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CORRUPTION AND FOREIGN DIRECT INVESTMENT. EVIDENCE FROM CENTRAL AND EASTERN EUROPEAN STATES

Cristina Mihaela Amarandei*

Abstract: *This paper examines the impact of corruption on foreign direct investment inflows for ten Central and Eastern European states. The paper attempts to answer the question: what is the role of corruption in attracting foreign direct investments? Using the data from UNCTAD for foreign direct investment and Corruption Perception Index from Transparency International, for a period of 12 years, 2000-2012, we evaluate the specific impact of corruptions on FDI using GDP as control variable. Our results confirm the majority of literature and show a negative significant relation between the variables analyzed, but at a lower intensity than expected.*

Keywords: foreign direct investment; institutions; corruption.

JEL Classification: D73; E02; F21.

INTRODUCTION

Taking into consideration the CEE states, after the 1989 moment, foreign direct investment was seen as the best solution for national economic development. As Dunning (1993, p. 20), for example, has argued that multinational companies „are uniquely able to supply many of the necessary ingredients for economic growth, a reshaping of attitudes to work and wealth creation, the redesigning of the business and legal framework, especially with respect to property rights and contractual relationship”.

Institutions have an essential role in setting the „rules of game” by which individuals interact in a market economy (North, 1990), especially by ensuring the competitiveness of markets.

After the 1989 events, the countries from Eastern Europe looked at foreign examples in building its institutions and reforming their economies. Still, new institutions were created without taking into consideration that the distinct cultural and systematic inheritance influences especially informal institutions such as norm and values. In many countries weak legal framework permitted a large extent of opportunistic behavior, bribery and corruption (Nelson et al., 1998).

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Looking at the literature that examines in which extent the quality of institutions plays an important role in the development of an economy we found conflicting results. In general, many studies demonstrated that bad governance fosters corruption and can lead to inefficient allocation of resources and impede economic progress. Many authors, such as Gyimah-Brempong (2002), Mo (2001), Li et al. (2000) and Mauro (1995) had found that corruption has significant adverse effects on economic growth.

Corruption can also create obstacles to doing business, according to World Bank (2002), deter foreign direct investment flows (Wei, 2000), cause misallocations of public expenditures (Mauro, 1997; Tanzi and Davoodi, 1997) or reduce rates of investment.

There are many ways in which corruption can impact on economic behaviour and impose economic losses on society: it can damage incentives and destroy opportunities; it can distort price signals and deplete resources; and it can create uncertainty and compromise public policy.

Our study presents the effect of corruption and market potential on foreign direct investment for 10 Eastern European countries for a period of 12 years. The results show that the level of corruption deters foreign investment inflows.

The research has the following structure. Section 1 presents the theoretical approach on foreign direct investment, corruptions and a short literature review of econometric studies on the subject. Methodological aspects and results are presented in Section 2 and conclusions in Section 3.

1. THEORETICAL APPROACH ON FOREIGN DIRECT INVESTMENT, CORRUPTION

1.1. Determinants of FDI

The process of economic globalization appears in the form of international trade in goods in services, short-term capital movements among countries and a rapid increase in foreign direct investment (FDI). FDI refer to long term cross-border investment with a substantial influence both on receiving country and on the investing multinational company.

Two main types of determinant factors: the gravity factors and the policy related factors are suggested by the empirical literature regarding the determinants of FDI. The gravity factors refer to issues such as market size and the proximity of the host country to the source country and have been found to explain a big part of FDI flows. Policy related factors regard overall macroeconomic

stability, trade policies (trade costs, openness degree), fiscal policies (average taxation rate or the fiscal burden, tax incentive), labour policies (labour costs and skills), the degree of regional integration, infrastructure and institutions.

Concerning the magnitude and sign of FDI determinants for Central and Eastern European States, many of the studies show ambiguous results when analyzed the mode of entry, the type of FDI or the target industry.

Regarding to the relation between determinants of FDI, the table below summarize some empirical studies:

Table 1 - Determinants of foreign direct investment

Variables	Sign of the relation		
	Positive	Negative	Insignificant
GDP/capita	Schneider and Frey (1985) Birsan and Buiga (2009)	Jaspersen et al. (2000)	Wei (2000) Hausmann and Fernandez-Arias (2000)
Political risk		Schneider and Frey (1985) Edwards (1990) Gastanaga et al. (1998) Moosa and Cardak (2006)	Loree and Guisinger (1995) Jaspersen et al. (2000) Hausmann and Fernandez-Arias (2000)
Corruption	Eagger and Winner (2005)	Wei (2000)	Akcay (2001)

Source: author representation based on the studies presented.

The available empirical findings based on EU countries make it difficult to draw general conclusions about the source of heterogeneity in the determinants of FDI for Central and Eastern European countries.

1.2. FDI and corruption

It is a large debate surrounding the definition of corruption, many authors expressing different approaches on the subject. The narrowest approach specifies that corruption is „the use of public office for private gain”.

The abuse of not only the public office but also the private or commercial takes part of the broad approach.

Theoretically, we must distinguish between „grabbing hand” and „helping hand” influences of corruption on inward FDI.

In the short run, corruption raises the cost of a firm’s foreign investment, since (i) firms have to pay bribes (similar to taxes), (ii) they are engaged in resource-wasting rent seeking activities (Applebaum and Katz, 1987; Murphy et al., 1991; Shleifer and Vishny, 1993), and (iii) they have to bear additional contract-related risks, because corruption contracts are not enforceable in courts (Boycko et al., 1995). Corruption in the host country thus acts as a grabbing hand, reducing the profits of firms and therefore lowering a firm’s incentives to invest abroad.

Further, corruption reduces the productivity of public inputs (infrastructure) which, in turn, decreases a country’s locational attractiveness (Bardhan, 1997; Rose-Ackermann, 1999; Lambsdorff, 2003). On the other hand, multinational firms might be willing to accept paying bribes in order (i) to speed up the bureaucratic processes to obtain the legal permissions for setting up a foreign plant (Lui, 1985), and (ii) to gain access to publicly funded projects (Tanzi and Davoodi, 2000). In this case, corruption acts as a helping hand, increasing profits of multinational firms. If the revenue effects outweigh the cost effects, corruption is expected to increase FDI. In the presence of pre-existing government and/or bureaucratic failures, however, corruption may be efficiency-enhancing (Bardhan, 1997; Aidt, 2003). Corruption then may also be rent-creating, with the rents from controls over foreign investment shared by corrupt officials and foreign investors. Glass and Wu (2002) focus on the impact of corruption on FDI in a general equilibrium model with Northern innovation and Southern imitation (Grossman and Helpman, 1991).

Multinational firms are vertically organized and shift their production to the low cost country. The firms bear the risk of illegal imitation of their innovations, and of the requirement to pay bribes to public officials. Analyzing four types of bribes (bribes on sales or profits as well as repeated and one-time bribes in order to obtain a permission to sell in the foreign market), Glass and Wu (2002) demonstrate that the general equilibrium effects of corruption on FDI are in principle ambiguous, and conclude (Glass and Wu, 2002, p. 19) that „corruption need not be bad for FDI..., but rather corruption may foster inward FDI”.

2. ECONOMETRIC ANALYSIS

Our model is based on theoretical approach found in academic literature. In order to isolate the effect of corruption on foreign direct investment we also use control variables such as GDP.

$$FDI_{i,t} = \alpha + \beta_1 CPI_{i,t-1} + \beta_2 GDP_{i,t-1} + \varepsilon_{i,t},$$

where i is the country subscript, t is the time subscript, β_n are unknown parameters to be estimated, $\varepsilon_{i,t}$ is the usual random disturbance term. All independent variables are lagged one year in order to avoid simultaneity with the dependent variable and taking into account that decisions to invest abroad take time.

2.1. Data variables

FDI inflows are drawn from UNCTAD database for 10 countries from Central and Eastern Europe: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

In the examination of corruption the most used measure is the Corruptions Perceptions Index (CPI) reported annually by Transparency International. This non-governmental organization studies corruption since 1995 looking to draw attention on the damage caused by corruption and to stimulate governments to adopt and implement anti-corruption regulations. The CPI ranges from zero (totally corrupt) to ten (absence of corruption). The index is based on surveys filled by specialists and calculated annually for a wide range of countries.

We also use as control variable the real GDP for the countries analyzed.

The table below shows the variables used in our analysis.

Table 2 - Description of the variables

Measure	Data Source(s)	Calculation	Observed
Foreign direct investment (FDI)	Inward of foreign direct investment in millions USD	Log FDI	2000-2011
Corruption Perception Index (CPI)	Transparency International draws on 13 data sources from 11 globally dispersed institutions for this index. It ranges from 0 to 10, with high values indicating absence of corruption*.	The CPI is a composite index using data compiled or published between 2000 and 2001 for the 2001 measure. Specifically, it is computed as an unweighted average of all estimates for a particular country. Currently, 183 countries are assessed.	2000-2011
GDP – proxy for market potential	UNCTAD database	real GDP in millions US dollars	2000-2011

*Transparency International Methodology, question 8, http://www.transparency.org/cpi2011/in_detail

2.2. Results and interpretation

Our analysis uses the multivariate regression technique.

The results show that, according to the Correlations table, between foreign direct investment and the perceived corruption is a negative significant relation, respectively a rise in the perception of corruption for the countries analyzed deter the expected inflows of FDI for the next years.

Also it can be noticed a moderate direct relation between market potential and foreign direct investment received by the Central and Eastern European countries.

This founding can be explained by the inclusion in the sample analyzed of the Baltic states who have a small GDP compared with the rest of the sample and high levels of foreign direct investment.

Correlations matrix

		FDI	CPI_1	GDP_1
Pearson Correlation	FDI	1.000	-.269	.646
	CPI_1	-.269	1.000	-.105
	GDP_1	.646	-.105	1.000
Sig. (1-tailed)	FDI	.	.001	.000
	CPI_1	.001	.	.127
	GDP_1	.000	.127	.
N	FDI	120	120	120
	CPI_1	120	120	120
	GDP_1	120	120	120

Source: author calculations using SPSS 17.

Table bellow shows that the model chosen for our analysis is significant ($.Sig < .005$) and adequate.

Still, the Model Summary table shows that our model could be improved in order to have better values of R and R square by adding other institutional variables in equation beside corruption like democracy, government stability, law and order, democracy and the quality of bureaucracy.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.677 ^a	.458	.449	3327.20174	.458	49.428	2	117	.000

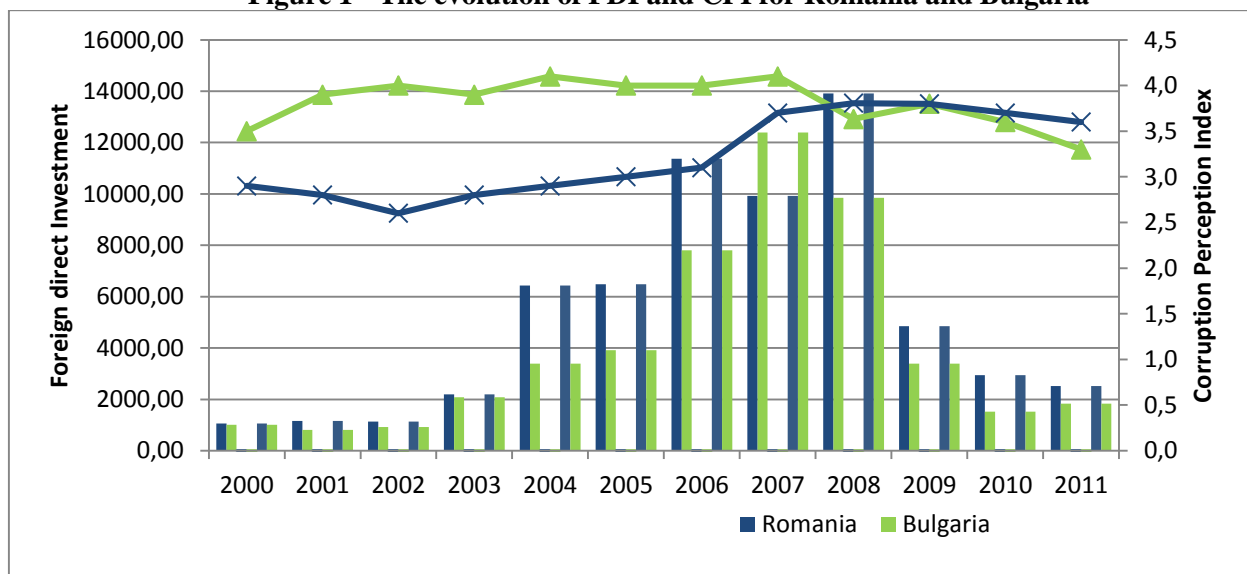
a. Predictors: (Constant), GDP_1, CPI_1

Source: author calculations using SPSS 17.

The qualitative assessment of the impact of corruption on FDI for the countries analyzed confirms the results of empirical analysis.

First of all, the figure 1 shows that Romania and Bulgaria are considered highly corrupted countries. The evolution of the perceived corruption improved over time only for Romania, while Bulgaria marked a decrease of the CPI Index. Regarding to FDI inflows attracted by Romania and Bulgaria we can observe that are correlated with the evolution of CPI index. The decrease of the measure of corruption (meaning a rise in the perceived corruption (0-highly corrupted to 10 – very clean)), correspond with lower values of FDI inflows in the next year.

Figure 1 - The evolution of FDI and CPI for Romania and Bulgaria

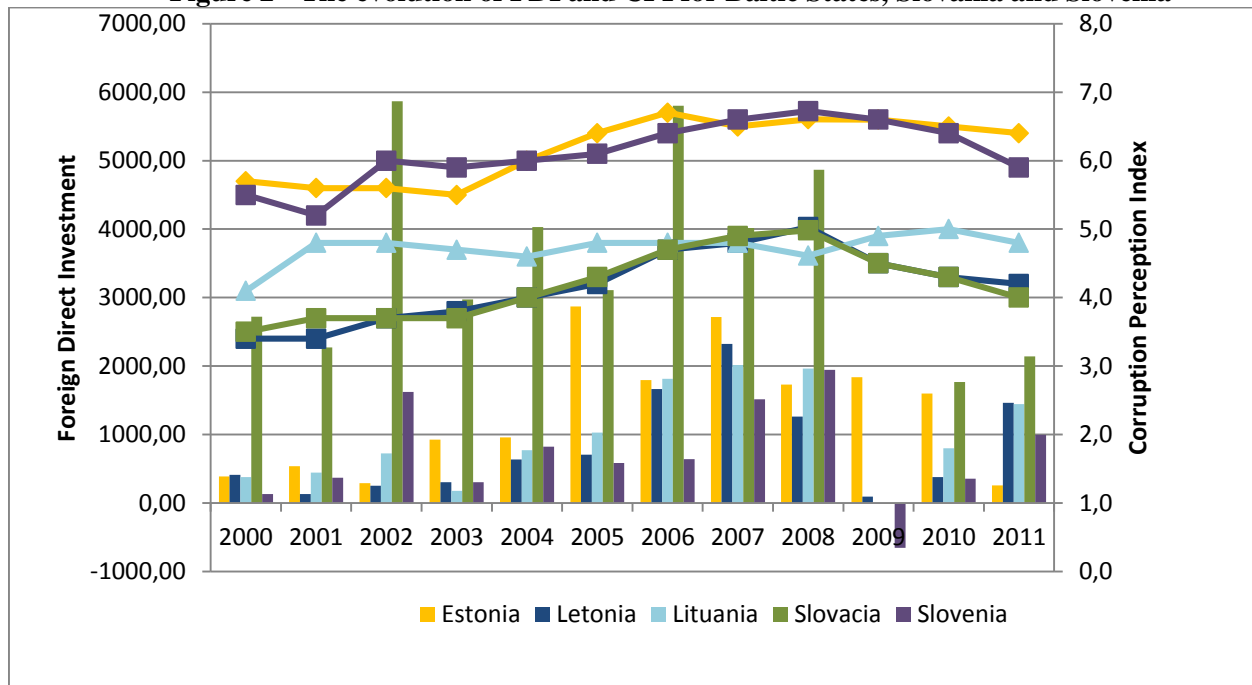


Source: UNCTAD and Transparency International.

Baltic States, Slovakia and Slovenia show the same evolution as Romania and Bulgaria (see figure 2). Still, we must mention that Lithuania, Slovakia and Latvia are perceived as more corrupted countries than Slovenia and Estonia. We must mention that the most free of corruption country of ECEC is Estonia with a CPI score higher than 6.0.

The highest level of FDI inflows are attracted by Slovakia even if the CPI index shows the lowest levels for the countries analyzed. These results can be explained by the active policy promoted by the Slovak government for attracting foreign direct investors (mainly fiscal incentives).

Figure 2 - The evolution of FDI and CPI for Baltic States, Slovakia and Slovenia

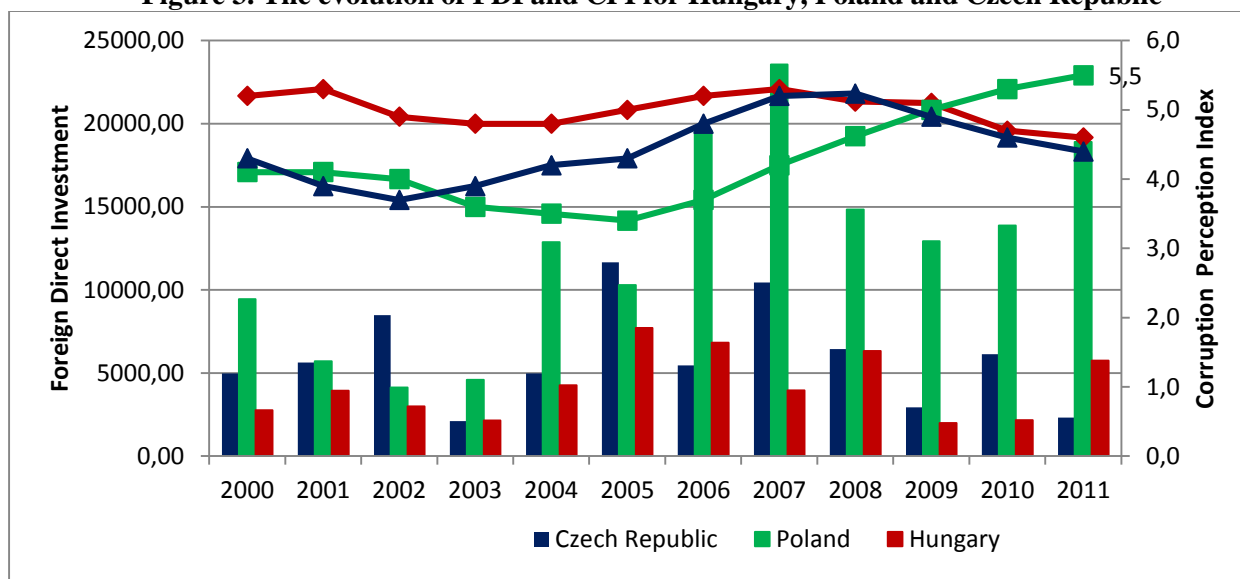


Source: UNCTAD and Transparency International.

Analyzing Poland, Hungary and Czech Republic we can observe a mainly indirect relation between foreign direct investments and CPI. Czech Republic and Hungary have a particularly trend of the perceived corruption showing the same evolution. After a period of reforms and concrete efforts in reducing corruption, the emergence of the economic crises in 2008 marked decreases in the levels of corruption perception index and in FDI inflows.

Poland stands alone in the group (see figure 3). We can see that even if the effect of the economic crises reflects in the levels of FDI inflows, the perceived corruption is constantly improving from 2005 to 2011.

Figure 3. The evolution of FDI and CPI for Hungary, Poland and Czech Republic



Source: UNCTAD and Transparency International.

CONCLUSIONS

FDI receiving host countries expect foreign investments to support economic growth, competitiveness, employment and technological progress. For Central and Eastern European states it was also an expectation regarding the transition process and improve efficiency. But the transition from centralized economy to market orientated states showed many challenges handled by each country analyzed in her way. One of these challenges proved to be the emergence of systematic corruption.

Our analysis focuses on the impact of corruption on foreign direct investment flows attracted by ECE countries. Using as determinants the CPI index and GDP, our results show a negative significant relation between corruption and FDI and a mild positive significant relation between GDP and FDI. These results can be explained by the fact that the foreign direct investors decide to invest or not after a complex analysis of the business environment. So, we can affirm that for Central and Eastern European states the impact of market potential, although high, is diminished by the other factors related with stability and predictability of the regulatory system. Regarding the perceived corruption, our analysis show that are impetuous necessary reforms of public administration in order to reduce all the forms of corruption and bribery. Again, Romania, a highly corrupted country after Transparency International methodology, needs coherent reforms in reducing corruption and in the same time increase the country locational attractiveness for foreign direct investors.

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RATIONAL CHOICE INSTITUTIONALISM AND THE EUROPEAN NEIGHBOURHOOD POLICY

Andrei – Cristian Balasan*
Andreea Maha†

Abstract: *The aim of this paper is to highlight the main aspects regarding the rational choice theory in neo-institutionalism, and the role the EU Neighbourhood Policy has nowadays. The protagonist of the rational choice theory in the new institutionalism remains homo-economicus. The theory of rational choice institutionalism challenges the perfect rationality of the individual, rather than the principle of rational choice itself. ENP is a framework for consolidating the Union's relations with neighbouring countries and aims therefore intensifying cooperation with them in order to establish a zone of prosperity, good neighbourliness, stability and security.*

Keywords: rational choice institutionalism; European Neighbourhood Policy; borders; security; new institutionalism.

JEL Classification: F15.

INTRODUCTION

The rational choice institutionalism represents a complex and extensive topic of discussion and its association with the EU neighbourhood policy makes it difficult to identify. We do not agree with the idea of associating the individual, the actor in the economic life, with the state or the organization which they represent or to which they belong, however, in order to achieve this correlation, we will start this scientific endeavour from the substitution of the man (and his rational choice) in the individual actions of the one representing the interest of each of the 28 member states, which are constrained by institutions to pursue their economic and political interests. Please note, from the beginning, that the protagonist of the rational choice theory in the new institutionalism remains homo-economicus, an individual limited in terms of rationality, and not the state or the organization he represents. Also the individuals are the reasons behind decisions within the European Union, and not the states or political organizations. However, we consider that it is difficult to clearly pinpoint the boundary that separates the individual interest of a person representing the state in a union or organization, from the collective interest. Nevertheless, given some social standards (the mentality, for example) can act directly at the level of person. Furthermore, it is important for us to draw the

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main aspects regarding rational choice theory in neo-institutionalism, but also the role the EU Neighbourhood Policy has nowadays.

