educational needs should take place in multiple levels and so to be feasible, methodical and scientific, thus for their conclusions to be valid and to contribute towards the effective planning of educational programmes.

At times, various models of needs assessment have been suggested, according to the area of expertise of the specialists who are engaged in this procedure and along with the personal characteristics of the population-target (Gupta, 1999; Witkin & Altschuld, 1995). Generally, it is suggested that this procedure comprises a planning phase, a materialization phase and a phase of utilization of the outcome for the planning of suitable continuous education programmes. During the planning phase, all those liable for needs assessment should be identified; all procedures and methods used must be chosen and funding resources and time concerning needs assessment must be examined. During the materialization phase of needs assessment, data must be collected to conduce to the identification of the needs, thus to classify them and locate their cause if possible. Finally, during the phase of utilization of the outcome, what must be defined is which needs to prioritize, thus to develop continuous education programmes that respond to the needs which were identified and so to have an evaluation of needs assessment, when possible.

4. Methods and techniques of training needs

Special methods and techniques of data collection for adult training needs assessment are classified in various ways that they present a particular interest (Noe, 1999). Also, it is worth clarifying that the choice of each technique and its tools depend on a variety of factors based on the time limits of the research, the human resources available, the precision level that is required,

the reliability of the resources and finally, the accessibility to each resource (Witkin & Altschuld, 1995). At this point it is essential to mention that all data collected by the methods and techniques of adult training assessment are various:

- *the report* is the most ordinary method of adult training needs assessment which can locate the views and opinions of individuals about their educational needs, they may be expressed in person by the individual, and they can be either oral or written (Queeney, 1995; Bee & Bee, 1994);
- *the questionnaire* is a common adult educational training assessment, which usually collects facts, attitudes and opinions by using a written questionnaire or an interview. The questionnaire may apply to a mass or part of the population concerned, or to key informants, which means individuals who, due to professional or social status, are aware of the educational needs of a group and thus they can indicate it (Bee & Bee, 1994; Queeney, 1995). In any case, the number of all those using the questionnaire must correspond to the population in question. Finally, such a questionnaire must be comprehensible, interesting and attractive thus to ensure that a large number of participants can use it accordingly for the purpose of educational needs assessment (Commission of the European Communities, 1992);
- *an interview* is also widely used in adult educational needs assessment, aiming at the planning of continuous education training, and it is regarded as a flexible researching technique, as it may be either formal or informal, structured or not, it may involve the interviewer and a participant or a whole group, it can take place at work environment or elsewhere in a distance, or even by phone (Rosset, 1987; Gupta, 1999). The main advantage of the interview is that the presence of an interviewer may allow a further explanation of the questions, who they in addition, may record unstated information, may ask additional questions and at the same time, an interview allow the participation of under-educated individuals or those with sight impairment (Bee & Bee, 1994);
- *the emergency incident technique* is another method used for the location of adult educational training needs and includes a set of direct observations or self- references on specific behaviours, that are directly related to the execution of tasks by the employee at a specific situation. This technique mainly contributes towards the

location and the resolution of any problems within the organization (Altschuld & Witkin, 2000);

- *group session* is another common method which is used in adult educational training needs assessment, which allows the opportunity of interaction between the participants and therefore compliance regarding their training needs. The deductive information from the group sessions is usually of quality, as it concerns group opinions, morals, views and preferences (Witkin & Altschuld, 1995). Group sessions as their main advantage offer the combination of the different views; they build support and commitment for the purpose of continuous education, they create a sense of participation in decision-making amongst their members and they are able to involve hundreds of individuals at a low cost (Knowles, 1980). However, all data obtained from these sessions are usually of quality and subjective, it is suggested that they come in combination with the outcomes of other methods for the educational needs assessment (Witkin, 1984);
- finally, note that beyond all the aforementioned techniques there is also a plethora of methods which, if accessible, it would be possible to supplement with valuable elements the detection and assessment of the adult training needs, thus contributing in knowledge effusion. Such sources are the *business plans, the statistic plans, work descriptions, competence reports, educational evaluation, personnel files, financial budget and others*.

So, it may be said that an adult training needs assessment may be achieved by employing more than one technique. There are many advantages in this approach, although it is highly demanding on the behalf of the assessors' multiple abilities, as it promotes the understanding of training needs within the population-target and it ensures an in-depth aspect on these complicated needs, as well as it gives the opportunity to overcome any weaknesses of one method by the strong points of another and it ensures a holistic and multidimensional approach, while at the same time the validity of the outcome is increased.

5. Conclusion

According to all aforementioned, it is evident that in a time which is characterized by a revolution in knowledge and technology, by the rapid changes at a global scale, by the restructuring of the economy, the productive procedures, labor hiring, by the important

advantages towards a unified Europe and the enhanced exploitation in information technology and in communication in every aspect of the human activity, education constitutes a sharp edge in the developed countries.

Therefore, in the modern society of knowledge, further education comparatively can be a powerful advantage at personal and social level which may lead to financial development and also prosperity. Countries which have invested in the formation of a competitive and effective educational system which provides knowledge and ability during the early schooling years, higher education and continuously today can benefit from a satisfactory rate of development. More specifically, adult education is considered a statute of strategic significance, so much for their continuous professional evolution and progress, as well as for the modernization and the development of their work environment. In fact, this training is imperative for a professional, to be able to participate in a society of knowledge as this varies by nature alone, and thus it re-ensures their professional development.

Professional development includes the acquisition of knowledge and ability on new subjects, additional information in existing knowledge, the development of cooperative skills so to create a sense of understanding within their work environment and an in-depth realization of their profession. Besides, as mentioned previously, an educational need is defined as the difference between the *actual* knowledge, ability and attitude of the adult trainee and the *desirable level* of knowledge, ability and attitude.

In any case the detection and assessment of adult educational needs are essential stages in the process of planning of equivalent programmes, as they contribute towards the selection of the content of such an educational programme, and in the clear account of its educational objectives, according to which it is going to be assessed.

Therefore, for the achievement of knowledge effusion, it is essential that there should be a thorough and systematic procedure of detection, research and assessment of the adult educational needs prior to the planning of every educational programme.

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