1. ACTING FREELY, BUT CONSTRAINED BY RULES

The specialized literature in the field of the new institutionalism (neo-institutionalism) is a very broad one. The common fund of ideas governing this school of thought arises as a result of what its promoters wanted to be, namely, a neoclassical response to the "old institutionalism". Certainly the promoters of this contemporary wave of ideas in social and political sciences were Ronald Coase, Nobel Prize laureate in 1937 for the famous article "The nature of the firm", and Armen Alchian, but the credit for using the first time the term *new institutional economics* is assigned to Oliver Williamson in the 70s (Pohoata, 2009, p. 51). On the same path of "thinking differently", these protagonists were followed by North, Demsetz, Elster, Hayek, Nelson and Aoki. We distinguish in this regard, at least three schools of thought: the historical institutionalism, rational choice institutionalism and sociological institutionalism (Hall and Taylor, 1996, p 950).

The theory of rational choice institutionalism is the toughest response ever given to the neoclassical economics, by challenging the perfect rationality of the individual, rather than the principle of rational choice itself. Therefore, without perfect rationality, the choice made by the neoclassical individual is not eminently wise. The main players in neoclassical economics, the manufacturer and the consumer were precisely modeled and built after this principle of perfect rationality. By simply "limiting" their rationality by the representatives of rational choice institutionalism, a "Pandora's box" has been opened in the field of academic research, attracting a lot of criticism and sparking many controversies, generating, automatically, new areas for research.

Under the new institutionalism and inspired by the American doctrine of social sciences in the 70s, rational choice starts from a different approach of the institutions and their role in the economy (Ivanica, 2006, p. 28). Thereby, the actors act to maximize their utility and the institutions play an important role in solving the collective interests. Ronald Coase named this phenomenon as the "disembodied blood circulation" (Coase, 1998, p. 6, in Ingram and Clay, 2000, p. 525). In their turn, institutions are artificially created by the actors, who have freedom to amend them, in the idea of facilitating future success just through them. Today, more than ever before, especially at the EU level, there are many limitations and regulations. And yet, the actors act free, but are constrained by the

rules. As in any game the rules must be complied, substituted when they are not working or give rise to blockages, and the players are aware that only through these rules they can achieve benefits.

According to Pollack, rational choice theory under the new institutionalism refers to the analysis from the ontological and epistemological perspective of the individual and his relation with the social structures as well as on the role of ideas and material forces in the social life. In other words, Pollack believes that in order to achieve better results both individually and collectively, there must be at least three essential elements: methodological individualism, maximizing the utility and the existence of institutional constraints on the rational choice of the actors involved (Pollack, 2006, p. 33). Strictly speaking, the actors will act pragmatically and realistically, always in the idea of maximizing their utility, acting freely, but within the set of rules (the institutions). It is considered that they take decisions following a rational choice, but they have limited knowledge and limited cognitive capacity (Ingram and Clay, 2006, pp. 526-527). We can talk, especially within the European Union and the newly integrated member states, of an illusion of freedom to decide in a rational way.

Regarding how the institutions are addressed in this new vision of neo-institutionalist, Shepsle considers the institutions as constraints or set of rules, specifically referring to *the laws of states, organizations policies and social standards* (Shepsle, 2005, pp. 1-2). Therefore, in the theory of rational choice institutionalism, institutions restrict the decisions (choices) of the actors so that the best choices of actors are automatically the collective good. At the same time, they create stability and set the agenda of collective actions. It should be noted that, unlike the neoclassical model, the institutions do not occur naturally, but are created artificially by all actors, actors build new institutions to enable a better interaction, but their preferences are not defined or influenced by these institutions (Prisecaru, 2008, p. 141).

2. JUST REDUCING DISPARITIES, NOT EXPANDING?

Officially released since 2004, the EU Neighbourhood Policy (ENP) sought to strengthen economic welfare stability, security and cooperation at regional level at southern and eastern borders of the EU. ENP is a framework for consolidating the Union's relations with neighbouring countries and aims therefore intensifying cooperation with them in order to establish a zone of prosperity, good neighbourliness, stability and security. From this point of view, economic levers represent also an instrument of zonal influence which, not infrequently can take geopolitical issues (Moga, 2011, p. 7). Whatever the reasons for implementing this policy, a fact is that it will lead to the elimination of

economic disparities between these regions and member states will stimulate trade and foreign direct investment.

A controversy in the dispute from the political and economic literature on the ENP is represented by the motivation that lies behind the achievement of strategic partnerships with neighbouring countries. Apparently, as stated by supporters of the traditional theory, it relies on the transforming role of this policy, better said on the "normative power" of the European Union, namely, by harmonizing and aligning the surrounding areas to its policies, without subordinating them to the conditionality principle, so significantly in the last two waves of accession, but also without ensuring them with the promise of their future inclusion in its integrative structures.

Another opinion in respect of the ENP motivation claims that the main reason underlying EU actions is to reduce rationalists interests, namely, from this point of view the Neighbourhood Policy being regarded the second best alternative, after that of becoming a member with full rights (Monastiriotis and Borrell, 2012, pp. 4-5). If for countries like Moldova or Ukraine would exist, in the future, opportunities of integration, for other areas over which the Neighbourhood Policy has effect (North Africa for example) its implementation is made only due to political reasons and security at the borders of the Union, and the states from these territories are not eligible for accession in the foreseeable future (Bordeianu, 2007, p.7). A "sixth" enlargement wave, in the near future, would be a hasty step, hampering governance at the level of the European community, the gaps being still too large.

3. EAST CHALLENGES

The process of economic integration that has been reached at the level of the European Union, as well as the intensification of regional interdependence, clear realities of the contemporary world, involves, in addition to economic benefits, and an unparalleled increase of spatial disparities that exist between the community and the contiguous areas. Precisely in this sense, the approach of the European Union through the Neighbourhood Policy is the one to eliminate large disparities between neighbourhood regions and to create "buffer zones" that separate the community space from non-EU countries.

Even if it does not entirely meet the political expectations of the governments of Eastern countries, in the sense that it does not provide a definite insight for accession, through the Neighbourhood Policy, the EU stretches out a "helping hand" to the states in these regions. The results

that are pursued will be beneficial to both parties. Through various multiplication effects from the economy, the aid granted to disadvantaged regions from the surrounding areas (creating jobs, investments, trade, financial aid, cooperation for research and development) will lead to the possibility of these countries to join the European standards, to institute reforms in strategic areas and to govern according to democratic principles, approaching more and more to the level at which today are situated the majority of the EU members (28).

On the other hand, the European Union will benefit from several advantages such as the reduction of illegal immigration from the East, low transactions in the underground economy, and increasing border security in these areas. Also, as a global player, the EU will benefit from a positive enhanced image after supporting states in border areas.

By creating institutions in these regions, that will facilitate their further development, these discrepancies may disappear. Among these, I consider important harmonizing the legal framework, transforming markets from Eastern Europe in market economies, protecting the private property and also trying to change the mentality of individuals from these states.

After whole decades in which they were used to live life in a communist area, subjected to an ideology and a "real-socialist" way of thinking with a centralized economy and an anti-capitalist mentality, residents of countries such as Belarus, Ukraine, Georgia and Moldova must learn to imitate, to create consumer behaviours, but also patterns of entrepreneurship specific for western economies.

In other words, by creating or modifying these ineffective, nonperforming institutions, through the Neighbourhood Policy, the EU can speed up the process of economic development of these regions. The vast majority of the population from these states came into contact with the values promoted by Western institutions just in a superficial mode. They must first be acknowledged, understood, and then experienced.

CONCLUSION

Followers of the new institutionalism support the idea that "Institutions do matter", but unfortunately, for the countries in the vicinity we cannot, however, speak of an institutional framework, clearly defined, as it is within the EU, where institutions such as the European Council, the European Parliament and the European Court of Justice are interconnected and provide operability and transparency in the European Community.

States targeted by the Neighbourhood Policy are rather related to the European Union by agreements, bilateral policy (ENP), partnerships (the Eastern Partnership), multilateral framework (Black Sea Synergy, the Union for the Mediterranean Sea). Attempts are being made in order to increase the integration of these regions, but for now the actions taken are rather a tentative (and focus more on the business side). At the same time, it should be stated that the geopolitical situation in the regions concerned is not exactly ideal: "the Arab Spring" in the South, East Europe's geopolitical competition with Russia, frozen conflicts (Transnistria). Therefore, we firmly believe that an institutional framework in which should be included the neighbours would be desirable (and, in this case, yes, the institutions coordinating joint activity would matter), but now the EU-ENP institutional link is still modest, almost non-existent.

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EUROPEAN INTEGRATION - A COMPARATIVE PERSPECTIVE BETWEEN ROMANIA AND THE REPUBLIC OF MOLDOVA

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Abstract: *The integration in the European Union is a reality for some countries and a purpose for others. This process generates a lot of benefits for an EU member but also involves important costs. The research investigates the opinion of two different people (Romanian and Moldavian) about the perceived effects of EU integration. The results show that Moldavians are more interested in European Union than Romanians. For Moldavians, the independent economy is considered to be the greatest advantage of their country not being integrated in UE. The perceived disadvantages are the lack of free movement, corruption and low level of general development. For Romanians, the most important perceived advantage for integration in EU is free movement. The biggest disadvantage is that foreign sellers have more benefits than local sellers.*

Keywords: EU integrations; Romania; Republic of Moldova.

JEL Classification: F0, F60.

INTRODUCTION

The process of integration in the European Union generated great transformations and significant changes in the business and social environment. Also, political analysts have study the role of the integration upon the transformation of domestic politics in the new EU member states.

The process of Europeanization is understood as “the change within a member state whose motivating logic is tied to a EU policy or decision-making process” (Ladrech, 2010, p. 2), the “change in national institutional and policy practices that can be attributed to European integration” (Hix and Goetz, 2000, p. 17) or as the “construction, diffusion and institutionalisation of formal and informal rules, procedures, policy paradigms ... which are first defined and consolidated in the making of EU decisions and then incorporated in the logic of domestic discourse, identities, political structures and public policies” (Saurugger and Radaelli, 2008, p. 213).

After the integration, Romania continued to face great political and socio-economic challenges while the EU bodies have continued to closely monitor the reform process in the country: the fight

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against corruption, the transformation of its respective electoral system, the account deficit and inflation, the domestic companies' debts (Andreev, 2009). Shortly after the integration, the economic progress of Romania has been identified as an overall “success story” (Financial Times, 2008).

The integration in the European Union is the strategic and irreversible objective of the external and internal policy of the Republic of Moldova. The legal base of the relations between the two parts is represented by the Partnership and Cooperation Agreement, a document that contributes to political, commercial, economic, social and cultural cooperation. An important step for Republic of Moldova was the RM-EU Action Plan, signed in 2005, a subscription including strategic objectives and defined actions in order to facilitate the integration.

1. ADVANTAGES AND DISADVANTAGES FOR ROMANIA

Many business and academic studies agree that Romania integration in European Union brought a lot of advantages but also some challenges. “Most periods of integration success are followed by periods of stagnation; periods of integration failures are often followed by breakthroughs” (Schneider, Weitsman and Bernauer, 1995, p. 2). Since 2007, Romania faces the challenges of transformation of the Nation State under the impact of European integration: transition from a traditional government to a multi-level system of governance, supranational, transnational, euro-regional, national, regional, local etc., pluralism of the actors involved in the decision-making process and of the shared competences (Dodescu and Chirila, 2012, p. 1179).

Some important advantages are the free capital movement and the increase of competition, decreasing the costs and growing the level of productivity. Under the conditions of a high qualified but cheap workforce, free capital movement can bring benefits for our country. Romanian companies activate on a single European market, are forced to be more competitive, to increase productivity, to implement new and modern technologies. Romania and Romanian companies build their competition on three processes: globalization, economical European Integration and market economy transition. The purpose of Economical European Integration is to obtain mutual advantages by creating a dynamic environment for European economies. A higher level of specialization means more efficient resources relocation, stronger competition between companies, a higher level of productivity, an accelerated economic growth. One of the objectives of Romania's integration in the European Union is the increase of population's social, economic and state welfare (Bacescu-Carbunaru and Condruz-Bacescu, 2009). Open access to labor market encouraged workforce migration and the free movement

of people. At the beginning, in 2007, people from Romania might travel free in EU states but they did not have free access to the labor market (Pociovalisteanu, 2012), they were “European citizens without European employment rights” (Hartman, 2007). This phenomenon attracted both advantages and disadvantages for Romanian citizens. Large groups of migrants were looking for jobs and social aids in other EU countries, good specialists trained in Romania left the country in order to find higher paid jobs. On a global perspective, labor migration has improved both employment policies and the social security systems in European Union. In Romania, this phenomenon led to decreasing labor market imbalances, the reduction of technological development, economic growth, wages and employment in certain activity sectors. Romania could not benefit from its investment in people training by valuing their competences on the jobs (Boboc, Vasile and Todose, 2012, p. 353).

Industrial and agricultural restructuring was necessary in order to honor the conditions for a healthy integration. A more stable legislative and economic environment assures the development of business policies. Access to structural funds allowed the development of agriculture, transport, constructions and tourism industries.

A study made on Romanian SMEs showed that 46.67% of the managers consider that the European integration represents a major opportunity for the undertaken activities. These companies that admit the benefits of the integration activate in constructions field (61.54%), services (53.91%), industry (45.74%), trade (41.91%), tourism (39.39%) and transportation (39.23%) (Nicolescu and Ceptureanu, 2009). The same study indicate that the benefits perceived by the SMEs are: “better access to markets (43.47%), the existence of better potential suppliers and/or cheaper suppliers (38,54%), improved legislation and regulations (35.35%), access to structural funds (32.64%), easier access to new technologies (28,34%), correct public acquisition procedures (12.82%) and a better cooperation for innovation (12.02%)” (Nicolescu and Ceptureanu, 2009, p. 156).

Asaftei and Parmeter (2010, p. 14) investigate the pro-competitive effects of the Free Trade Agreement between Romania and the EU in terms of its effect on companies’ market power. The results show that EU integration appears to increase the competitive pressure, many state-owned firms having difficulties in adjusting to competition from better quality foreign products. Another effect is the bilateral liberalization. After a privatization and restructuring phase, market power became an important determinant of corporate performance.

According to the Innovation Union Scoreboard 2011, regional innovation is one of the most performing in EU, with an average growth rate of over 5%, Romania being one of the catching-up leaders of EU (Dodescu and Chirila, 2012, p. 1179).

As we noticed from literature review, there are many studies presenting different approaches of Romania's integration in the European Union, advantages and disadvantages, cost and benefits. There are also opinions that most costs are in fact investments for improving our life: investments in building and rebuilding freeways, reducing pollution, improving the quality of food and water (Boita and Ardelean, 2011, p. 3). Romania supported the cost of implementing the EU regulations, adjusting to the European legislation, implementing the EU standards, budget contributions as a member, modernizing the economy (Boita and Ardelean, 2011). As general benefits, we can mention economic, monetary, social benefits. From another point of view, there are three significant advantages of the integration: security, prosperity and a superior standard of civilization.

2. ADVANTAGES AND DISADVANTAGES FOR REPUBLIC OF MOLDOVA

There are different economic, political and social specialists' opinions and analysis regarding the advantages and disadvantages of a future integration of Republic of Moldova in the European Union. We mention here the studies of Mihai Patras (2007), Viorel Matasaru (2010) and Iulian Sinzianu (2010). Due to the lack of academic research in this field, we will present some data of the deductive undertakings made by specialists from Republic of Moldova.

During the 2007 Symposium organized by the General Association of the Romanian Economists on the theme "Romania's Integration in the European Union. Challenges and Solutions", Mihai Patras (2007) discusses about the appealing arguments sustaining the integration of Republic of Moldova and also about the consequences of this process. He mentioned the following benefits:

- The high level of economic, social, cultural and political development of member states made them sponsors/granters on European and worldwide context (including CSI countries);
- The Euro cash succeeded only in a few years to balance the USD coin that used to command more than six decades the financial international relations;
- The European Community is formed by states that represent the richest part of Europe, regarding social and economic traditions;
- Democratic principles are promoted in political management in the EU;
- The high level of mutual economic and trade relations (3/4-4/5 of total export trade of EU members);
- the EU is a characterized by stability, not only at an economic level, but also at political and interethnic level;

- the EU is an open community, with a growing efficiency in control.

As consequences of a future EU integration of Republic of Moldova, Patras (2007) mentions:

- Territorial reintegration of RM that will lead to obtaining economic, political, legal, demographic, administrative, decisional, informational, financial, fiscal, banking and scientific integrity, with specific benefits;

- A good change for the international and European status of Republic of Moldova;

- A demographical growth by stopping migration;

- A legal solution for the situation of Moldavian citizens already living in a country from European Union;

- Economical benefits by improving the commercial relations with foreign countries, fact that will generate stability for the economy and for the companies;

- Improving internal and external economic and political management for RM.

Viorel Matasaru and Iulian Sinzianu (2010) consider that the Republic of Moldova has many advantages from a future integration and that these benefits are essential for the progress of this society. They talk about the following benefits:

- Financial advantages and economic growth, accessing European funds, fated to facilitate the administrative reform, the investments in economy and infrastructure;

- The increase of foreign investments level, especially from the EU countries and also a higher credibility for external investors;

- Free movement of people from RM, the possibility for them to legally work and study in the EU countries;

- A stable environment for external relations;

- The access for the agricultures to Common Agricultural Policy, to the subventions, the possibility to apply methods and norms already established by communitarian institutions;

In 2008, the Eurasia Foundation considered necessary the public opinion evaluation regarding the progresses Republic of Moldova made in the process of cooperation with EU and implementation of Action Plan. The results were published in the *Report on the Assessment of Public Perception Regarding the Process of European Integration and Implementation of European Union-Republic of Moldova Action Plan*. The research was made on a sample of 1083 citizens, with ages over 18 years. According to this report, 93.6% of the respondents have heard about EU, 77.7% only know about EU, 46.2% are familiar with European Neighbouring Policy and only 36.6% of them heard about the existence of UE-RM Action Plan. 77% of the respondents support the integration of Republic of

Moldova in the European Union. Most of the Moldavian citizens are interested in EU and in its relations with Republic of Moldova. The main sources of information are TV and radio and 56% of the respondents consider they do not have enough information about EU. TV channels contribute most of all to Republic of Moldova's European integration. According to the same report, 48.7% of the respondents consider that Republic of Moldova adherence to EU will bring more benefits than disadvantages. The accession to EU will contribute to economic development of the country (82.4%), to free movement of the citizens (81.4%), to the influx of foreign investments and new technologies (80.3%), the growth of job number and incomes value (79.9%). The benefits perceived by Moldavian citizens once their country will be a part of EU community are: economic prosperity (16.4%), peace (15.3%), freedom of people circulation, the right to study and work in EU (14.3 %), more jobs (11.6%), material welfare (9.9%). Romania is the country that can offer the best support for RM's integration.

3. COMPARATIVE STUDY OF PERCEIVED ADVANTAGES AND DISADVANTAGES

3.1 Research Methodology

The research question: What are the main advantages and disadvantages of EU integration?

The purpose of the research is to investigate the opinion of two different group of people (Romanian and Moldavian) about the perceived effects of EU integration.

Research objectives:

- (1) Investigating the level of Romanians' interest in European Union;
- (2) Investigating the level of Moldavians' interest in European Union;
- (3) Identifying the perceived advantages and disadvantages of the Romania's Integration in UE;
- (4) Identifying the perceived advantages and disadvantages of the Republic of Moldova's future

Integration in UE. In our research, we focused less on the advantages and disadvantages on macroeconomic level but more on the benefits and costs experienced by people. We approach a practical perspective, investigating people's opinion regarding European Union integration. We choose a country already integrated in this community and another country that prepares its adhesion.

We used both qualitative and quantitative research. As methods, we used documentary research from secondary data, depth interviews and a survey. The sample for depth interviews was represented by ten people, five people from Romania and five from Republic of Moldova (35-50 years). Based

on the results of the qualitative research, we build a questionnaire applied on a sample of 144 subjects (72 people from Romania and 72 people from Republic of Moldova), with ages between 35 and 50 years.

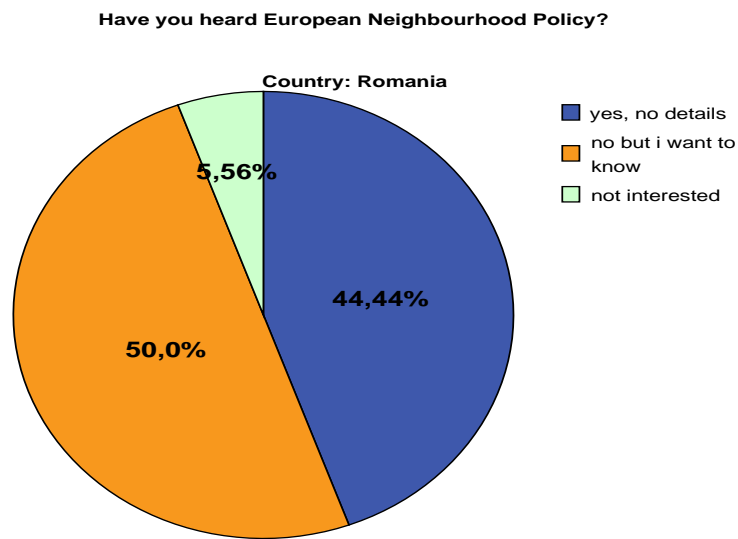
The perceived advantages and disadvantages were rated on a 5 point Likert scale (1- strongly disagree, 5- strongly agree). The level of interest in European Union, were rated on a level from 1 to 5 (1- not very interested, 5- very interested).

3.2 Research results

3.2.1 Investigating the level of Romanians and Moldavians' interest in European Union

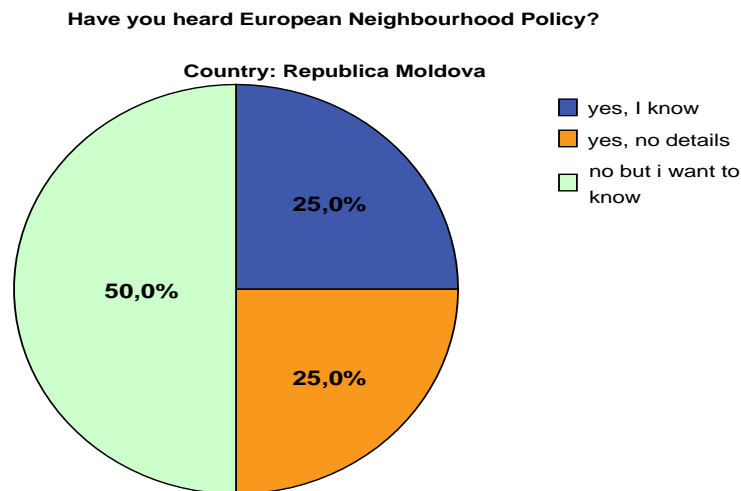
As shown in Figure 1, 44.44% of the Romanian respondents know about European Neighbourhood Policy but they have no details about this. Half of them (50%) want to have information about this subject.

Figure 1 - Information about European Neighbourhood Policy - Romania



As shown in Figure 2, half of the respondents from Republic of Moldova (RM) know about the European Neighbourhood Policy. The other half does not have any information but it is interested in discovering it.

Figure 2 - Information about European Neighbourhood Policy –Republic of Moldova



Regarding the level of interest in European Union, on a level from 1 to 5 (1- not very interested, 5- very interested), the mean from Romanian respondents is 3.72. The mean for RM respondents is 4.5 signifies a big interest in European Union, greater the Romanian's. We used Independent Sample T Test for investigating the difference between the two values. The difference is significant ($t=6.8$,

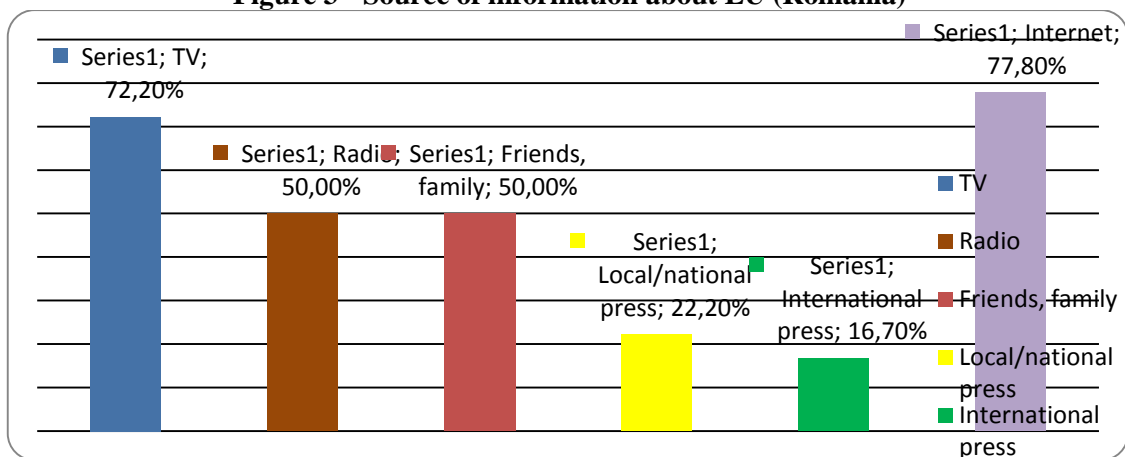
sig=0.00). We also notice the great percentage of RM respondents who declare that are very interested in UE (62.5%), compared with the percentage of Romanian respondents (5.6%).

Regarding the level of interest in the relations of their country with EU countries, on a level from 1 to 5 (1- not very interested, 5- very interested), the mean from Romanian respondents is 4. The mean for RM respondents is 4.37. We used Independent Sample T Test for investigating the difference between the two values. The difference is significant (t=2.6, sig=0.008).

The percentage of RM respondents who declare that are very interested in the relations of their country with EU countries is almost double (62.5%), compared with the percentage of Romanian respondents (33.3%).

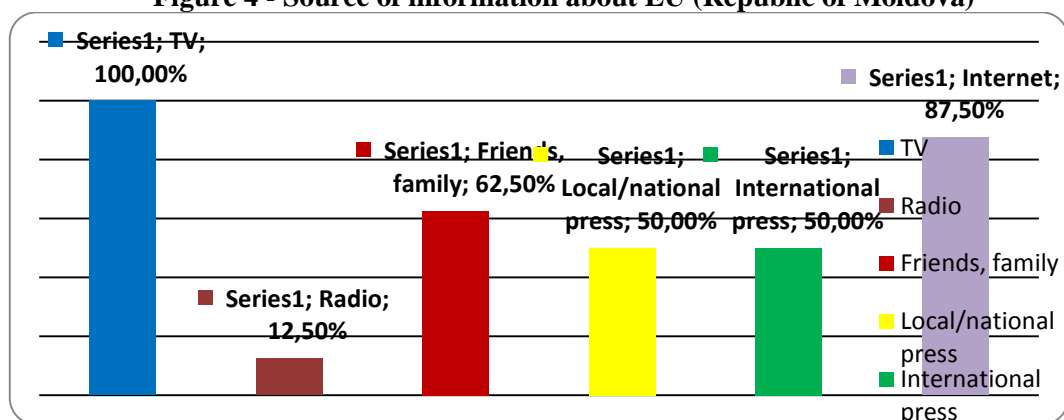
The main sources of information for the Romanian respondents are the Internet (77.8%) and the TV (72.2%), as shown in Figure 3.

Figure 3 - Source of information about EU (Romania)



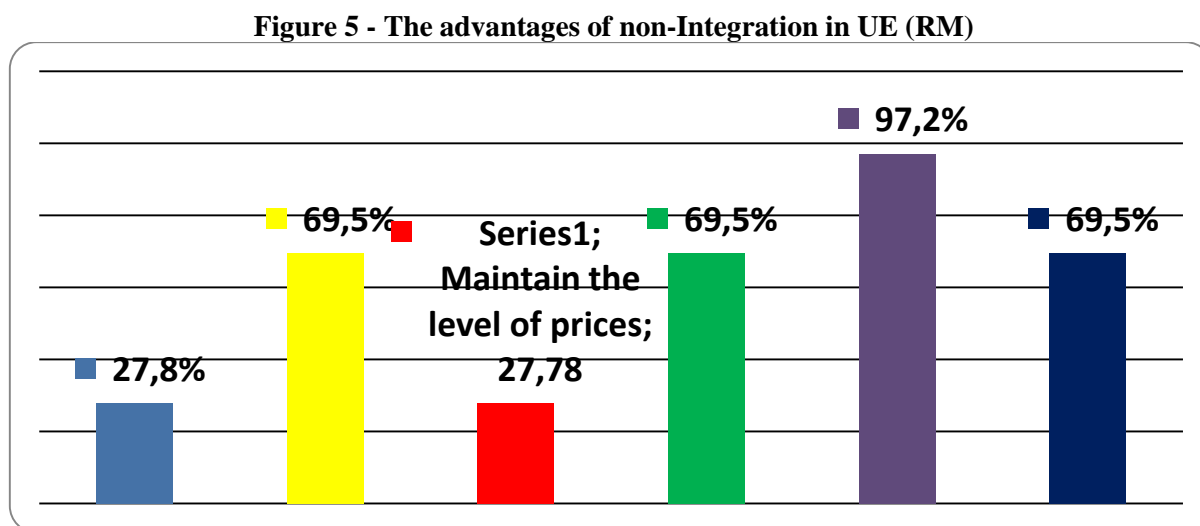
The main sources of information for the respondents from RM are TV (100%) and the Internet (87.5%) (Figure 4)

Figure 4 - Source of information about EU (Republic of Moldova)



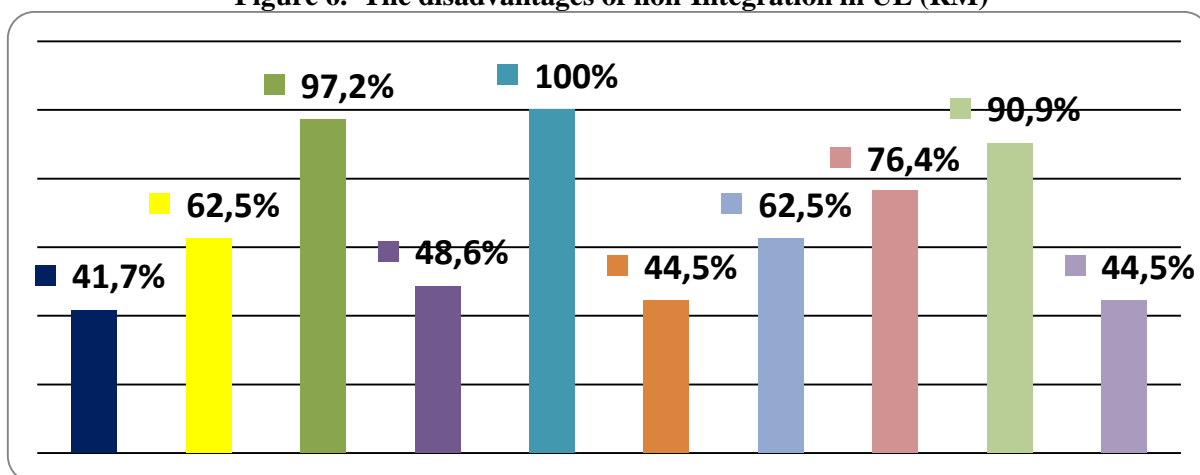
3.2.2. Identifying the advantages and disadvantages of the Integration in UE (for Romania and Republic of Moldova)

We identified a list of advantages for Republic of Moldova (RM) which is not in UE (see Figure 5): Safety for RM citizens, maintaining the status of independent country, maintain the level of prices, a national legislation (not an European one), independent economy, lack of involvement of the European authorities.



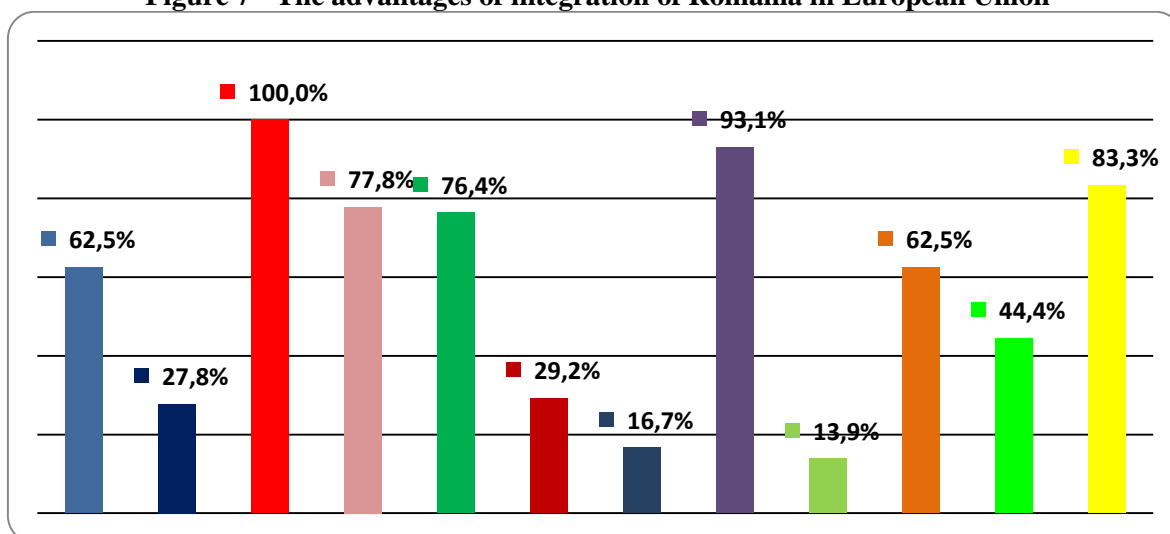
The respondents from RM consider that the greatest advantage of their country not being integrated in UE is the independent economy (97.2%). We also identified the disadvantages for RM not being integrated in European Union (see Figure 6): lack of opportunities for young people, political intolerance, corruption, restricted access to international information, the lack of free movement, the lack of investments, the lack of European funds, no international support, low level of general development and the involvement of Russian Federation. The most important disadvantages are: the lack of free movement (100%), corruption (97.2%) and low level of general development (90.9%).

Figure 6. The disadvantages of non-Integration in UE (RM)



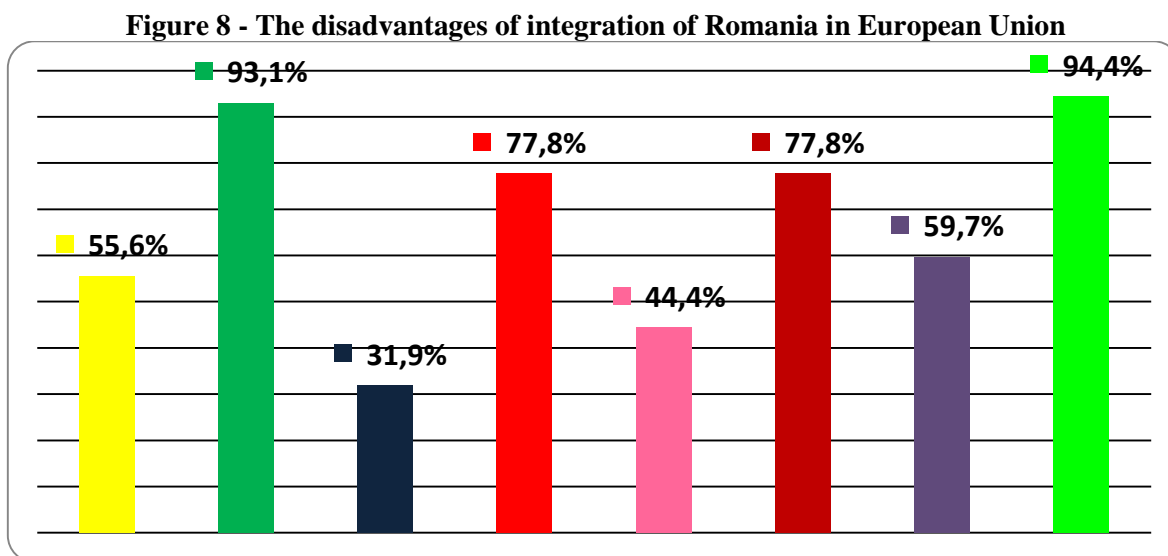
The advantages of integration of Romania in European Union identified in our qualitative study are: educational advantages, higher European quality standards for the products, free movement, access to European funds, political stability, security, access to information, economic benefits, European Parliament representation, justice monitor, the tourism development and more rights as a EU citizen.

Figure 7 - The advantages of integration of Romania in European Union



As shown in Figure 7, the most important advantages are: free movement (100%), economic benefits (93.1%) and more rights as a EU citizen (83.3%). The disadvantages of integration of Romania in European Union identified in our qualitative study are: prices boost (higher prices), higher unemployment rate, losing national identity, free circulation for all categories of citizens who create

a negative image of Romania, disloyal competition, economic restrictions, adopting European regulations and more benefits for foreign sellers to the injury of Romanian producers.



As shown in Figure 8, the most important disadvantages are: more benefits for foreign sellers to the injury of Romanian producers (94.4%) and higher unemployment rate (93.1%).

CONCLUSIONS

Half of people from Romania and Republic of Moldova know about European Neighbourhood Policy. The others want to have more information about this subject. Moldavians are more interested in European Union than Romanians. Also, the percentage of RM respondents who declare that are very interested in the relations of their country with EU countries is almost double compared with the percentage of Romanian respondents. This interest might be explained by the fact that Republic of Moldova is not a EU member, there still are new information for its people, there are great expectation connected with the integration.

The main sources of information for the Romanian and Moldavians are the Internet and the TV. For the Moldavians, the independent economy is considered to be the greatest advantage of their country not being integrated in UE. Other advantages are: maintaining the status of independent country, a national legislation (not an European one) and the lack of involvement of the European authorities. The most important perceived disadvantages for Romania's integration in EU are more benefits for foreign sellers to the injury of Romanian producers and higher unemployment rate.

The most important perceived disadvantages for RM not being integrated in European Union are the lack of free movement, corruption and low level of general development. The most important perceived advantages for Romania's integration in EU are free movement, economic benefits and more rights as a EU citizens.

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THE CURRENT BRICS TRADE BARRIERS ON EU`S EXPORTS

Ludmila Borta*

Abstract: *As a major trading power in the world, the European Union is an important trading partner for five emerging economies, namely Brazil, Russia, India, China and South Africa (the BRICS countries). The EU is particularly interested in protecting the interests of developing countries and supports the idea that trade can promote their economic growth and production capacity. The aim of this paper is to present the main trade barriers on the import of goods that are practised currently by BRICS nations, limiting the EU exporters` access on their markets. These barriers were reported to the European Commission which has the mission to take actions to solve this problem. The European Union considers that the trade barriers applied by these five countries are unjustified.*

Keywords: EU`s exports; BRICS countries; trading partners; trade barriers; market access.

JEL Classification: F13; F51; F53.

INTRODUCTION

In 2001, Jim O`Neill (economist of Goldman Sachs) coined the acronym BRIC to describe collectively Brazil, Russia, India and China. This group of countries is successfully playing an important role in world economy and in international trade, representing a vital driving force for global economic recovery. With BRIC`s admission of South Africa, the biggest economy on the African continent, it has grown into BRICS, the potential for development and cooperation for these five emerging economies being huge. The BRICS countries are working together not only in the field of business and trade. They wish also to have a bigger say in the world politics (Zhitao, 2011, p. 2).

The European Union has developed a network of bilateral trade agreements with many countries and regions in the world, including trade relationship with each BRICS countries. In regard of EU`s imports, the principle is the prohibition of quantitative restrictions, in accordance with GATT principles, being sufficient the common customs tariff. Concerning the EU`s exports, there is a common regime since 1996. One of the objectives of the EU`s trade policy is to harmonise the state`s actions on exports. It is also essential to know which trade regime do trading partners adopt, especially if trade barriers are applied to their imports. Thus, in this paper we chose to present the main current trade barriers, and the tariffs and duties, of BRICS nations.

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1. THE NOWADAYS EU-BRICS TRADE RELATIONS

Brazil is the largest economy in Latin America, over 20% of its total trade is represented by the trade relations with the EU. For this country, the European Union is the first trading partner and, in 2011, its trade with the EU accounted for 37% of the EU's total trade with the Latin America region. Concerning investments, Brazil holds 43% of the entire EU investment stocks in Latin America. Due to the fact that in the last five years the EU-Brazil bilateral trade has grown, this trade relationship became more dynamic and complementary.

As to the trade relationship between the European Union and Russia, they have negotiated a Partnership and Cooperation Agreement since 1997, regulating the economic and politic relations between them. For Russia, the European Union is the first trading partner. For the EU, this country is the 3rd trading partner. In 2008, the economic and financial crisis has interrupted the trend of EU-Russia trade (until that year, this showed steep growth rates), Russia adopting unilateral measures.

India, combining a growing market of more than 1 billion people, is an emerging global economic power and an important trade partner for the European Union. Through the EU-India Free Trade Agreement negotiations launched in 2007, both sides hope to increase their trade in goods and services and investment. Between 2003 and 2011, the value of the EU-India trade grew from approximately 29 billion euro to 80 billion euro.

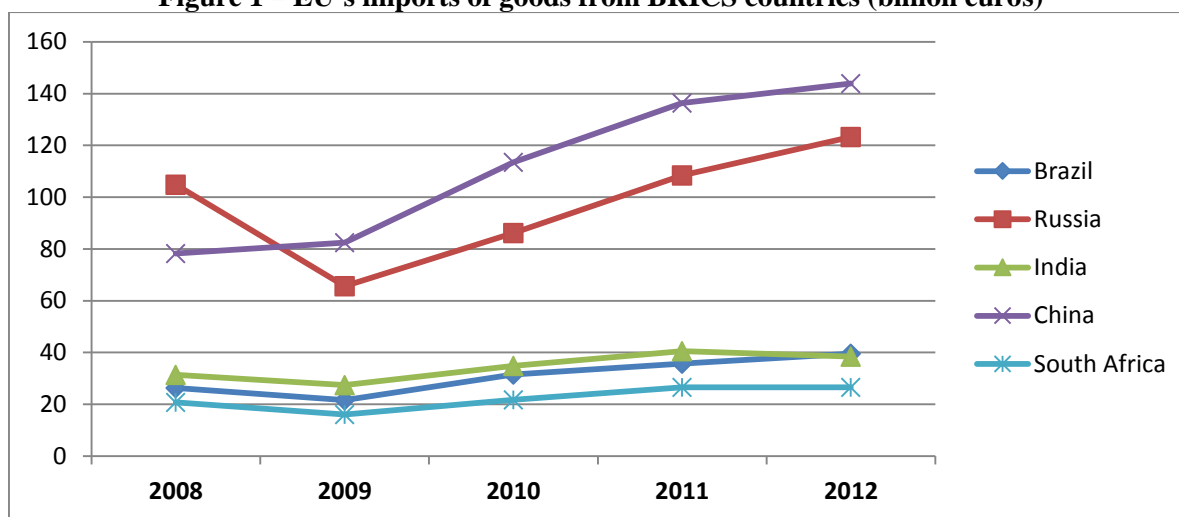
For China, the European Union is the biggest trading partner and also an important source of imports. The EU-China trade now counts well over 1 billion euro a day. The European Union is interested to open trading relations with this country. Thus, at the 5th EU-China Summit (2012), both sides agreed to lunch negotiations on a bilateral investment agreement in the coming years. They are two of the biggest traders in the world, China being now the EU's 2nd trading partner behind de US. The trade between China and the EU has increased dramatically in recent years.

South Africa is a member of the African Caribbean Pacific group (ACP) of countries and is the European Union's largest trading partner in Africa, although this country is not one of the strongest of sub-Saharan Africa's economies. The EU-South Africa Trade, Development and Co-operation Agreement governs the trade relations and development co-operation between this two trading partners, establishing a free trade area that covers 90% of EU-South Africa bilateral trade (Countries and regions, 2013).

As for the EU's imports from Brazil, these were of approximately 37 billion euro in 2012 (2.1% of total EU's imports). Brazil's imports are dominated by primary products (agricultural products –

41%, Brazil being the biggest exporter of these products to the European Union; fuels and mining products – 31%). Also, manufactured products represent around one fourth of EU imports from Brazil. Concerning Russia, the exports of this country to the European Union were of 213.2 billion euro in 2012 (12% of total EU`s imports), and are dominated by raw materials (in special, oil and gas). For these products, Russia has committed to freeze or reduce its export duties. The value of EU`s imports of goods from India, in 2012, was 37.3 billion euro (2.1% of total EU`s imports). The EU`s imports from China are dominated by industrial and consumer goods, and, in 2012, were of 290 billion euro (16.2% of total EU`s imports). From South Africa, the value of EU`s imports was 20.5 billion euro in 2012 (1.1% of total EU`s imports). These are growing and their composition is becoming more diverse, being dominated by fuels and mining products, machinery and equipment, and other semi-manufactured goods (Countries and regions, 2013).

Figure 1 – EU`s imports of goods from BRICS countries (billion euros)

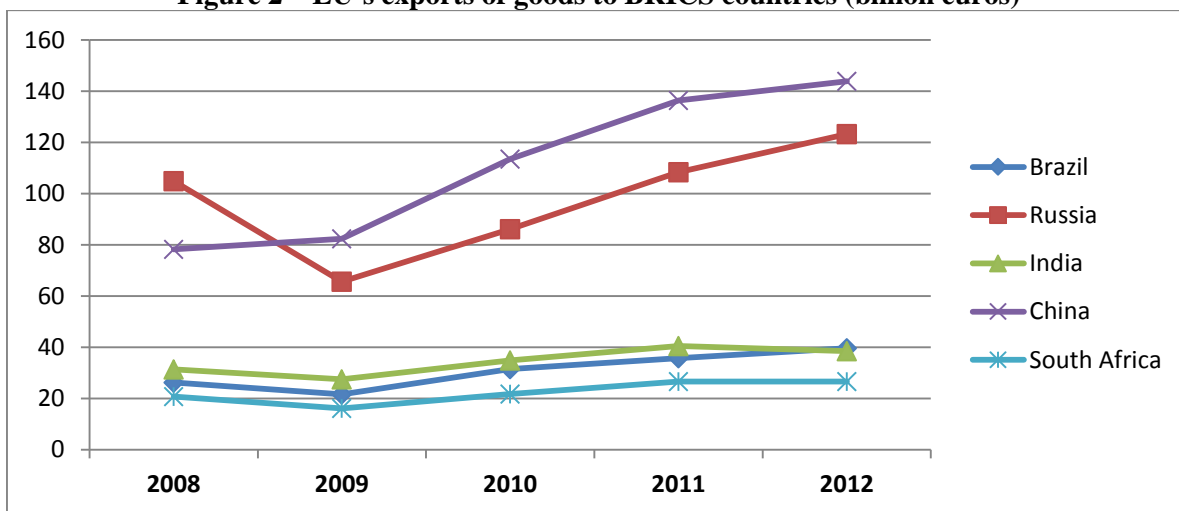


Source: Own processing after the European Commission Statistics.

The economic and financial crisis of 2007-2008 had a negative impact on trade relations not only for the EU and BRICS, but also for all countries in the world. As a result, in 2009 compared to 2008, the exports from this group of countries to European Union have decreased: namely, from Brazil with 28%, from Russia with 34%, from India with 14%, from China with 13.5%, and from South Africa with 22%. In 2012, compared to 2009, the level of EU imports from BRICS countries significantly increased, especially from China and Russia (see Figure 1). Thus, compared to 2009, the BRICS exports to European Union have increased in 2012 with: 43% – Brazil, 80.5% –Russia, 47% – India, 35% – China, 7% – South Africa.

Considering EU's exports to Brazil, these are dominated by manufactured products. In 2012, the value of these was 39.5 billion euro (2.3% of total EU's exports). But trade balance of the European Union registered a trade deficit in goods with Brazil and had a surplus in commercial services trade. The EU's exports to Russia were of 123 billion euro in 2012 (7.3% of total EU's exports) and are dominated by agricultural products, machinery, transport equipment and chemicals. The EU's exports to India were of 38.5 billion euro in 2012 (2.3% of total EU's exports). To China, the EU exports are represented by machinery and equipment, chemicals, aircraft, and motor vehicles. In 2012, the value of these was 144 billion euro (8.5% of total EU's exports). Concerning the EU-China bilateral trade in services, the EU's exports of services are less than 20% of EU's exports of goods. The EU Trade Balance registers a significant trade deficit with China, this being in part a reflection of the global and Asian value chains and, also, in part, due to remaining market access barriers in China. The South Africa's imports from European Union are dominated by chemicals, machinery and equipment, and other semi-machinery, and, in 2012, were of 27 billion euro (1.6% of total EU's exports) (Countries and regions, 2013).

Figure 2 – EU's exports of goods to BRICS countries (billion euros)



Source: Own processing after the European Commission Statistics.

The economic and financial crisis of 2007-2008 had a negative impact on the EU-BRICS trade relations. As a result, in 2009 compared to 2008, the European Union's exports to only four of these five countries have decreased with: 18% – Brazil, 37% – Russia, 12.5% – India, 23% – South Africa. But, China's imports from EU have increased with 5.3% during this period. In Figure 2, we can see that, between 2009 and 2012, the level of EU's exports to BRICS countries has increased significantly, especially from China and Russia, a similar trend to that of EU's imports from this five

emerging economies. Thus, compared to 2009, the European Union`s exports to BRICS nations have increased in 2012 with: 84% – Brazil, 88% – Russia, 40% – India, 75% – China, 65.5% – South Africa.

2. EU`S ACCESS ON BRICS MARKETS: ONGOING DISPUTES

The EU strongly supports the World Trade Organisation which sets a number of rules to facilitate global trade liberalisation and to ensure equitable treatment for all participants. Nowadays, the European Union is, at the same time, an important member of WTO and a part of several bilateral trade agreements with a significant number of countries and regions in the world (Dobre, 2010, p. 205).

The EU`s exporters are currently faced with problems in trade relations with third countries. These problems are characterized, in especially, by: discriminatory regulations or standards and the traditional import tariffs or quotas. The aim of the EU`s strategy to ensure its access on trading partners` markets is to remove these barriers. In this section we chose to present the current main trade barriers of BRICS which affect the European Union`s exports, and which were reported to the European Commission.

2.1. Brazil

Over the last two years, Brazil`s market is relatively high protected with an applied customs averaging tariff of 12%, being one of the countries that applied the highest number of new trade restrictive measures. To protect its exports, the European Union encourages Brazil to reduce tariff and non-tariff barriers. Brazil enjoys trade preferences with the EU under the Generalised Scheme of Preferences (GSP) (Countries and regions, 2013).

Table 1 – Brazil’s import tariffs for agricultural and non-agricultural products

Products	Year of MFN applied tariff	Binding coverage	Frequency distribution							
			Simple average		Duty-free		Duties > 15%		Non ad valorem duties in %	
			Bound	MFN applied	Bound	MFN applied	Bound	MFN applied	Bound	MFN applied
in %										
Agricultural	2011	–	35.4	10.3	2.7	6.2	95.7	15.5	0	0
Non-agricultural	2011	100	30.8	14.2	0.7	5.2	96.5	40.4	0	0

Source: Own processing after *World Tariff Profiles*, WTO, 2012, available on http://www.wto.org/english/res_e/booksp_e/tariff_profiles12_e.pdf.

The data in Table 1 corresponds to the fiscal year – or year of MFN (Most Favoured Nation) applied tariff – of 2011. During this year, Brazil enacted full binding coverage (100%) for non-agricultural products. The simple average of final bound duties, excluding unbound tariff lines was higher for both agricultural and non-agricultural products compared to the simple average of MFN applied duties (see Table 1). In regard to duty-free, partially subheadings of this are taken into account on a *pro rata* basis. Brazil has applied more both duty-free of final bound duties and duty-free of MFN applied duties on agricultural products than for non-agricultural products. In 2011, Brazil has not resorted to non-ad valorem duties. This country was more interested to apply the final round duties over 15% on both agricultural and non-agricultural products.

Considering trade barriers applied by Brazil, an important measure is represented by *export taxes on hides and skins*. Exports of skins, bovine raw hides and wet-blue are subject to an ad-valorem export tax of 9%. To solve this problem, the European Union took the following two actions, namely: multilaterally (Doha Development Agenda) – NAMA (Non-agricultural market access) negotiations, bilateral request being issued and negotiations will take place in the context of the World Trade Organisation (Doha round); and bilaterally – this being raised in several Joint Committees.

Sanitary and Phytosanitary (SPS) measures: The import of several agricultural products (pears, apples, nuts, cherries, plums etc.) is restricted by phytosanitary rules. In the last years, no progress was observed in regard to actions taken by the European Commission. The import approval of new products, new plants or new plant varieties can take several years. These measures are applied by Brazil also on import of bovines and bovine products. This country does not allow the import of bovines and bovine products due to the current bovine spongiform encephalopathy (BSE) import conditions. The European Commission has raised this issue with the Brazilian authorities to have a full and updated understanding of the arguments of Brazil. Also, Brazil’s Sanitary and Phytosanitary measures are the lack of a swift pre-listing provided by this country to all EU Member States

(resulting in an adverse impact on trade) and the fact that Brazil refused to recognize regionalization to certain EU Member States (resulting in unjustified import restrictions on exports of pork products and pigs). The European Commission takes the following actions: raised in several Joint Committees and in the context of the World Trade Organisation (WTO) Trade Policy Review of Brazil; and in the margins of several WTO Sanitary and Phytosanitary Committee meetings (Trade Barriers, *n.d.*).

2.2. Russia

This country has a strong trade relationship with the European Union. One of the main objectives of the Partnership and Cooperation Agreement is to promote the EU-Russia trade and investment. The current negotiations of a new EU-Russia Agreement should provide a comprehensive framework for bilateral relations with stable, predictable and balanced rules for bilateral trade and investment relations. As a member of WTO, according to the European Commission, Russian authorities will bring down the level of import duties, improving market access for EU businesses and, also, consumers of this country will gain from both lower prices and increased competition. To protect certain sectors, Russia has introduced new protectionist measures at a time when a liberalisation of the trade regime would have been expected (Countries and regions, 2013).

Table 2 – Russia`s import tariffs for agricultural and non-agricultural products

Products	Year of MFN applied tariff	Binding coverage in %	Simple average		Frequency distribution					
			Bound	MFN applied	Duty-free		Duties > 15%		Non ad valorem duties in %	
					Bound	MFN applied	Bound	MFN applied	Bound	MFN applied
Agricultural	2011	–	–	14.3	–	7.8	–	17.3	–	29.8
Non-agricultural	2011	–	–	8.7	–	14.5	–	8.3	–	10.5

Source: Own processing after *World Tariff Profiles*, WTO, 2012, available on http://www.wto.org/english/res_e/booksp_e/tariff_profiles12_e.pdf.

The data in Table 2 corresponds to the fiscal year – or year of MFN (Most Favoured Nation) applied tariff – of 2011. In this year, the Russia`s simple average of MFN applied duties was higher for agricultural products than for non-agricultural products. Considering duty-free, partially subheadings of this are taken into account on a *pro rata* basis. Russia has applied more duty-free of MFN applied duties on non-agricultural products than for agricultural products. In 2011, Russia has

resorted to more non-ad valorem duties on agricultural products. This country was more interested to apply MFN applied duties over 15% on agricultural products.

Concerning the trade barriers applied by Russia, an important measure is represented by *non-tariff measures on electronics sector*. This country classifies all encryption products (including mobile phones) as sensitive risk products for which an expensive and very burdensome licensing procedure needs to be followed. This issue is under discussion in the framework of Russia's WTO accession negotiations.

This country has used the *import barriers on wines and spirits*. For many years the European Union's importers have faced difficulties in entering the alcohol market of Russia, largely due to the introduction of a number of legislative initiatives and also of burdensome requirements. Nowadays, some of the barriers experienced by the alcohol sector include: licences for white spirits; reporting system for excise stamps (the importers must report on the use of each individual sequential excise stamp – hundreds of pages in written reports are submitted to customs –, this procedure being discriminatory with them, because the local producers are only required to report on product serial numbers. The European Commission doubts Russia's commitment to solve the discrimination by also increasing reporting requirements for domestic producers); additional second guarantee (despite being abolished in 2007, Russian customs are still asking for additional documents and guarantees. The Federal Customs Service has confirmed that these fees are illegal and informed the regional customs points about this).

Considering *Sanitary and Phytosanitary (SPS) measures on pesticide and antibiotic residues*, so far Russia has trade-restrictive measures based on unclear scientific backgrounds or disproportionate enforcement decisions. These practices are not compatible with modern norms and standards applicable to SPS field, posing numerous problems to EU producers and a substantial burden to EU exporters of agricultural and plant products to Russia. The fact that this country is the first export market for European Union of meat dairy and vegetables, and a key market for many other sectors of agricultural products, restrictions in this area present a direct risk for companies operating in this sector. In 2011, Russia committed to take a number of strong actions in the SPS field by the date of its WTO accession.

As regards *SPS measures on milk and dairy products*, Russia chose to introduce sanitary requirements which differ from international standards. Thus, the establishments shall have valid contracts with Russian importers for milk products supplied. The European Commission has protested against these requirements, which go even beyond WTO Sanitary and Phytosanitary issues,

requesting information directly and through the World Trade Organisation accession negotiations (Trade Barriers, *n.d.*).

2.3. India

Nowadays, India maintains substantial tariff and non-tariff barriers to imports and imposes a number of non-tariff barriers, hindering trade with the European Union. Thus, negotiations for a comprehensive EU-India Free Trade Agreement were started in June 2007 and are ongoing. This country enjoys trade preferences with the EU under the GSP. According to the European Commission, some progress has been made to dismantle trade barriers in India, in the last few years. Thus, export restrictions on cotton and security requirements for telecommunication equipment were removed in 2012, and the progress has also been achieved with regard to sanitary and phytosanitary rules. The EU-India trade negotiations cover: access to each other's markets; the framework for investment; the rules that frame trade, such as intellectual property and competition; sustainable development, growth in trade is in tandem with the environment, social and labour rights (Countries and regions, 2013).

Table 3 – India`s import tariffs for agricultural and non-agricultural products

Products	Year of MFN applied tariff	Binding coverage	Frequency distribution							
			Simple average		Duty-free		Duties > 15%		Non ad valorem duties in %	
			Bound	MFN applied	Bound	MFN applied	Bound	MFN applied	Bound	MFN applied
Agricultural	2010	–	113.1	31.4	0	5.9	98.6	81.4	0.3	0.3
Non-agricultural	2010	69.8	34.6	9.8	3.1	3.1	66.2	6.7	6.0	5.7

Source: Own processing after *World Tariff Profiles*, WTO, 2012, available on http://www.wto.org/english/res_e/booksp_e/tariff_profiles12_e.pdf.

The data in Table 3 corresponds to the fiscal year – or year of MFN (Most Favoured Nation) applied tariff – of 2010. In this year, India adopted the binding coverage of 69.8% for non-agricultural products. The simple average both of final bound duties excluding unbound tariff lines and of MFN applied duties were higher for agricultural products. Considering duty-free, partially subheadings of this are taken into account on a *pro rata* basis. India has applied more duty-free of final bound duties on non-agricultural products and more duty-free of MFN applied duties on agricultural products. In 2011, India has resorted to more non-ad valorem duties on non-agricultural products. This country

was more interested to apply both final round duties over 15% and MFN applied duties over 15% on agricultural products.

India applied *standards and other technical requirements on medical devices*. Thus, the authorities of this country have decided that, at the import moment, these devices must have a valid shelf life not less than 60% of the original shelf life. This procedure discriminates against importers in favour local producers, for which this requirement does not apply. In present time, the European Commission is closely monitoring the decision of India to draft new legislative requirements for medical devices which applies to imported goods as well.

In regard of the *imports restrictions on cosmetics and perfumes*, the method of calculation for the additional customs duties (put in place in this country for imports of these products) represents a problem. Since 2001, this type of duties is calculated in India on the flat-rate basis of 16% of the MRP (Maximum Retail Price) minus one rabais. The European Commission argues that this method is not relevant for imported products. Also, in 2007, the Indian authorities announced changes to Drugs and Cosmetics Rules, introducing restrictive requirements to place cosmetic products legitimately on the India`s market without any increase of product safety for the consumers.

India applied *export taxes on iron, steel and non-ferrous metals sector*. In 2011, the government of this country has increased the rate of export duty for all types of iron (previous: 5% - iron ore fines; and 15% - iron ore lumps) at a unified level of 20% ad-valorem. Also, export duties are applied by India on raw and semi-finished leather. In 2000, this country lifted its export restrictions in the leather sector. At the same time, the export duty on raw hides and skins and certain semi-finished leather was raised from 25% to 60% (the highest rate in the world). This issue has been at the Agenda of all bilateral and multilateral meetings between the EU and India.

Considering the *Sanitary and Phytosanitary measures*, in India, the new regulations *on import of plants and plant products* include bureaucratic procedures for dealing with import applications, not being trade friendly. The European Union continues to raise this issue with India in different forums. Also, this country applied unjustified import restrictions on a number of animals and animal products relating to AI (Avian Influenza). Since 2004 (when India started applying an import ban on animals and a range of animal products from the whole territory of a Member State with Highly Pathogenic AI), the European Union, together with other trading partners, have consistently raised this problem in all available forums, and in every bilateral meetings. In regards to India`s import conditions for dairy, this requires a number of measures which are considered overly trade restrictive

and which are not in line with international standards. The European Union continues to raise this issue with India in the different forums.

Concerning the the *tariff levels of imported wines and spirits*, in India, spirits are considered to be affected by discriminatory measures, hindering their internal distribution and offering for sale. In 2005, the industry of the European Union initiated a Trade Barrier Regulation (TBR) case, as the result of which the Commission confirmed the high and discriminatory nature of customs duties and taxes on wines and spirits imported into India. The European Commission started WTO dispute procedures at the end of 2006 (Trade Barriers, *n.d.*).

2.4. China

China is one of the world's largest economies and an important trading partner for the EU, being an increasingly important political power. China's rapid development continues to offer huge opportunities, with significant potential for further expanding trade and investment and strengthening of the relations. In China, the practice of non-tariff measures and inadequate protection and enforcement of intellectual property rights may discriminate against foreign companies. An important step is the decision to launch EU-China negotiations bilaterally. A major trade obstacle is represented by Chinese export restrictions on raw materials, being imposed by this country a set of export restrictions, including export quotas, export duties and additional requirements. These measures limit the companies` access of the EU to rare earths. The EU considers that the Chinese restrictions are in violation of general WTO rules (Countries and regions, 2013).

Table 4 – China’s import tariffs for agricultural and non-agricultural products

Products	Year of MFN applied tariff	Binding coverage	Frequency distribution							
			Simple average		Duty-free		Duties > 15%		Non ad valorem duties in %	
			Bound	MFN applied	Bound	MFN applied	Bound	MFN applied	Bound	MFN applied
			in %		Tariff lines (in %)					
Agricultural	2011	–	15.7	15.6	6.0	5.9	35.6	34.6	0	0.5
Non-agricultural	2011	100	9.2	8.7	6.5	7.8	13.4	11.6	0	0.5

Source: Own processing after *World Tariff Profiles*, WTO, 2012, available on http://www.wto.org/english/res_e/booksp_e/tariff_profiles12_e.pdf.

The data in Table 4 corresponds to the fiscal year – or year of MFN (Most Favoured Nation) applied tariff – of 2011. In this year, China adopted full binding coverage (100%) only for non-agricultural products. The simple average both of final bound duties excluding unbound tariff lines and of MFN applied duties were higher for agricultural products. Considering duty-free, partially subheadings of this are taken into account on a *pro rata* basis. China has applied more both duty-free of final bound duties and duty-free of MFN applied duties on non-agricultural products. In 2011, Brazil has resorted to only non-ad valorem duties of MFN applied duties on both agricultural and non-agricultural. This country was more interested to apply both final round duties over 15% and MFN applied duties over 15% on agricultural products.

As regards to the *sandards and other technical requirements*, the European Union’s industry is concerned with the lack of transparency of China's regulatory *in the information and communication technology (ICT) sector*. These practices contribute to a serious problems in regard to access on China’s market for foreign and foreign-invested companies. The Chinese companies refuse to enter into negotiations for licensing agreements with the EU’s companies, which causes huge losses to European Union’s companies. The EU have raised this issue on many discussions with China.

China continues to practice *high tariffs on textile and clothing*, even though its import tariffs have been lowered step by step since 1994. The applied duties have been further reduced as a result of Chinas accession to the World Trade Organisation. The main role of these customs duties is significant and renders European companies less competitive on the Chinese market, preventing producers of low medium range products to penetrate the Chinese market.

Considering the *Sanitary and Phytosanitary measures*, China applied a *ban an on ornamental birds, wild birds and their products unless heat treated*, due to HPAI (Highly Pathogenic Avian Influenza), for some EU Member States; *and import ban on live bovines meat and meat products* (none of the dossiers submitted by the EU Member States have been evaluate). Also, in regard of this

type of measures, the European Union applies the principle of pre-listing to China and to all other trading partners. The Chinese procedure causes enormous delays and obstacles to market access for EU exporters of, in particular, fresh meat and meat products. The issue has been raised at a political level during the High Level Economic and Trade Dialogue between the European Union and China. As this issue is a priority, it has been raised whenever possible with the aim of obtaining facilitation (Trade Barriers, *n.d.*).

2.5. South Africa

South Africa joined the Economic Partnership Agreement negotiations as part of the Southern African Development Community Group in 2007. This country has opted not to join at this stage as its trade relations with the EU which are governed by the Trade, Development and Co-operation Agreement, concluded in 1999. The EU is South Africa's most important development partner, a large part of EU-South Africa trade being now subject to preferential rates. Since 2000 (the signing of the EU-South Africa agreement), trade in goods between this two partners has increased by more than 120%. This goes to show that EU-South Africa trade is more than day-to-day trade and that the trade ties are solid and dynamic (Countries and regions, 2013).

Table 5 – South Africa's import tariffs for agricultural and non-agricultural products

Products	Year of MFN applied tariff	Binding coverage <i>in %</i>	Simple average		Frequency distribution					
					Duty-free		Duties > 15%		Non ad valorem duties in %	
					Bound	MFN applied	Bound	MFN applied	Bound	MFN applied
Agricultural	2011	–	39.2	9.1	21.8	45.3	72.2	24.4	0	14.3
Non-agricultural	2011	95.8	15.8	7.5	13.5	63.7	35.0	20.3	0	0.4

Source: Own processing after *World Tariff Profiles*, WTO, 2012, available on http://www.wto.org/english/res_e/booksp_e/tariff_profiles12_e.pdf.

The data in Table 5 corresponds to the fiscal year – or year of MFN (Most Favoured Nation) applied tariff – of 2011. In this year, South Africa adopted binding coverage of 95.8% for non-agricultural products. The simple average of final bound duties excluding unbound tariff lines was higher for both agricultural products and non-agricultural products compared to simple average of MFN applied duties. Considering duty-free, partially subheadings of this are taken into account on a *pro rata* basis. South Africa has applied more duty-free of MFN applied duties on both agricultural

and non-agricultural products. In 2011, South Africa has resorted to only non-ad valorem duties of MFN applied duties. This country was more interested to apply final round duties over 15% on both agricultural and non-agricultural than MFN applied duties over 15%.

In regard of trade barriers, South Africa resorted to *Sanitary and Phytosanitary measures*. Unjustified import restrictions *on pork and pork meat* due to measures against Porcine Reproductive and Respiratory Syndrome (PRRS). Most recently, South Africa has notified to the WTO the new import requirements concerning PRRS for WTO Members to comment. Some Member States are able to export some kinds of pork meat products to South Africa. The EU Delegation in South Africa and the European Commission are in close contact with South African authorities in order to follow the legislative activities on the issue (Trade Barriers, *n.d.*).

CONCLUSIONS

The European Union is the bigger trading partner for five emerging economies that represents the BRICS group, namely Brazil, Russia, India, China and South Africa. Even though, these countries have resorted to apply trade barriers on imports of foreign producers, creating difficulties for the EU's exporters in regard of the access on BRICS markets.

After an analysis of trade relations between the European Union and BRICS, we observed that both imports and exports of the EU with each these five countries are represented by a certain category of products. Thus, the EU's imports are dominated by: primary products (especially, agricultural products, and fuels and mining products) and manufactured products (machinery, transport equipment etc.) – from Brazil; raw materials (especially, oil and gas) – from Russia; industrial and consumer goods – from China; fuels and mining products, machinery and equipment, and other semi-manufactured goods – from South Africa. The EU's exports to BRICS countries are dominated by: manufactured products – to Brazil; agricultural products, machinery, transport equipment and chemicals – to Russia; machinery and equipment, chemicals, aircraft, and motor vehicles – to China; chemicals, machinery and equipment, and other semi-machinery – to South Africa. The EU-India trade is characterized also by primary products, manufactured products etc.

Nowadays, the EU's exporters are faced with problems in trade relations with BRICS countries, their access on BRICS markets being limited by discriminatory regulations or standards, and the traditional import tariffs or quotas. We analysed trade barriers of these five emerging economies, which were reported to the European Commission. Thus, we found that the current main trade barriers

of BRICS which affect also the European Union`s exports are: Sanitary and Phytosanitary (SPS) measures on import of several agricultural products, and bovines and their products, and export taxes on hides and skins – of Brazil; non-tariff measures on electronics sector, import barriers on wines and spirits, SPS measures on pesticide and antibiotic residues and on milk and dairy products – of Russia; standards and other technical requirements on medical devices, import restrictions on cosmetics and perfumes, export taxes on iron, steel and non-ferrous metals sector, SPS on import of plants and plant products, tariff levels of imported wines and spirits – of India; standards and other technical requirements in the information and communication technology sector, high tariffs on textile and clothing, SPS on wild birds and their products and on bovine and their product – of China; SPS on pork and pork meat – of South Africa.

Thus, the five emerging economies that formed BRICS have resorted to apply trade barriers, according to imported goods of each country, on following sectors: agriculture and fisheries, textiles and leather, chemicals, pharmaceuticals, cosmetics, telecommunications equipment, electronics, wines and spirits, iron and non-ferrous metals. The European Commission considers that these measures are unjustified.

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ANALYSIS OF THE RETURNS AND VOLATILITY OF THE ENVIRONMENTAL STOCK LEADERS

Viorica Chirila*

Abstract: *The last years have been faced with a blasting development of the Socially Responsible Investments (SRI) worldwide even though the economic environment has been shaken by a global economic and financial crisis. The aim of this paper is to analyze the return and risk characteristics of the sustainably managed companies that pay particular attention to the environment responsibility in comparison with those that pay more attention to the corporate governance and respectively to the social responsibility. These characteristics are useful both to the individual and institutional investors as well as to the portfolio managers. For the comparative analysis we started from the study of descriptive characteristics of return and risk of indices portfolios of the environmental social and governance stock leaders and we focused on their univariate econometric modelling by means of the heteroskedastic models. The studies undertaken until now are centered on the performance obtained by the portfolios of sustainable indices and on the modelling of the volatility of sustainable indices. We would like to investigate the characteristics of return and risk of the assets of the sustainably managed companies that could attract active investors towards the sustainably managed companies that pay particular attention to the environment responsibility in comparison with those paying increased attention to the corporate governance and respectively to the social responsibility.*

Keywords: financial market; risk; return; heteroskedastic models.

JEL Classification: G15, C58.

INTRODUCTION

The birth of the modern portfolio theory with Markowitz's paper (Markowitz, 1959) underlined the importance of the profit obtained and the risk taken when holding an asset portfolio. The analysis of the last years highlights that the stakeholders of a company are not only interested in the profit obtained but also in the effects of the company on environment and social life. This new business model is known as Corporate Social Responsibility (CSR), while the investments performed in the assets of these companies are called Socially Responsible Investment (SRI), ethical investment or sustainable investment (Renneboog, 2008).

The evolution of total SRI assets under management in Europe is remarkable: on December 31, 2007, there were 2.665 trillion Euros while on December 31, 2009 there were 5 trillion Euros (EUROSIF 2008, 2010). It was natural that within this interest framework, funds of financial assets should appear being able to buy and manage stocks of the sustainably managed companies.

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Since the Socially Responsible Investment grew in importance, indices were created to reflect the evolution of the companies managed in such a business manner. The SRI indices created offer the investors who want to build the portfolio of financial assets selected by means of the sustainability criterion, a benchmark portfolio. The number of SRI indices burst after 2006 so that in June 2011 there was 116 SRI indices worldwide out, of which 32 underline the environmental topic (Sun et al., 2011). The selection criteria of the companies which are included in the indices portfolios are different but all of them refer to corporate governance, environment responsibility and social responsibility.

The studies undertaken so far which take into consideration the SRI indices focus especially on the performance adjusted through risk and obtained by means of the SRI indices portfolios in comparison with the portfolios of the general stock indices (Schroder, 2003), (Di Bartolomeo, Kurtz, 1999). Some of these studies draw the conclusion that the performance of sustainable indices portfolios comparatively with the performance of their benchmark indices is higher (Di Bartolomeo, Kurtz, 1999), or a little bit smaller (Schroder, 2003).

Hoti et al. (Hoti et al., 2005) focus on modelling the environmental risk and analyze the portfolios of indices DJSI World, DJSI STOXX and DJSI EURO STOXX in comparison with the portfolios of indices DJIA and S&P500. The results obtained confirm that there are differences in the return and volatility behaviour between the portfolios of sustainable indices and the portfolios of general stock exchange indices.

Now, when a great part of the assets of the companies holding CSR management and which consequently take into account within their management strategy the elements related to corporate governance, environment responsibility and social responsibility, it is time to ask whether there are significant differences from the point of view of return and risk between the stocks of those companies putting on the first place the environment responsibility, the social responsibility or the corporate governance. Our study is facilitated by the existence of the three Global ESG Leaders Indices: STOXX Global ESG Environmental Leaders, STOXX Global ESG Social Leaders, STOXX Global ESG Governance Leaders, calculated based on the prices of the previously mentioned stocks.

This paper has several goals. These focus on the comparative analysis of the implications of the descriptive characteristics of return and risk of the environmental, social and governance stock leaders; the comparison of statistical and econometric characteristics of return of the environmental, social and governance stock leaders and their implications; the modelling of return and risk of the environmental, social and governance stock leaders and the identification of the best evolution models; the implications of the chosen model on the investors' choice; the evaluation of the possibility

to anticipate on the basis of the indices of sustainably managed stocks the business cycles in the Euro zone and in the USA.

In order to reach these objectives we use a wide and diverse range of statistical and econometric methods prevalently used by the financial statistics and econometrics as well as by the business cycle econometrics.

1. CASE-STUDIES PRESENTATION

Dow Jones Indexes, STOXX Limited and SAM (Sustainable Asset Management, Switzerland) have begun to publish since 1999 the first global indices reflecting the general trend of the sustainably managed companies. These are the first SRI indices. In March 2010 the indices previously determined lose the prefix DJ (from Dow Jones) after Dow Jones & Company exits the joint venture because Deutsche Börse AG and SIX Group AG become sole shareholders of STOXX. Now STOXX offers two families of sustainable indices: STOXX ESG Leaders indices and STOXX Sustainability indices.

Within the family STOXX ESG Leaders indices Sustainalytics, a leading global provider of ESG research and analysis, key performance indicators (KPIs) for three sub-areas of stocks are determined: environmental (ENV), social (SOC) and governance (GOV). Taking into consideration these indicators the stocks are selected and three indices of the shares of the environmental, social and governance stock leaders are calculated. These are: STOXX Global ESG Environmental Leaders, STOXX Global ESG Social Leaders, STOXX Global ESG Governance Leaders. In order to reach the objectives already presented in the paper, we shall analyze the return and risk of the index portfolio of environmental stock leaders in comparison with the portfolios of indices of the social and governance stock leaders.

The daily values of the indices analyzed are taken from the website www.stoxx.com. We have at our disposal the values of the indices from 21 September 2001 (the moment when these indices began to be calculated) until 12 of July 2012. The values of the indices have been noted with PENV, PSOC and respectively PGOV, while the daily returns of the indices portfolios have been noted with LRENV, LRSOC and respectively LRGOV.

The return of a stock portfolio is determined according to the relation:

$$r_t = (\ln P_t - \ln P_{t-1}) * 100$$

where: r_t - the continuously compounded return

P_t, P_{t-1} - the price of a portfolio at the moment t, t-1 respectively

The returns of portfolios of the three indices under analysis will be noted with LRENV, LRSOC and LRGOV.

The total risk of a stock portfolio can be measured by means of variance or standard deviation. When the returns of the portfolio are stationary the variance and the standard deviation of the portfolio returns are calculated as follows:

$$\sigma^2 = \frac{1}{T} \sum_{t=1}^T (R_t - \bar{R})^2, \quad \sigma = \sqrt{\frac{1}{T} \sum_{t=1}^T (R_t - \bar{R})^2}$$

where: σ^2 , σ - the variance or respectively the standard deviation of the portfolio returns during the sub-period (t-1, t);

R_t - the portfolio return during the sub-period (t-1, t);

\bar{R} - the average of the portfolio returns for the entire period;

T - the number of sub-periods.

The variance determined by means of the previous formula is also called unconditional variance and it is supposed to be constant throughout the entire period under analysis. Since the variance of the portfolio returns is not constant during the entire analyzed period, when analyzing the risk an important role is played by the conditional variance which changes anytime because it depends on the history of returns until the moment it is calculated. The conditional variance will be presented in the modelling of the volatility of indices portfolios.

1.1. The descriptive statistical analysis of return and risk

Within this framework we shall analyze the distribution of the return of the portfolio index of environmental stock leaders in comparison with the distributions of indices portfolios of social and governance stock leaders. The previous studies show that the financial variables are characterized by an excess of leptokurtosis also known as “fat tails” (Mandelbrot, 1963) that is why the distributions of returns do not follow a normal distribution law. To test the normality of distributions we shall use the Jarque-Bera test which is calculated in relation to the asymmetry and kurtosis indicators.

The graphical representation of returns of the indices portfolios shows that if the conditional variance is constant in time and if it is presented in clusters it is known under the name volatility clustering. Volatility clustering refers to returns in which high variations are followed by high variations and low variations are followed by low variations. This characteristic reveals that a shock

(a new piece of information, for example) on the stock market has an influence that persists over time and may be empirically tested by means of returns' dependence.

1.2. The econometric analysis of return and risk

In the econometric analysis we focus in the first stage on the stationarity of the variables under analysis. The testing of returns' stationarity is a necessary analysis before their modelling. The stationarity property is very important in the econometric analysis from the following reasons (Berdot, J.-P., 2003):

- the traditional statistical inference has a meaning only for the stationary variables. By definition it is impossible to estimate a moment (mean or the variance) of a time series when this moment varies in time. The estimation of the moment in t starting from a single available value performed in t would not have any sense;

- the search for a relationship between two non-stationary variables is impossible: the regressions generally become spurious and cover only the existence of artificial, common trends, without real significance;

- the forecast often becomes hazardous for the non-stationary variables when the variables follow random behaviours.

In order to test the stationarity of variables we shall use the Augmented Dickey-Fuller test. The null hypothesis of this test implies that the analyzed variables have a unit root, meaning they are not stationary while the alternative hypothesis implies that the returns are stationary.

During the second stage we test the returns' autocorrelation. The Ljung-Box test allows reaching two goals (Berdot, J.-P., 2003): it enables the precision of the character of the process followed by the returns' rates (AR – autoregressive, MA – mobile mean or ARMA autoregressive and mobile mean) and it determines whether the returns' rates are correlated or not, this last hypothesis being frequently met in the theoretical or empirical literature of financial markets.

During the third stage, we test the autocorrelation of the returns' squares. The Ljung-Box test will reveal if the returns are dependent. The dependence means the situation when the high return rates (positive or negative) are followed by other extreme return rates, no matter what their sign (Berdot, J.-P., 2003). The presence of the dependence of return rates suggest that they can be modeled by means of the ARCH (Auto Regressive Conditional Heteroskedasticity) autoregressive conditional models.

Then we modeled return and risk of the portfolios. The autoregressive conditional models are comprised of two equations: the equation of the conditional mean and the equation of conditional volatility. The equation of conditional mean is generally an ARMA model but in this equation other influence factors of return can be introduced (for instance macroeconomic variables). The equation of conditional volatility will be specified for each and every model in what follows.

The GARCH model (Generalized Autoregressive Conditional Heteroskedasticity) was created by Bollerslev (Bollerslev T., 1986) and represents a generalization of the ARCH model created by Engle (Engle, R.F., 1982). For the ARCH model Engle received the Nobel Prize in 2003. By means of this model, two characteristics are taken into account: a characteristic of volatility, volatility clustering, and a characteristic of return, fat tails.

The GARCH(p,q) model is presented in the following form:

$$h_t = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \alpha_2 \varepsilon_{t-2}^2 + \dots + \alpha_p \varepsilon_{t-p}^2 + \beta_1 h_{t-1} + \dots + \beta_q h_{t-q}$$

The following conditions must be met in order for volatility h_t to be positive:

$\alpha_0 > 0$, $\alpha_i \geq 0$, $\beta_i \geq 0$. At the same time, the stationarity condition is ensured if $\alpha_i + \beta_i < 1$.

The GARCH-M (GARCH in Mean) model offers a new possibility which is pertinent to the extent to which the financial markets remunerate risk: these models assume that the risk level (positively) influences the expectancy of return. This assumption allows the conditional expectancy of the variance (or the standard conditional deviation) to be taken into account as an explanatory variable.

The GARCH(p,q)-M(1) model may be written as follows:

- The model ARMA(p,q) for Y: $Y_t = a_0 + a_1 Y_{t-1} + \dots + a_p Y_{t-p} + m_1 \varepsilon_{t-1} + m_q \varepsilon_{t-q} + a'_1 \sqrt{h}$

$$h_t = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \alpha_2 \varepsilon_{t-2}^2 + \dots + \alpha_p \varepsilon_{t-p}^2 + \beta_1 h_{t-1} + \dots + \beta_q h_{t-q}$$

The following conditions must be met in order for volatility h_t to be positive: $\alpha_0 > 0$, $\alpha_i \geq 0$, $\beta_i \geq 0$ and $\alpha_i + \beta_i < 1$.

This model allows us to study the relationship between risk and the expected return. In the first equation $a'_1 \sqrt{h}$ represents the reward for taking the risk. The estimator for parameter a'_1 is significant if volatility has an influence on the value of the return. Parameter a'_1 is interpreted as follows: if $a'_1 > 0$ for taking a high level of risk the investors are rewarded with high returns, if $a'_1 < 0$ the investors are penalized for taking the risk.

The following models, EGARCH, TGARCH and APGARCH take into consideration the asymmetry phenomenon of the impact: a new, negative piece of information (a shock) of the same force as a positive piece of information determines a higher volatility. For each of these asymmetric

models we shall also study the “average” lot variant (EGARCH-M, TGARCH-M and APGARCH-M) in order to study the relationship between return and risk.

By means of the EGARCH model (exponential GARCH) (Nelson, D. B., 1991) the asymmetry phenomenon of the impact of news on returns is modeled: a negative shock with the same force as a positive shock leads to a higher increase of volatility (asymmetric volatility).

The EGARCH(1,1) model has the following formulation:

- The model ARMA(p,q) for Y: $Y_t = a_0 + a_1Y_{t-1} + \dots + a_pY_{t-p} + m_1\varepsilon_{t-1} + m_q\varepsilon_{t-q}$

$$\ln h_t = \alpha_0 + \alpha_1 \left| \frac{\varepsilon_{t-1}}{\sqrt{h_{t-1}}} \right| + \gamma_1 \frac{\varepsilon_{t-1}}{\sqrt{h_{t-1}}} + \delta_0 \ln h_{t-1}$$

The asymmetry effect is highlighted by γ_1 . This estimated parameter must be significant and lower than zero.

The EGARCH –M model also takes into consideration in the modelling the relationship between the assumed risk by investors and the expected return, apart from the asymmetry phenomenon of volatility. In comparison with the EGARCH model previously presented in the mean equation there will also be the variance, the standard or logarithm deviation within the conditional variance.

The TGARCH model occurs from the need to take into consideration when modelling the return and risk of the leverage phenomenon. (Glosten, Jagannathan and Runkle (1993) and Zakoian (1994)).

$$h_t = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \gamma_1 \varepsilon_{t-1}^2 d_{t-1} + \beta_1 h_{t-1}$$

The asymmetry effect is highlighted by γ_1 . This estimated parameter must be significant and bigger than zero.

The APGARCH model is proposed by Ding et al. (Ding et al., 1993) following the identification of returns’ autocorrelation within the mode for long lags.

The conditional variance for a APGARCH(1,1,1) is modeled by the equation:

$$h_t^\delta = \alpha_0 + \alpha_1 (|\varepsilon_{t-1}| - \gamma_1 \varepsilon_{t-1})^\delta + \beta_1 h_{t-1}^\delta$$

The recorded parameters must meet the following requirements $\delta \geq 0$, $\alpha_0 > 0$, $\alpha_1 \geq 0$, $\beta_1 \geq 0$ and $|\gamma_1| \leq 1$. If $\gamma_1 \neq 0$, the conditional volatility is asymmetric.

For the estimation of conditional volatility Engle (Engle, R.F., 1983) used the normal distribution. Since the distribution of the residual variable resulted from modelling did not follow a normal distribution law due to an excessive leptokurtosis, in 1987 Bollerslev (Bollerslev T., 1987) proposed the standardized Student t distribution while in 1991 Nelson (Nelson, 1991) proposed Generalized Error Distribution (GED).

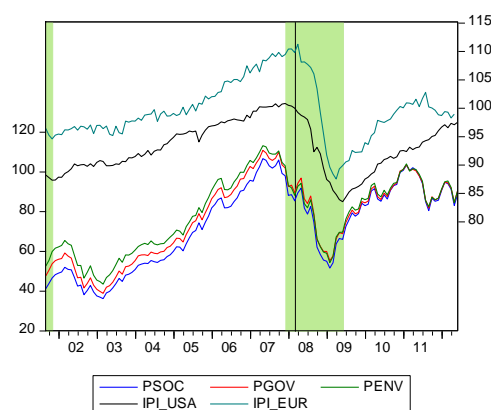
Once the heteroskedastic models have been estimated, we tested specific regression model estimation assumptions. Then, we chose the best model depending on Adjusted R squared and the Akaike, Schwarz, Hannan-Quinn information criteria.

2. RESULTS AND DISCUSSION

2.1. The descriptive statistical analysis of return and risk

In figure 1 we presented the time evolution of the indices portfolios of the environmental, social and governance stock leaders (having as a standard the left vertical axis) and the evolution of the industrial production indices in the USA and the Euro area (17 European countries). The shadowed areas represent periods of economic downturn in the USA for the period under study (according to the National Bureau of Economic Research). During the time span analyzed (21 September 2001 – 12 July 2012) the Euro area is subject to a period of economic recession (according to the Euro Area Business Cycle Dating Committee) that starts later than that in the USA marked by the vertical line. The graph shows that the evolution of the three indices portfolios is almost parallel until the moment when the recession in the USA starts, after which the evolutions of the indices portfolios almost coincide (situation which is visible only in the middle of the year 2010). As a consequence, as regards the evolution of the index portfolio of the environmental stock leaders from the graphical representation, this does not differ much from the evolution of the indices portfolios of social and governance stock leaders.

Figure 1 - The evolution of the indices of the stocks of environmental, social and governance stock leaders and GDP for the USA and Europe during 21 September 2001 - 12 July 2012



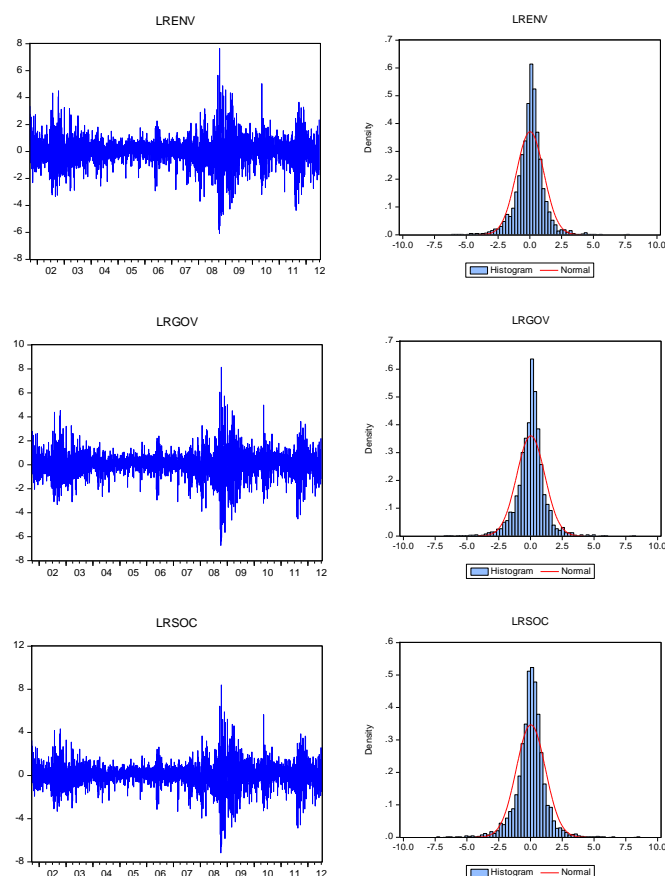
In the figure above we have the time evolution of the daily returns of the indices portfolios of the environmental, social and governance stock leaders as well as the distribution of these returns presented alongside a normal distribution of the same mean and dispersion. Therefore, we may draw the following conclusions:

- the returns of the indices portfolios present a cluster variation: the low variations are followed by low variations regardless of their sign while the high variations are followed by high variations. The cluster variation of the volatility of returns of the indices portfolios suggest the returns' dependence and can be numerically tested by means of the Ljung-Box test applied to the return's squares. We also notice that during the periods of economic downturn the variation is higher in comparison with the periods of economic growth;

- the distributions of the daily returns of the indices portfolios are leptokurtic which means that the frequencies for the returns' distributions are higher than those of the normal distributions. This feature is also known as "fat tails";

- due to the strong leptokurtic nature of the returns' distributions, these may not follow a normal distribution law. Therefore, it suggests to the investors that the investment in these portfolios may determine either to get high profits, or high losses, higher than the normal ones. We can test the normality of returns' distributions using the Jarque-Bera test.

Figure 2 - The returns and the distribution of returns of the stocks of environmental, social and governance stock leaders during 21 September 2001 - 12 July 2012



On account of the graphical assessments performed on the daily returns of indices portfolios of the environmental, social and governance stock leaders and the distribution of these returns, presented alongside a normal distribution of the same mean and dispersion, we may say that the returns of the index portfolio of the environmental stock leaders do not have significantly different features in comparison with the returns of the indices portfolios of social and governance stock leaders.

Before estimating the descriptive statistics of portfolios' returns we tested their stationarity. We used the Augmented Dickey-Fuller test. The null hypothesis supposes that the variable has a unit root (it is not stationary). The probabilities associated to the ADF tests performed for the three tested models are lower than the risk taken during the testing (5%), which shows that the returns of the indices portfolios are stationary. Since the values of the two information criteria Akaike and Schwarz are minimal for the model without intercept and trend, this proves that the average daily returns of the three portfolios are not significantly different from zero.

The analysis of descriptive statistics shows that the distribution of returns of environmental stock leaders is characterized by the lowest average return as well as by the lowest total risk (measured by means of the standard deviation). As a consequence, this situation suggests a relationship between

risk and return. The risk-averse investors will prefer to choose the portfolio of the environmental stock leaders against the other ones because they present a higher risk. As it was also natural, the extreme minimal and maximal values are lower for the portfolio of environmental stock leaders.

Table 2 - The estimation of descriptive statistics of the index portfolio returns of the environmental, social and governance stock leaders

	LRENVD	LRGOVD	LRSOCD
Mean	0.021674	0.024850	0.029619
Median	0.066684	0.077582	0.077598
Maximum	7.651096	8.132840	8.405904
Minimum	-6.067941	-6.735958	-7.175965
Std. Dev.	1.075904	1.106854	1.150459
Skewness	-0.184066	-0.230854	-0.231452
Kurtosis	7.449098	8.173993	8.295923
Jarque-Bera	2340.113	3168.298	3318.322
Probability	0.000000	0.000000	0.000000
Observations	2818	2818	2818

The results are obtained by means of the Eviews statistical software.

The kurtosis indicator confirms what we had already observed from the graphical representation of returns' distribution: the leptokurtosis. On the basis of these numerical indicators we can ascertain that the leptokurtosis of the distribution of the portfolio index of environmental stock leaders is less excessive, indicating once again that when possessing it the losses are lower than in the case of the other two portfolios. The daily return rates of the portfolio environmental stock leaders present a smaller left asymmetry than that of the other two portfolios. The distribution of the daily return rates of the portfolios is displayed towards the negative values of the distribution.

The null hypothesis of the Jarque-Bera test supposes that the tested distribution follows a normal distribution law. According to the results in table 2 the probabilities associated with this test are lower than the risk taken during testing of 5%. Therefore, with a 95% probability we can ascertain that the distributions of portfolio returns do not follow a normal distribution law.

Table 3 - The estimation of the coefficients of bivariate correlation among the returns of the index portfolios

Correlation			
	LRENV	LRGOV	LRSOC
LRENV	1.000000		
Probability			
LRGOV	0.988062	1.000000	
Probability	0.0000		
LRSOC	0.985005	0.993346	1.000000
Probability	0.0000	0.0000	-

The results are obtained by means of the Eviews statistical software.

The estimated coefficients of bivariate correlation among the returns of the three portfolios under analysis show that there is a very strong direct correlation.

2.2. The econometric analysis of return and volatility

In what follows we aimed at studying the autocorrelation of the returns of index portfolios. The statistical test which was used is the Ljung-Box test. The null hypothesis associated with the test implies that the returns of the three portfolios are autocorrelated. This result proves that the portfolio returns can be forecasted based on the previous values. The possibility to forecast the three portfolios suggests that the market of sustainably managed stocks is not efficient from an information point of view in a weak sense.

Table 4 - Testing the autocorrelation of the returns of index portfolios of environmental, social and governance stock leaders

LRENV				LRGOV				LRSOC			
AC	PAC	Q-Stat	Prob	AC	PAC	Q-Stat	Prob	AC	PAC	Q-Stat	Prob
0.131	0.131	48.358	0.000	0.103	0.103	29.816	0.000	0.095	0.095	25.517	0.000
-0.032	-0.050	51.167	0.000	-0.023	-0.034	31.363	0.000	-0.028	-0.037	27.717	0.000
-0.026	-0.015	53.060	0.000	-0.028	-0.022	33.520	0.000	-0.027	-0.021	29.763	0.000
0.027	0.032	55.114	0.000	0.035	0.040	36.959	0.000	0.035	0.039	33.207	0.000
-0.029	-0.039	57.487	0.000	-0.044	-0.054	42.463	0.000	-0.044	-0.054	38.723	0.000
-0.049	-0.039	64.400	0.000	-0.051	-0.040	49.918	0.000	-0.049	-0.038	45.396	0.000
0.012	0.024	64.819	0.000	0.019	0.029	50.938	0.000	0.017	0.025	46.178	0.000
0.024	0.013	66.443	0.000	0.024	0.013	52.600	0.000	0.019	0.008	47.151	0.000
0.008	0.004	66.622	0.000	0.011	0.009	52.942	0.000	0.008	0.008	47.330	0.000
-0.025	-0.023	68.400	0.000	-0.020	-0.019	54.130	0.000	-0.017	-0.016	48.177	0.000
0.013	0.018	68.896	0.000	0.012	0.012	54.563	0.000	0.011	0.010	48.549	0.000
0.019	0.011	69.885	0.000	0.010	0.006	54.838	0.000	0.012	0.009	48.975	0.000

Note: AC-represents the values of the total autocorrelation function, PAC – represents the values of the partial autocorrelation functions, Q-Stat – represents the values calculated for the Ljung-Box test, Prob – represents the probabilities associated with the Ljung-Box test. The results are obtained by means of the Eviews statistical software.

The application of the Ljung-Box test to the square of index portfolio returns, as we have previously mentioned, can prove the existence of the dependence of returns anticipated from the graphical representation. The results obtained and presented in table 5 confirm the dependence of returns. As a consequence, the low values of the portfolios' returns are followed by high values regardless of sign while the low values are followed by low values. The dependence of returns shows that these can be modelled by means of the heteroskedastic models.

The heteroskedastic models taken into consideration have been presented in the second part of this paper.

As we have seen in the second part of the paper, in order to estimate the heteroskedastic models we need to identify the equation of the mean and the equation of the conditional variance. To estimate the conditional mean we use the ARMA(p,q) modelling, as we have already noticed, the returns of index portfolios are autocorrelated.

Table 5 - Testing the dependence of returns of index portfolios of environmental, social and governance stock leaders

LRENVD2				LRGOVD2				LRSOCD2			
AC	PAC	Q-Stat	Prob	AC	PAC	Q-Stat	Prob	AC	PAC	Q-Stat	Prob
0.221	0.221	138.00	0.000	0.224	0.224	140.97	0.000	0.212	0.212	127.25	0.000
0.329	0.295	443.63	0.000	0.338	0.303	462.74	0.000	0.330	0.298	433.84	0.000
0.293	0.203	685.56	0.000	0.284	0.190	691.00	0.000	0.281	0.193	656.34	0.000
0.229	0.084	834.14	0.000	0.230	0.081	841.00	0.000	0.238	0.098	816.07	0.000
0.362	0.230	1203.7	0.000	0.415	0.297	1328.2	0.000	0.411	0.294	1293.9	0.000
0.217	0.047	1336.5	0.000	0.220	0.045	1464.6	0.000	0.214	0.042	1423.4	0.000
0.253	0.051	1517.2	0.000	0.272	0.046	1673.9	0.000	0.271	0.050	1630.9	0.000
0.211	0.015	1643.3	0.000	0.216	0.009	1806.1	0.000	0.215	0.011	1761.2	0.000
0.233	0.066	1797.2	0.000	0.236	0.058	1963.2	0.000	0.234	0.050	1916.4	0.000
0.281	0.103	2020.3	0.000	0.298	0.091	2215.1	0.000	0.289	0.081	2153.4	0.000
0.230	0.060	2170.1	0.000	0.230	0.053	2365.5	0.000	0.228	0.056	2300.2	0.000
0.260	0.068	2362.1	0.000	0.282	0.082	2590.2	0.000	0.275	0.080	2514.2	0.000

Note: AC-represents the values of the total autocorrelation function, PAC – represents the values of the partial autocorrelation functions, Q-Stat – represents the values calculated for the Ljung-Box test, Prob – represents the probabilities associated with the Ljung-Box test.

The results are obtained by means of the Eviews statistical software.

In order to choose the best mean equation since in this case the Akaike and Schwarz information criteria do not offer the same result we shall favour the Schwartz criterion , T. C., 1999]. Therefore, the estimated model for the mean is an autoregressive model of order AR(1). As we have previously seen when testing the stationarity of portfolios' returns, the daily mean of returns is not

significantly different from zero; as a result, the estimated AR(1) model does not have the statistically significant intercept and we exclude it from the model.

We estimated heteroskedastic models with a different number of parameters and we took into consideration the three distributions used in the heteroskedastic modelling: normal distribution, standardized Student distribution and Generalized Error Distribution. For all the estimated models we took into account the Akaike, Schwarz, Adjusted R-Squared information criteria. Since these information criteria guide us towards the same model, in few cases we focused only on the Schwartz model, helping us to identify the best models with a reduced number of parameters. The best models are those with the lowest values for this criterion.

Of each category of heteroskedastic models tested we have chosen the best model. All these selected models were estimated by means of the Generalized Error Distribution. In the following two tables we present the estimated values of the parameters of the best estimated models for LRENVD.

Table 6 - The estimation of parameters of heteroskedastic models for LRENVD

	GARCH(1,1)	EGARCH(1,1)	TGARCH(1,1)	APGARCH(1,1)
a_1	0,131344***	0,134614***	0,135105***	0,134589***
α_0	0,008916***	-0,097263***	0,011399***	0,014675***
α_1	0,082168***	0,123916***	0,008090	0,065482***
γ_1		-0,096611***	0,129739***	0,800683***
β_1	0,910517***		0,916624***	0,931788***
δ		0,983749***		1,118776***
Schwarz	2,584507	2,561219	2,562379	2,560943

Note: models estimated by means of Generalized Error Distribution

*Note: *, **,***, indicate statistical significance for a taken risk of 10%, 5% and 1%*

The results are obtained by means of the Eviews statistical software.

In table 6 we estimate the heteroskedastic models which do not take into consideration the relationship between return and risk. The best model of those estimated is the APGARCH(1,1) model, according to the Schwarz information criteria.

We also took into consideration the models which estimate the relationship between return and risk. Since the estimated parameters are statistically significant, the correlation between risk and return is confirmed. The differences between the two selected models are very small according to the information criterion. We mention that all the estimated models meet the specific restrictions, the exception being represented by the GARCH(1,1) models which were not taken into consideration in the interpretation. All the estimated models also meet the hypotheses specific to the estimation of a regression model.

As a consequence, the model we focused on, APGARCH(1,1), confirms that the investors react differently according to the ascending or descending evolution of the market. On a descending trend market the volatility is higher than on a market with ascending trend and a new negative shock (a new piece of information) determines a higher variation/risk than a positive piece of information. Since the estimated value of the parameter δ is close to value 1 as Ding et al. (Ding, Granger and Engle, 1993) also underline the return under the form of the dependent variable in the APGARCH(1,1) model, it has a long memory meaning that the shocks on return persist in time.

Table 7 - The estimation of parameters of the heteroskedastic models in mean for LRENV

	GARCH(1,1)-M	EGARCH(1,1) -M	TGARCH(2,1) -M	APGARCH(1,1) -M
a_1'	0,091263***	0,059006***	0,059405***	0,058892***
a_1	0,117858***	0,127084***	0,123950***	0,127565***
α_0	0,009519***	-0,103754***	0,013383***	0,015172***
α_1	0,085349***	0,126368***	-0,034741**	0,066562***
α_2			0,051343***	
γ_1		-0,091433***	0,127810***	0,750312***
β_1	0,906732***		0,902042***	0,928402***
δ		0,983294***		1,100557***
Schwarz	2,580157	2,561283	2,562686	2,561066

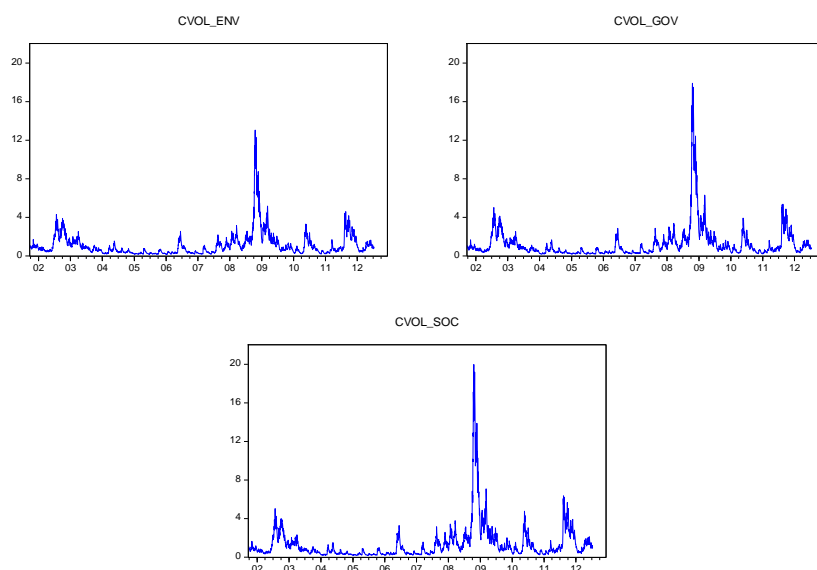
Note: models estimated by means of Generalized Error Distribution

Note: *, **,***, indicate statistical significance for a taken risk of 10%, 5% and 1%

The results are obtained by means of the Eviews statistical software.

The best models for LRGOVD and LRSOCD are APGARCH(1,1)-M which indicates the same features as for LRENV. The difference is expressed by the fact that the taking into consideration of the correlation between return and risk determines a better model. Therefore, the stocks' portfolios of social and governance stock leaders are characterized both by the correlation between risk and return (correlation much sought by the risk-averse investors) and by the risk asymmetry.

Figure 3 - The evolution of the conditional volatility of the returns LRENV, LRGOV, LRSOC



According to the figure above that presents the evolution of conditional volatility we seem not to notice any great differences of evolution of the conditional volatility of the portfolios of the three indices analyzed. We notice a difference at the end of the year 2008 and the beginning of the year 2009, during the global economic and financial crisis, when the portfolios register the greatest conditional volatility. The index portfolio of the environmental stock leaders has a lower volatility than the portfolios of the indices social and governance stock leaders.

2.3. The analysis of the correlation between the business cycles and the prices of the environmental social and governance stock leaders

The business cycle literature mentions that the stock exchange prices anticipate the global business cycles of an economy. Therefore, we aimed at analyzing whether the prices of environmental, social and governance stock leaders anticipate the business cycles of the Euro area and the USA.

The global business cycles in the Euro area and the USA were estimated based on the industrial production index because it is registered on a monthly basis in both areas. The choice of the gross domestic product would have forced us to analyze the quarterly data. For the estimation of the business cycles we used the Hodrick-Prescott filter.

Table 8 - The estimation of bivariate correlation coefficients between the stock prices of environmental, social and governance stock leaders and the business cycles from the Euro zone (with different lead).

	0	1	2	3	4	5	6	7
PENV	0.402968	0.464439	0.514992	0.544837	0.561382	0.560339	0.543836	0.520953
	(0.0000)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PGOV	0.393706	0.445933	0.488610	0.510893	0.520995	0.513531	0.490690	0.463171
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PSOC	0.375303	0.428779	0.472967	0.497630	0.510764	0.505997	0.485868	0.460907
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

The results are obtained by means of the Eviews statistical software.

In order to test if the prices for the environmental, social and governance stock leaders anticipate the business cycles in the Euro area and the USA, we estimated the bivariate correlation coefficient between the prices for environmental, social and governance stock leaders and the business cycles with different lead. Then we tested the significance of the bivariate correlation coefficients which were obtained. In the table below are presented the results.

Since the highest correlation coefficient is obtained for a lead equal to four, the prices of shares of environmental, social and governance stock leaders anticipate each business cycle in the Euro zone four months ahead.

Table 9 - The estimation of bivariate correlation coefficients between the stock prices of environmental, social and governance stock leaders and the business cycle in the USA with different lead

	0	1	2	3	4	5	6	7
PENV	0.416771	0.469391	0.518332	0.553770	0.567674	0.581668	0.585796	0.573127
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PGOV	0.405563	0.447801	0.487878	0.514620	0.521160	0.528734	0.526775	0.509226
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PSOC	0.383540	0.426620	0.468206	0.496422	0.506163	0.517065	0.517178	0.501904
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

The results are obtained by means of the Eviews statistical software.

The analysis conducted for the anticipation of the business cycles in the USA by the stock prices of environmental, social and governance stock leaders enables us to obtain different results from the Euro area. The stock prices of governance stock leaders anticipate the business cycles in the USA five months ahead and the prices of shares of environmental and social stock leaders six months ahead.

CONCLUSIONS

The analysis of return and risk of the index portfolios STOXX Global ESG Environmental Leaders, STOXX Global ESG Social Leaders, STOXX Global ESG Governance Leaders offered us the opportunity to discover important details regarding the Socially Responsible Investment. What we need to remark is that there are not significant differences between returns and the risk of the three portfolios.

The return distributions of the three portfolios are characterized by the lack of normality due to the excessive leptokurtosis, fact that shows to the investors they could obtain either very high profits or very high losses, higher than in the case of a normal situation. The returns of the three portfolios are autocorrelated, therefore they can be forecasted and they are also dependent, suggesting that the high values of returns are followed by high values, regardless of their sign, while low values are followed by low values, regardless of their sign. The index portfolios under analysis present the correlation between return and risk, feature which is preferred by the risk-averse investors. The risk of index portfolios is subjected to the asymmetry phenomenon, meaning that a new negative shock/piece of information on the market determines a higher volatility in comparison with a positive piece of information. The analysis of the correlation between the Euro area and the USA as well as the value of these index portfolios show that the stock exchange indices anticipate the business cycles in the Euro zone four months ahead and in the USA five or six months ahead.

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THE ROLE OF THE INTERNATIONAL ECONOMIC ORGANIZATIONS AND THE PUBLIC SECTOR IN CREATING AND SUSTAINING INTERNATIONAL COMPETITIVENESS

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Abstract: *By analyzing the global economy, one can easily notice that states that record economic growth are competitive, and that the competitive ones collect revenues of billions of dollars from trade, outsourcing and meeting the needs of their citizens. The role of private sector in creating and sustaining competitiveness it is well known. But what actions are undertaken by the international organizations and the public sector in this direction? The scope of this article is to offer a brief description of the role played by these actors taking into account that they must create the fundamental condition for competitiveness: macroeconomic stability.*

Keywords: public sector; international organizations; international competitiveness.

JEL Classification: F00; E00.

INTRODUCTION

With the intensification of international competition, the results of assuming broad responsibilities by the state in economy became obvious. Fiscal deficits, bureaucracy, governmental dependency of individuals, privileges granted through protectionism to national firms have become embarrassing restrictions for growth. A compromise between free market and dirigisme - probably the only way to ensure efficiency and equality - has not yet succeeded anywhere in the world (Beacon Hill Institute, 2011). State involvement in education, health, regulation of social, economic life aims to create the favorable conditions for the development of a competitive environment, requiring high standards, creating the premises for competitiveness.

Sustainable economic growth and the improvement of living standard of the population are determined by the development of economic competitiveness in the context of global challenges: economic globalization, opening of international markets, rapid technological change. These challenges do not mean that states are likely to disappear or that the role of government decreases in the era of the globalized economy. On the contrary, if the economic decisions were left to the market forces alone, the likely result would be some kind of economic crisis, or stagnation. So far "...the markets have not demonstrated that they are sufficiently sophisticated and function sufficiently smoothly to discriminate between good and bad policy objectives." (Ruggie, 1997). With increasing

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economic openness and with the pressures of international production and financial globalization, it is very hard to overestimate the central role of the state in providing a buffer between the clashing interests of its citizens' welfare and the effects of the global economy.

If governments cannot react to the fast changing international economic environment, they lose. After the first painful experiences, they must learn to navigate in the dangerous waters of the globalized economy. This does not apply to developing countries and transition economies alone, but to every open economy in the world. The difficult part under the new rules of the global economy is to know when the government should intervene. The best alternative for governments here would be to see what policies have worked and which have worldwide failed.

1. CONTRIBUTION OF INTERNATIONAL ECONOMIC ORGANIZATIONS TO THE IMPROVEMENT OF ECONOMIC POLICIES AND INSTITUTIONAL REFORMS

The issue of international economic competitiveness has come into notice in recent years, not only in literature. In times of economic globalization, open economies are concerned with a possible loss of competitiveness. In addition, international organizations and forums, such as the World Trade Organization (WTO), United Nations Industrial Development Organization (UNIDO), the Organization for Economic Cooperation and Development (OECD), International Monetary Fund (IMF), UNCTAD and the World Economic Forum are interested in the international competitiveness of nations, industries and financial markets. The European Commission publishes annually The Report on European Competitiveness, containing an analysis of recent developments in the global competitiveness performance of the EU and the impact of economic reforms on productivity. The OECD studies the impact of policies on labor productivity and use in member countries in the annual publication *Going for Growth*. The IMF regularly examines the competitiveness development processes in member countries as part of its surveillance exercise specified in Article IV, while the World Bank, the World Economic Forum and the International Institute for Management Development (IMD) have developed international rankings of countries, rankings using competitiveness indicators, focusing on the microeconomic level (Leichter et al., 2010).

For more than three decades, the Global Competitiveness Reports of the World Economic Forum have studied and evaluated many factors underpinning national competitiveness. The purpose of this paper was to provide an insight and to stimulate discussion among all interested parties on the

best strategies and policies that would help countries overcome obstacles in order to improve competitiveness. Reports contribute to understanding the key factors determining economic growth, help to explain the phenomenon that some countries are more successful than others in rising income levels and providing opportunities for the public, and offer policymakers and business leaders an important instrument for shaping economic policies and improved institutional reforms. In the current economic environment, this information and guidance effort stress out the importance of structural economic fundamentals for sustained economic growth (Schwab, 2012).

The activity of the IMD World Competitiveness Center results in a series of yearbooks and workshops. The IMD Yearbooks, published since 1989, have been an excellent source of information and inspiration to investigate the competitiveness degree of a country, the main reasons underlying this competitiveness and to develop new ways to improve competitiveness. They also allow cross-country comparisons on a regional and global level, provide insights that may underlie the decision-making process, help to establish priorities and policies and are used to promote investment in a country, state or region. The workshops on competitiveness are usually organized to complete a special report. Within these workshops, results are disseminated, the facets of competitiveness are explained, the challenges and opportunities facing the economy are analyzed, the success factors found in the most competitive environments are highlighted, the best practices to enhance competitiveness are discussed, the results and priorities for a country are examined. These workshops can be organized independently of the reports (IMD World Competitiveness Center, 2012).

The mission of the Organization for Economic Cooperation and Development is to promote policies that improve economic and social welfare of individuals around the world. OECD provides a forum for governments that facilitates the sharing of experiences and finding of solutions to common problems. The organization works with governments to explain and understand what determines the economic, social and environmental changes, measures productivity and global flows of trade and investment, analyzes and compares data to predict future trends and international proposes international standards for a wide range of fields, from agriculture and taxes, to the safety of chemicals (About the OECD, 2013).

World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations. At its base lie trade agreements, negotiated and signed by most of the nations that are part of foreign trade processes and ratified in their Parliaments. The goal is to help producers of goods and services, exporters and importers run their business. WTO is an organization that supports trade liberalization, is a forum for governments to negotiate trade agreements and a

place for solving commercial disputes that operates a system of trade rules. Essentially, WTO is a place where member governments are trying to solve professional problems which they face (What is the WTO?, 2013).

UNCTAD promotes the amicable integration of emerging countries in the global economy. UNCTAD aims to help shape current policy debates on development, with a particular focus on ensuring that domestic and international policies support each other in achieving sustainable development. The organization has three key functions: it functions as a forum for intergovernmental deliberations, manifested in the form of discussions with experts and exchanges of experience, aimed at consensus building; it engages in research, in strategic analysis and data collection for the debates of government representatives and experts and provides technical assistance tailored to the specific needs of emerging countries, with particular attention to the least developed countries and economies in transition (About UNCTAD, 2013).

These organizations try to assess national economies in order to prevent fundamental issues that can affect the growth and stability of the world economy, to support the integration of emerging countries in world trade and to forecast future developments in global markets (Mitschke, 2008).

2. THE ROLE OF THE STATE IN CREATING AND STRENGTHENING THE COMPETITIVE ADVANTAGES

In the endless debate on the competitiveness of nations, no subject causes more controversy than the role of the state. Many see the government as an important supporter of the industry, promoting a series of policies that directly contribute to the strategic industries competitive performance. Others accept the principle of laissez-faire, the economy better functioning under the action of the invisible hand (Cho, Moon, 2000).

Both views are incorrect. On the one hand, government intervention requires policies that, in the long term, affect companies, creating a constant need for help. On the other hand, the role of the state in providing context and institutional infrastructure in which businesses operate and in creating the environment that stimulates firms to gain competitive advantages is not recognized.

Governments must play a crucial role in ensuring macroeconomic stability and providing stable political, legal and social institutions. However, given these prerequisites for prosperity, the microeconomic level, firm sophistication and quality of their environment should be examined (Snowdon, Stonehouse, 2006).

The proper role of government is catalyst and competitor; to this regard, the government should encourage - or even push - companies to exceed their aspirations and achieve higher levels of competitive performance, even if the process is unpleasant and difficult. The government cannot create competitive industries, this is the responsibility of companies. The role of government is partial, guaranteeing success only in connection with the factors of diamond. Yet the government's contribution in the transmission and amplification of the diamond forces is very high. Of the government policies, successful are those that form an environment in which companies gain competitive advantages, not those that involve direct government intervention in the process, except for countries in the lower stages of development (Magnusson, Ottoson, 2001).

It is not difficult to understand why many governments consistently make the same mistakes: the competitive time of firms do not coincide with the political time of governments. It takes little more than a decade for an industry to become competitive; the process involves prolonged upgrading of labor, investment in products and processes, building clusters and entering foreign markets. In politics, a decade implies an eternity. Consequently, most governments prefer policies that provide short-term benefits, such as subsidies, protection and arranged mergers - policies that slow down innovation. Policies that make the difference are often too slow and require much patience, or are accompanied by short-term suffering (Tiemstra, 1994). For example, the deregulation of protected industries will cause short-term failures, but in the long term, companies will become stronger and more competitive.

One can mention a number of simple fundamental principles that governments can apply in their role of supporting national competitiveness: to encourage change, to promote domestic competition, to stimulate innovation. Some of the approaches necessary to support nations to gain competitive advantages include:

Attention granted to specialized factor creation. The government is responsible for the primary and secondary education systems, the national infrastructure and the main areas of national interest, such as health. These basic factors rarely lead to the acquisition of competitive advantages. Advanced specialization programs, university research efforts in collaboration with trade and industry associations and, most importantly, private firms investment will generate, ultimately, competitive advantages (Soubotina, Sheram, 2000).

Avoiding intervention on the foreign exchange market and on the production factors market. Government seeks to intervene in input markets and foreign exchange to reduce input costs and to influence the exchange rate in order to support firms in competing more efficient in international

markets. But the reality has shown that these policies are often counterproductive. They operate against industrial modernization and the search for sustainable competitive advantages (Dublin National Competitiveness Council, 2008).

Implementation of safety and environmental standards. Strict government regulations can promote competitive advantages by stimulating and upgrading the domestic demand. Rigorous standards regarding product performance, its safety and environmental impact forces companies to improve the quality, to upgrade technology and to provide features that meet the needs of society and consumers (European Commission, 2010).

Strict regulations that anticipate standards that will spread internationally offer firms a promising start in developing products and services that will be required anywhere. However, strict standards must be accompanied by a legal process which prevents the absorption of resources or delays.

Strong limitation of direct cooperation between competing industries. The most generalized global policy mentioned in the discussion about competitiveness is the appeal to industrial consortia and a more cooperative research. Governments submit firms the idea of closer collaboration, as individual research is duplicative and wasteful, group efforts determine economies of scale, and in companies there is a risk of low investments in research and development that prevents them from obtaining a number of benefits. But companies rarely bring their best scientists and engineers in joint projects and, most often, allocate more resources to individual research (Schwab, 2011).

In certain circumstances, collaborative research may be beneficial. Projects should target products and processes research, not those areas which represent the sources of advantages for companies. They must own only a small part of the entire research program of the company, regardless of the field. Collaborative research should be indirect, carried out by independent organizations at which the majority of industrial participants have access. Organizational structures, such as university laboratories and centers of excellence, reduce management problems and minimize the risk of competition. Finally, the most successful joint projects often target areas that concern most of the industrial sectors and that require a substantial amount of investment in research and development.

Promoting objectives that lead to sustainable investment. Government plays an important role in shaping the objectives of investors, managers and employees through the set of adopted policies. For instance, the degree of regulation of capital markets influences investors decisions, so the

behavior of firms. Government must encourage investment in labor, in innovation and in physical assets (Salvatore, 2010).

Deregulation of competition. Regulating competition through public policies such as maintaining public monopoly, controlling inputs in industry or fixing prices implies two negative consequences: mitigates competition and innovation as companies become concerned with compliance with these regulations and with the protection of what they have and transforms the industry in a supplier or client less dynamic and less appropriate. Deregulation and privatization are not successful unless accompanied by fierce domestic competition and strong antitrust policy (Magnusson, Ottosson, 2000).

The adoption of strong national antitrust policy. An antitrust policy - especially for horizontal mergers, alliances and unfair behavior - is fundamental to innovation. As a result of globalization and the formation of national champions, multiple mergers and alliances occur, thereby undermining the creation of competitive advantages. Keeping national competitiveness implies governments to prohibit mergers, acquisitions and alliances involving industry leaders. In addition, mergers and alliances standards should apply to both domestic and foreign firms. Also, government policy should favor entry, both national and international, to the detriment of acquisitions (Grybaite, Tvaronaviciene, 2008). However, companies should be allowed to take small firms in related industries considering that this acquisition promotes the transfer of skills and helps create competitive advantages.

Quitting trade control. Controlled trade is a dangerous and growing trend. Methodical marketing agreements, voluntary austerity agreements or other practices adopted to achieve quantitative targets in order to divide markets are risky, inefficient and costly for consumers (Schwab, Brende, 2012). Promoting industrial innovation is displaced with a guaranteed market for inefficient companies.

The trade policy established by the government must pursue opening outwards. To be effective, it should be an active tool; it should not be limited only to respond to complaints or to work in favor of those industries that have political influence. Trade policy should open those markets where the nation has competitive advantages and to meet emerging industries and problems in the early stages.

CONCLUSIONS

Innovation, competition and cooperation can positively influence all drivers of value creation. All the improvements of productivity can create advantages that can be used to limit competition. The need for competition and cooperation policies results from the necessity of not counteract the beneficial effects of cooperation on productivity and value creation. Industrial and competition policy should be consistent with other macroeconomic policies (such as education and health), but must be supported by a facilitator institutional context.

Many researchers emphasized the importance of institutions and institutional changes in reducing transaction and transformation costs and in supporting productivity and growth. Governments can be a powerful catalyst in institutional changes, holding the monopoly of power and the ability to legislate and regulate. Designing a facilitating framework is part of industrial policy and competition. The neoclassical theory of "market failure" implies that institutional context is given. The possibility of it to vary involves a more proactive role for the state. In this situation, the state should only intervene when markets fail. The proactive action of legislating and regulating is preferable, so that markets, firms and the state itself fail less and contribute to value creation. Importantly, governments should contribute to the development of markets (Olsen, 2000), but also to their creation, as do firms (Pitelis, Teece, 2009).

Industrial and competition policy should be seen in the broader context of global sustainable growth of value creation. Competition policy should aim at maximizing the net benefits of cooperation. The road to sustainable value creation is not just in one direction. Countries should exploit the informational benefits due to the existence of a plurality of institutional and organizational forms.

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SYSTÈMES COMPTABLES DANS LE CONTEXTE DE LA MONDIALISATION

Loredana Oana Hutanu (Toma)*

Résumé: *La comptabilité joue un rôle important dans les politiques économiques nationales et internationales et analysées dans le contexte de la mondialisation économique, l'harmonisation des normes comptables, a donné lieu au fil du temps, à une source continue de controverse. L'évolution de la comptabilité dans le contexte actuel est caractérisée par un phénomène d'harmonisation et de normalisation internationale. Cet article veut faire connaître au public les deux principaux systèmes comptables existants et leur besoin d'harmonisation.*

Mots-clés: mondialisation économique; l'internationalisation de la comptabilité; IFRS; US GAAP; normalisation; harmonisation.

Classification JEL: M40, M41, M48.

INTRODUCTION

La mondialisation comptable est un élément important de la mondialisation économique et consiste à façonner le système de comptabilité dans un modèle d'affaires qui peut informer rapide et plus précis utilisateurs de l'information comptable.

Dans la littérature théorique, la mondialisation peut être interprétée de diverses façons, mais essentiellement, la mondialisation signifie que la dépendance d'un pays avec le reste du monde est très élevée (Tanzi, 2004).

Les tendances actuelles indiquent un mouvement continu vers l'harmonisation des normes comptables, mais non sans peine et d'inquiétude. À certains moments, la pression du marché financier et politique, pousse le mouvement dans des directions opposées (Ampofoa et Sellani, 2005).

Le processus d'harmonisation bénéficiera également de la nature «globale» des deux commissaires aux comptes et leurs clients. Les auditeurs et les clients vont faire avancer des interprétations et des pratiques communes à travers le monde (Carmona et al., 2008).

Le mouvement des entreprises vers une économie mondiale a accéléré la nécessité de s'orienter vers des normes comptables mondiales (Fosbre, 2009).

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Dernières études spécialisées dans le domaine, conclut que le résultat de la mondialisation de la comptabilité est réellement la facilitation de la *divulgateion* des informations *comptables* par les personnes intéressées indépendamment du pays auquel ils appartiennent. Cette chose c'est aujourd'hui possible grâce à la mise en œuvre des Normes internationales d'information financière (IFRS).

1. THÉORIE SUR LE SYSTÈME DE COMPTABILITÉ DANS LE MONDE

Christopher Nobes (2012) suggère que l'expression “système de comptabilité” serait utilisée pour désigner les pratiques d'établissement de rapports financiers utilisés par une entreprise. Systèmes pourraient être classés en groupes par des similitudes et des différences. Si la totalité ou la plupart des entreprises dans un pays utiliser des pratiques comptables très similaires, ce qui pourrait suggérer que les pays peuvent être classés sur la base des pratiques comptables.

Deux systèmes de comptabilité sont actuellement utilisés dans le monde, les Français et les Anglo-saxonne, à savoir deux internationaux cadres de référence, une publiées par l'IASB et une ordonnance prononcée par le FASB, avec une évidente tendance à les harmoniser. (Ecobici, 2010).

Les pays en développement doivent et peuvent vivre avec les normes comptables moins globales, telles que les IAS à cause de leurs environnements d'affaires uniques. Les pays développés tels que le États-Unis ont des accords commerciaux complexes tels que les opérations sur dérivés et besoin de normes comptables complexes pour répondre à leurs questions spécifiques (Ampofoa et Sellani, 2005).

À l'intersection de la comptabilité avec la fiscalité apparaissent de nombreux problèmes qui peuvent être discutées. Les différends examinent la relation entre la comptabilité et de la fiscalité sur les années écoulées, indépendamment du niveau où ils se sont produits, ont abordé toutes les questions entre les deux, distinguant donc entre le système de comptabilité de l'Europe continentale et le système de comptabilité des pays anglo-saxons.

Dans les pays qui utilisent le système de comptabilité anglo-saxonne (Etats-Unis, Royaume-Uni, l'Irlande) les entreprises financent leur activité sur les marchés financiers et les intérêts des investisseurs ont la priorité. Sur cette base, l'information économique doit servir premièrement pour l'investisseur, donc obtenir une image fidèle des comptes est le principe suprême après quoi le système de comptabilité est guidé. Dans ce système, la comptabilité est déconnectée de fiscalité à

partir des organismes qui établissent les règles fiscales et comptables. Si les règles en matière de fiscalité restent à la charge des autorités fiscales de chaque pays, réglementations relatives à la préparation des états financiers sont déterminées par les organismes professionnels indépendants.

Dans Les États-Unis la fiscalité est la fonction d'IRS (Internal Revenue Service) et la comptabilité est dans l'attribution du FASB (Conseil des normes de comptabilité financière). En vertu de la comptabilité anglo-saxonne, le comptable n'a pas nécessairement besoin de connaître la fiscalité, il travaille seulement dans le domaine de la création comptable il cherche ces méthodes pour qui l'information est de plus en plus crédible (Neamtiu G., 2008).

Les entreprises qui appliquent le système comptable continental européen atteindre leur financement par des prêts bancaires et l'information comptable est au service de l'Etat parce qu'il est fortement influencé par la fiscalité. Dans les pays où ce système fonctionne (des pays comme l'Allemagne, la France, Suisse, Italie, Grèce, Roumanie) les deux règles fiscales et comptables sont élaborées par les autorités étatiques. Sous ce régime les états financiers sont dominés par le respect de principe de la prudence et la comptabilité est très prisée par les lois détaillées.

En Roumanie, la comptabilité est adoptée par le Parlement. Règlement du Parlement sont mises en œuvre par le Ministère des Finances en collaboration avec le Financial Reporting Councils dans lequel se joignent des représentants indépendants des organismes professionnels dans le domaine de la comptabilité (le Corps des Experts Comptables et des Comptables Agréés de Roumanie) et l'audit (Chambre des auditeurs financiers de Roumanie). En ce qui concerne la fiscalité, il est toujours mis en œuvre par le Ministère des Finances mais au moyen d'une structure subordonnées au ministère, nommé Agence nationale de l'administration fiscale.

La priorité de l'États financiers diffère considérablement de l'objectif qui sous-tend la préparation des états fiscaux et nous considérons dans ce cas, y compris la méthode de calcul qui sous-tend leur. Donnant une image fidèle du patrimoine d'une entreprise est l'objectif principal de la comptabilité. Cet objectif est réalisable uniquement par la transparence de l'information comptable et sans que cette information soit polluée fiscale.

Le système anglo-saxon répond le mieux aux caractéristiques qualitatives qui déterminent l'utilité de l'information fournie par les états financiers, qu'il s'agisse du bilan ou compte de profits et pertes. Ainsi, à l'entrée de la Grande-Bretagne dans l'UE, les règles comptables sont devenues de plus en plus dure et la directive européenne IV imposant la véritable image comme un élément clé dans la présentation des états financiers. A partir de ce moment, coût historique est la preuve formelle crédible qui sous-tend l'évaluation comptable.

Après Christopher Nobes (2012), une partie du travail de classification est maintenant un intérêt historique. Toutefois, les différences internationales restent dans les nombreux pays qui n'ont pas encore adopté ou convergencé avec les IFRS à toutes fins comptables.

2. LA NORMALISATION ET L'HARMONISATION DE LA COMPATIBILITÉ

La prémisse du processus d'harmonisation comptable est donnée par la normalisation de comptabilité. La normalisation comptable est la prémisse et la conséquence de la nécessité d'une comptabilité universelle (Horomnea, 2004).

Pour supprimer les nombreuses différences entre les deux systèmes comptables et pour que les investisseurs ont accès à l'information économique comparable et précis, dans le monde entier, au cours des dernières années ont mis l'accent croissant sur l'harmonisation comptable et sur la normalisation comptable.

L'harmonisation internationale des normes de comptabilité financière a été l'objectif de beaucoup de comptables professionnels et universitaires au cours des dernières années (Baker et al., 2007).

Au niveau européen, l'objectif principal a pris en considération l'harmonisation des règles comptables européennes avec les Normes internationales d'information financière (IFRS).

La Stratégie de l'Union européenne à se tourner vers les normes comptables internationales a été déterminé, d'abord, l'obligation imposée aux sociétés européennes cotées sur les marchés de capitaux internationaux à publier des états financiers en conformité avec les exigences de ces marchés, et d'autre part, les normes IAS / IFRS et US reconnus (comme un résultat d'une collaboration IASB - IOSCO en améliorant les normes IAS / IFRS), l'Union européenne a jugé cette évolution vers une solution (Berheci et Chersan, 2011).

3. IFRS CONTRE US GAAP

L'harmonisation comptable au sens de Mustata (2008), implique un mouvement d'un référentiel comptable national à une référentielle internationale. Dans ce contexte, les Normes internationales d'information financière (IFRS) publiées par le Conseil des normes comptables internationales (IASB) reflètent la convergence de l'information comptable à toutes les parties prenantes représentant pratiquement étapes finales prises à l'harmonisation comptable internationale. En 2002, l'UE a décidé que toutes les entités énumérées à adopter pour leurs comptes consolidés depuis 2005, la référence internationale publiée par l'IASB.

Dans le contexte de la mondialisation et l'internationalisation, les états financiers peut être faite sur la base des normes nationales (national lois) ou les normes internationales (IFRS et US GAAP) (Ecobici, 2010).

Actuellement, deux grands systèmes des normes comptables coexistent, IFRS et les US GAAP des États-Unis, et les objectifs des organismes financiers et de la comptabilité internationale est d'obtenir une convergence de ces derniers. Cet objectif, cependant, ne peut être réalisé jusqu'à ce que nous arrivions à un consensus sur deux questions clés: les systèmes fiscaux et des systèmes comptables local ou national (Guggiola, 2010).

Les normes internationales d'information financière (IFRS) sont conçues comme une langue mondiale commune pour les affaires commerciales ainsi que les comptes des entreprises sont compréhensibles et comparables à travers les frontières internationales. Elles sont la conséquence de la croissance de l'actionnariat international et du commerce et sont particulièrement importants pour les entreprises qui font affaire dans plusieurs pays. Ils remplacent progressivement les différentes normes comptables nationales.

IFRS a commencé comme une tentative d'harmonisation comptable dans l'Union européenne, mais la valeur de l'harmonisation a rapidement fait le concept attrayant dans le monde entier. Ils sont parfois encore appelés par son nom d'origine des normes comptables internationales (IAS). IAS ont été émis entre 1973 et 2001 par le conseil d'administration du Comité international des normes comptables (IASC). Le 1er Avril 2001, le nouveau Conseil international des normes comptables a pris le relais de l'IASC la responsabilité de fixer des normes comptables internationales.

IFRS sont utilisées dans de nombreuses parties du monde, y compris l'Union européenne, l'Inde, Hong Kong, l'Australie, la Malaisie, le Pakistan, les pays du CCG, la Russie, le Chili, l'Afrique du Sud, Singapour et la Turquie. En Août 2008, plus de 113 pays à travers le monde, y compris toute

l'Europe, actuellement imposent ou permettent reportant IFRS et les IFRS exigent 85 rapports pour toutes les sociétés cotées domestiques, selon la US Securities and Exchange Commission.

Principes comptables généralement reconnus, les PCGR américains (US GAAP) ou simplement conformes aux PCGR (GAAP) sont des termes pour les «principes comptables généralement reconnus» et les règles utilisées aux États-Unis.

Ceux-ci sont utilisés pour préparer et présenter les états financiers pour une grande variété d'entités, y compris les sociétés cotées en bourse et privée, les organisations à but non lucratif, et les autorités gouvernementales, avec le Conseil des normes de comptabilité financière (FASB) établir des règles pour les entreprises publiques et privées et des organismes à but non lucratif;

Les normes comptables ont historiquement été fixées par l'American Institute of Certified Public Accountants (AICPA) de l'objet de la Securities and Exchange Commission des règlements. L'AICPA d'abord créé le Comité de la procédure comptable en 1939, et remplacé que par le Conseil des principes comptables en 1959. En 1973, le Conseil des principes comptables a été remplacé par le Financial Conseil des normes comptables (FASB), sous la supervision de la Financial Accounting Foundation avec le Conseil Consultatif des Normes Comptables Financières servant à informer et donner leur avis sur les normes comptables.

En 2008, la Securities and Exchange Commission a publié une "feuille de route" préliminaire qui pourrait conduire les Etats-Unis à abandonner les principes comptables généralement reconnus dans l'avenir (à déterminer en 2011), et de rejoindre plus de 100 pays à travers le monde au lieu de l'aide de la basée à Londres, les Normes internationales d'information financière. En 2010, le projet de convergence était en cours avec la réunion FASB régulièrement avec l'IASB. La SEC a exprimé son objectif d'adopter pleinement les normes internationales d'information financière aux États-Unis en 2014

Tableau 1 - Les différences entre les IFRS et les U.S. GAAP des États-Unis

Question	IFRS	U.S. GAAP
Documents inclus dans les états financiers	Bilan Compte de résultat Variation des capitaux propres Tableau des flux de trésorerie notes	Bilan Compte de résultat État du résultat global Variation des capitaux propres Tableau des flux de trésorerie notes
Bilan	Exige la séparation des actifs et passifs courants et non courants	Recommande séparation des actifs et passifs courants et non courants
Les impôts différés	Montré comme des postes distincts sur le bilan	Inclus avec des actifs et des passifs
Les intérêts minoritaires (généralement des participations significatives par mais pas les investisseurs majoritaires)	Inclus dans les capitaux propres comme un élément distinct	Inclus dans le passif comme un élément distinct
Les éléments extraordinaires (événements qui ne se produisent sur une base régulière)	Interdit	Autorisées que si elles sont inhabituelles et peu fréquents
Découverts bancaires	Peut être inclus dans la trésorerie s'ils sont utilisés dans la gestion de trésorerie	Chargé comme une activité de financement

Source: Logue, A. *n.a.*.

L'application des normes IAS / IFRS en Europe est très influencé par l'activité de l'entreprise (Barbu, 2009). L'une des principales raisons de l'application des IFRS dans les états financiers consolidés, c'est que, à ce niveau, nous ne trouvons pas des influences fiscales (Kvaal, 2010).

Nobes (2008) note que, même après l'application des normes IAS / IFRS en Europe mais aussi dans d'autres régions du monde, il y a encore des différences entre la valeur comptable et la diversité des réponses nationales en ce qui concerne les normes IAS / IFRS est due à des raisons de droit des sociétés et le droit fiscal.

Toutes les sociétés cotées de l'UE sont actuellement requis pour préparer états financiers consolidés complets correspondants selon IFRS (Ecobici, 2010).

Les normes comptables nationales de Roumanie ont été alignées à la communauté, mais il est nécessaire de débrancher tous les comptes de taxes afin de donner plus de poids au raisonnement économique contre la taxe.

En ce qui concerne la comptabilisation et l'évaluation des provisions pour risques et charges, la culture de la comptabilité nationale est toujours visible, même lorsque les entreprises déclarent conformément aux normes IFRS (Feleaga, 2010).

Par exemple en Roumanie en conformité avec les lois nationales (OMFP 3055/2009), les états financiers fournissent une structure de bilan qui classe les actifs dans l'ordre croissant de la trésorerie et les passifs dans l'ordre croissant de l'exigibilité. Selon les normes US GAAP, les actifs

sont classés dans le bilan en descendant ordre et les passifs dans l'ordre croissant (Ecobici, 2010). Synthétiquement, ces différences peuvent être observées dans tableau no. 2.

Tableau 2 - Structure comparatif des actifs et passifs au bilan

En conformité avec les lois nationales (comptabilité réglementations cohérentes avec les directives européennes)	En conformité avec les normes US GAAP
A. Immobilisations I. Immobilisations incorporelles II. Les immobilisations corporelles III. Les actifs financiers B. Actifs à court terme I. Stocks II. créances III. Placements à court terme IV. La trésorerie et les comptes bancaires C. Charges payées d'avance	Actif à court terme La trésorerie et les équivalents de trésorerie Placements temporaires Comptes débiteurs Les stocks Charges payées d'avance et autres actifs courants Avantages fiscaux sur les bénéfices futurs Autres actifs courants Holdings et des créances à long terme Patrimoine, de la machinerie et de l'équipement (immobilisations corporelles) Dépôts et autres actifs à long terme
D. Dettes: montants payables dans l'année G. Dettes: Dettes à plus d'un an H. Dispositions I. Produits constatés d'avance J. Capital et réserves I. Capital souscrit (présentant séparément le paidup et le capital impayé) II. Primes d'émission III. Réserves de réévaluation IV. réserves V. Bénéfice / perte reportée VI. Bénéfice / perte de l'exercice	Passif à court terme Effets à payer et actuel versements de long terme La dette Comptes créditeurs Charges à payer Dette à long terme Les impôts différés Autres passifs Les capitaux propres Actions ordinaires Actions privilégiées Capital déposé Les bénéfices distribués

Source: Ecobici (2010).

CONCLUSIONS

L'achèvement de la normalisation et de l'harmonisation comptable mai aussi l'acceptation au niveau international des normes comptables proposées, entraînent des rapports financiers uniformes qui conduisent à l'effacement des différences entre les pays.

Dans le contexte actuel de la mondialisation économique se fait sentir le besoin urgent d'harmonisation internationale des réglementations comptables. La coopération entre les états est nécessaire d'augmenter et les organismes de formation professionnelle au niveau international (par

exemple L'Association of Chartered Certified Accountants - ACCA) s'étendent et fournir des services dans d'autres pays. Les professionnels des finances doivent élargir leurs connaissances et leur compréhension des relations d'affaires au niveau internationaux non seulement les nationaux.

La connaissance approfondie *des règles* de la *comptabilité* au niveau international c'est la force *des experts comptables* et financières et est essentiel d'avoir une interprétation correcte sur les entreprises du monde entier.

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MODELLING THE DEVELOPMENT OF THE INTEGRATION PROCESSES DIRECTION IN THE BAKING INDUSTRY

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Abstract: *The paper presents the characteristics of the economic interaction between organizations and enterprises within the system of cluster type and the direction of their investment and innovation transformation through the implementation of the integration processes in the bakery industry.*

Keywords: cluster; correlation and regression analysis; system model.

JEL Classification: C35, C53.

INTRODUCTION

The modern period of Ukraine's economic development requires a transition to an innovative type of management, in which high-tech research and production systems are becoming prioritized. Close long-term cooperation of all investment and innovation processes' participants with research centres and organizations of various types create favourable conditions to accelerate the introduction of science and technology, strengthen the market position of enterprises, and improve their financial and economic situation. The investment and innovation processes become an important part of the enterprises' competitiveness growth, including the baking industry. Improving the performance of bakeries requires a number of priority issues: retrofitting bakeries, increasing investment in the sector, reducing costs and improving product quality. Transformation of investment and innovation processes of bakeries in the contemporary economy should be characterized by the introduction of new approaches to the development of investment sources and priorities for their use.

The development of enterprises through innovation gives systemic idea of the investment and innovation process, its connection with a business, creates a more complex vision of innovative products. In an innovative development, designed to create and implement a value chain to the end user all parts take part in the investment and innovation process. This chain is represented by the flow of needs (consumers), deliveries (suppliers) and the flow of competitors operating in the market. Thus, the rate of investment and innovation processes of baking industry affects not only the

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company-producers of bakery products, asking for investment and innovation, but their customers, suppliers and competitors as well.

The modern Ukrainian baking industry is characterized by a tendency towards consolidation of production and its concentration in the hands of powerful integrated structures that affect the status and trends of investment and innovation processes bakeries. Because of the structural changes that have occurred among domestic manufacturers of bread are several major forms of combination. First, an association of companies engaged in only baking bread. Second, the integration of enterprise comprising a mill centre, and finally the concentration of businesses that grow grain to their own needs. A typical trend of the modern market bakery products is to build vertically integrated holding companies that have their sown areas, grain elevators, processing plants, bakeries and even the marketing structure.

Integration processes in the baking industry are characterized by clear regional concentration, due to the specifics of bakery products - a limited period of implementation and unprofitable outlets in remote areas. Leading manufacturers of regional bakery products in Ukraine cover up to 60 percent of the national market.

Investigation of region-specific implementation of investment and innovation processes at the enterprises of the baking industry led to the conclusion that their activation should take place towards the integration of the main participants of the bakery products' value chain at the regional level. The development of integration processes in the baking industry (Буряк, 2007) due to the possibility of formation of stable production and economic relations between enterprises within the process chain; modernization of production capacity; reduction unit costs by increasing the scale of production and improve the price competitiveness of products; accumulation of capital for investment and innovation development and the achievement of an appropriate position in the market; creation of favourable conditions for the diversification of production; development of manufacture of innovative products based on new productions.

Based on the study of basic forms of investment and innovation activities of enterprises we consider it appropriate to carry out the implementation of the integration processes in the field of bakery based on the cluster approach.

It should be noted that significant achievements in the study of the features of formation of cluster models of entrepreneurship have received foreign and domestic researchers Y.M. Bazhay, A.M. Poruchnyk, B.V. Zaremsky, D.G. Lukyanenko, M.P. Voynarenko, A.K. Kins, A. Dlugopolsky, S.I. Sokolenko, M. Porter, E. Dakhma, S. Rosenfeld, C. Ketels, D. Jacobs, E. Leamer, I. Tolenado,

D. Radebe, P. Samuelson, D. Soulier (Бажал, 1996; Войнаренко, 2000; Заремський, 2010; Гальчинський, et al. 2002; Портер, 2002), etc. However, as we have established, there remain a number of unresolved issues, especially with the possibilities of adapting the cluster approach to national economic conditions, characteristics of economic cooperation between the organizations, businesses and corporations, which are included in the cluster type and forming effective tools for financing investment and innovation processes of enterprises in the cluster.

The aim of our research is to examine characteristics of the economic cooperation between the organizations and the entities within cluster system and the transformation of the directions of their development through the implementation of the integration processes in the baking industry.

Under the cluster, we offer understand a holistic socio-economic and territorial-branch system of enterprises and organizations involved in the generation and implementation of competitive products and services within their value chain. A cluster is formed based on territorial concentration of networks of specialized suppliers, major producers and consumers, the interaction of which is related technological chain (Гальчинський, 2004). The occurrence of clusters provides for the transfer through the same chain of products with high consumer value and other advantages of the high competitiveness of enterprises to the founding of the cluster of allied enterprises.

In order to investigate trends of baking industry clustering in Odessa region we offer the use of economic-mathematical modelling interactions of factors affecting the level of resulting parameters bakeries.

The study of research aspects of economic and financial problems using the unit of economic and mathematical modelling studied by many scientists and economists, among them V.N. Tregubchuk, P.T. Sabluk, A.G. Yankovoy, I.V. Orlova, V.A. Polovnikov (Саблук, 2002; Трегубчук, 2005).

As part of our analysis, we suggested the use of economic and statistical methods that provide the ability to build models with the analytical expression of the relationship between the main economic indicators. To assess the impact of the factors contributing to the effectiveness of bakeries and justify their further directions clustering consider it appropriate to use regression analysis (CRA). Correlation and regression analysis takes into account the internal relationship and provides a more complete measurement of the impact of each factor on the effective sign to other factors and the impact of all factors on the symptom score.

As a resulting parameter of bakeries activities, suggested the use of the indicator Y - profits from sales of the enterprise. Let us examine the level of impact on the profit from the sale of the

enterprise main factor variables such as the cost of the main raw material, marketing expenses, long-term bank loans, and the cost of the active part of fixed assets.

The choice of these factors in the analysis is determined by the specifics of the baking industry and the characteristics of the formation of the value chain bakery products. Here are explanations of each selected factor.

The cost of the main raw material. The high degree of dependence on raw materials inevitably leads to an increase in the cost of production and a fall in profitability bakery manufacturers. The poor state of the domestic agricultural sector, which directly affects the processing enterprise, is complicated by the high cost of energy, fuel and petroleum products, the use of outdated technology equipment, lack of machine-vehicle fleet. Despite significant territorial capabilities, the Odessa region is a zone of risky agriculture; therefore, the level of bakeries basic raw materials is directly dependent upon the quality and affordability.

Marketing expenses. With the continuous reduction of bread and bakery products consumption the public key challenge for manufacturers is to ensure the smooth sales. The marketing consumer market research and trends in consumer tastes, the analysis of the competitive market become important. Only under the condition developed marketing strategy and extensive distribution network it is possible to hold competitive positions in the market.

Long-term bank loans. The development of businesses clustering process is directly related to the development of financial mechanisms and instruments that can provide attraction of investments for the realization of their investment and innovative projects. World practice shows that the decisive role of long-term loans, as the main mechanism for financing of investment and innovation that could significantly improve the efficiency of investment projects and rising funds for the long term. However, the practice of domestic business shows that the use of bank credit is limited considerably high degree of volatility and riskiness of credit, high interest rates. This reduces the investment opportunities of investment and innovation processes of the baking industry, leaving producers completely dependent solely on their own resources.

The cost of the active part of fixed assets. The main problem of the industry is aging of technique of domestic bakeries. This greatly complicates the implementation of modern innovative technology by manufacturers and leads to an increase in production costs. The ability to bakeries to update and modernize the active part of fixed assets determines their competitiveness in the market.

The dependence of the proposed resulting indicator from these factors could be traced with the following multi-functions:

$$Y = f(X_1, X_2, X_3, \dots, X_n) \quad (1.1)$$

where $X_1, X_2, X_3, \dots, X_n$ - factors affecting the formation of profits from the sale of bakery business.

At the first stage of economic and mathematical modelling based on the analysis and the establishment of cause-effect relationships provide the definition of result indicators, and a multitude of factors that influence them. The study carried out based on activities of JSC "The Odessa Karavaj".

According to the phasing of the regression analysis, we have carried out the construction of the matrix pair correlation coefficients for the estimation of linear and non-linear relationships. The resulting matrix makes it possible to assess the presence of linear and non-linear relationships between the resulting index and factors affecting it.

The correlation coefficient determines the nature and density of relations between the parameters activities the baking enterprise. Correlation coefficient is set in the range from -1 to +1. Its positive value indicates that there is a direct connection, according to which an increase in one-indicator entails an increase in the other, the negative - the reverse, that is, increase in one variable leads to a decrease in the other.

The evaluation of the correlation coefficients, was carried out using the Chedaka scale that provides qualitative assessment of the closeness of the connection parameters. According to the Chedaka scale correlation between the parameters are interpreted as follows: $0,1 \leq |r| < 0,3$ - a weak correlation; $0,3 \leq |r| < 0,5$ - moderate correlation; $0,5 \leq |r| < 0,7$ - a marked correlation; $0,7 \leq |r| < 0,9$ - strong correlation; $0,9 \leq |r| < 1$ - a very strong correlation.

The results indicate that the equation constructed multifactorial statistical reliability in general $F = 0,0002 < 0,05$.

According to the correlation matrix of both linear and non-linear relationships, we concluded that there is a strong dependence of the volume of business of all of these factors, with the exception of long-term bank loans. The density of the correlation of this indicator amounted to $R = 0,173$. Consequently, this factor can be excluded from the simulation process.

The analysis has shown that we are considering the dependence of resulting indicator from factorial signs accurately described by a logarithmic function:

$$Y = -2,2046 + 0,7289 \ln(X_1) + 0,3833 \ln(X_2) + 0,1487 \ln(X_3) \quad (1.2)$$

where:

X_1 - the cost of the main raw material;

X2 - marketing costs;

X3 - the active part of the cost of fixed assets.

According to the conducted CRA the correlation coefficient for the model (1.2) $R = 0,9869$ indicates the high quality of the model, 97% of the variance resultant variable, profits from the sale of JSC "The Odessa Karavaj" explained regression:

$$Y = -2,2046 + 0,7289 \ln(X_1) + 0,3833 \ln(X_2) + 0,1487 \ln(X_3)$$

The model is statistically reliable, as the P-value F-test was 0.000222, which is much less than 0.05. The coefficients of the first order autocorrelation of the residuals are $r(1) = 0.1073$ (p-value = 0.132976), indicating the adequacy of the model.

We have constructed a first-order AR model describes the dependence resulting indicator subsequent levels of a number of dynamics from past and has the following form:

$$Y = -1157,94 + 0,851003Y_{t-1} \quad (1.3)$$

The above model is able to describe quite well simulated of dynamics series us, and therefore can be used as a tool for predicting the long term.

CONCLUSIONS

Modelling studies of factors relationships affecting the level of profits from the sale of bakeries, indicating the high level of its relationship with factors such as the X1 - the cost of the main raw material (the highest ratio of the degree of the strength of correlation), X2 - marketing costs, X3 - the cost of the active part of fixed assets. Thus, clustering baking industry should be in the direction of establishing sustainable raw relations between the main participants of the cluster structure. Requirements to reduce the cost of production, including through the modernization and automation of production, development of an appropriate pricing and distribution policy and the cost of building an active part of fixed assets through the introduction of new equipment and innovative technologies.

The benefits of cluster foundation over the typical for the baking industry vertically integrated structures include the ability to produce flexible specialization and efficient realization of synergy opportunities of its members. The proposed cluster associations should establish close cooperation between grain producers, baking, milling plants, as well as other related resources on the basis of industrial sectors (cereals, fodder, confectionery, pasta), as well as educational, scientific and research organizations, investment institutions, government and regional authorities. Clusterization of bakeries

will contribute to the development of investment and innovation processes, accelerate the implementation of research and development to production, and innovative products to the market, the growth rate of investment in the industry.

In accordance with the cluster's approach transformation of investment and innovation processes of baking enterprises should be based on an integrated approach to the formation of regional clusters covering the main areas of integration of participants at the regional level. Development and the development of common positions form a cluster of baking industry specific to their operation and the prevailing regional conditions for development is the centre of attention in future research.

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THE FUNDAMENTAL CONTRADICTION OF AN EMERGING SYSTEM OF CORPORATE GOVERNANCE IN UKRAINE

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Abstract: *In the article, the key features of development of national corporate case frame in Ukraine are considered. It is retained that the legislation of Ukraine from point of presence of the formal generally accepted measures on defiance of rights for a shareholder can be appraised as highly developed enough. Thus, the personal touch of redistribution of equity in the Ukrainian corporate sector is prevailing of property of insiders. The folded situation allows talking about steady and fundamental contradiction of the formed national system of corporate management.*

Keywords: corporate government legislation; financial system of Ukraine; insider's ownership; ownership's structure; shareholders' rights.

JEL Classification: G34; G28.

INTRODUCTION

Among the key features of the national model of the corporate governance development in Ukraine it should be identified: a permanent process of property redistribution in corporations, insiders specific motivations associated with the control of financial flows and the "output" of corporate assets, the weak role of the traditional "external" corporate governance mechanisms, inefficient or politicized State enforcement.

In Ukraine, as in continental Europe, is used the generally accepted division of the rights into public (the organization of the state and its relations with individuals) and private (the regulation and protection of the interests of individuals). Private law, in its turn, is divided into two main parts: civil (general rules governing the relations of individuals) and trade (the ratio of individuals with regard to the recovery of profits). "Trade Association" is regarded as a branch of commercial law, and the "joint stock companies", in its turn, as part of the "trade associations" ("economic partnerships and companies").

Another formal difference is the specification (or lack thereof) of company law norms in special laws. The special laws related to the joint-stock companies (JSC) (other than codes) are currently available in most countries, such as France (the law of trade associations in 1966), Germany (the law

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on joint stock companies in 1965). Almost in all countries with transitive economy JSC are already the subject of a particular type of legal regulation.

Hungary was the first that went along with the French way (Company Law 1988, amended 1991). Similar legislation (where JSC is regulated on a par with other companies or partnerships) has been adopted in Albania, Bulgaria, Kazakhstan, Mongolia, Russia and Ukraine.

The paper (Кублікoв, 2008) shows that none of the existing models of corporate governance is perfect. Similarly, no other country has reached a 100 percent level of most conciliatory implementation of Principles of Corporate Governance in terms of international practice the OECD (OECD, 1999). The most developed countries walked closer to it than other, primarily belonging to the Anglo-American legal system. This is followed by the country's civil law.

The analysis of the Ukrainian legislation in terms of availability of formal common measures for the protection of shareholder rights shows that it can be rated as sufficiently highly developed. Of course, in the domestic legislation on joint stock companies there is a significant adoption of the Anglo-American protection mechanisms of shareholder rights. However, the general traditions of European civil law remain dominant, which determines the proximity of Ukrainian corporate law to the standards of EU legislation on formal criteria set forth in the Regulations and Directives of the European Council (Database of EU legislation on <http://www.europa.eu/>) (Table 1).

Table 1 - The basic norms of company law presence in Ukraine and the EU

Norms	Ukraine	EU
Tight and detailed procedure for creating a joint-stock company	Yes	Yes
Tough and detailed procedure for maintaining the size of the authorized capital stock	Yes	Yes
Regulation of creation of branches, representative offices and other separate units	Yes	Yes (in reporting)
The main issues of reorganization	Yes	Yes
The possibility of company with one participant	Yes	Yes (for closed / private companies)
Pre-emptive right to purchase the shares by shareholders	Yes	Yes
Stringent requirements for reporting and auditing	Yes	Yes
Absorption and protection of minority rights	Yes (details required)	The general principles under discussion
Bankruptcy	Yes (a modification of legislation needed)	Yes (minimum)
Insider transactions	Yes (minimum)	Yes (outright ban)
Liquidation	Yes	No

On the other hand, the analysis of the mechanism of the property structure formation and its redistribution in Ukrainian specifics suggests that this mechanism is primarily performs the functions

associated with the struggle for control of the company. Typical feature of the share capital redistribution in Ukrainian corporate sector is the dominance of insider ownership (Table 2).

The analysis of Table 2 suggests that from 2003 to 2009 there was a decrease in the company's capital share for shareholders who own less than 15% and an increase the share of owners who own more than 80% of the share capital. Thus, the structure of share ownership, which has developed in the Ukrainian economy, can be characterized as highly concentrated.

Table 2 - Changes in the proportion of owners in joint stock companies in Ukraine (as for January 1)

Year	Shareholders portion in the company who own more than 5% of share capital (%)								
	<15	15-20	>20-30	>30-40	>40-50	>50-60	>60-70	>70-80	>80-100
2003	27,6	5,2	6,0	8,3	8,7	12,1	10,8	9,7	11,6
2004	21,2	4,9	5,7	7,8	9,5	11,4	11,0	12,2	16,3
2005	21,0	3,9	5,4	6,7	8,0	10,1	12,1	14,5	18,3
2006	10,8	3,2	4,8	6,2	7,4	9,9	14,5	17,5	23,9
2007	4,8	3,8	11,0	6,1	9,5	10,0	11,1	12,1	31,6
2008	4,5	3,7	10,4	6,4	9,2	9,4	11,5	12,6	32,3
2009	4,5	3,7	9,9	6,0	8,7	9,6	12,5	11,6	33,6

Based on the above, as well as taking into account a number of empirical data we can talk about sustainable and fundamental contradiction emerging national system of corporate governance. Its essence lies in the fact that in the current system two fundamentally different approaches coexisting:

1. Concentration of share capital, which implies a minimum of legal protection of shareholders;
2. Anglo-Saxon legal tradition, which is characterized by maximization of minority shareholders legal protection.

This combination of approaches has led to the unique situation of reciprocal neutralization:

- On the one hand, the concentration of the share capital and the gradual reduction in the proportion of minority shareholders in principle reduces the importance of a broad legal instruments of minority shareholders protection in terms of the corporate sector in general, and the tools themselves to protect small shareholders are transformed into instruments of corporate blackmailing;
- On the other hand, the establishment of a comprehensive system of legal protection of shareholders, in turn, hampers the further process of concentration of share capital (as a factor of the inverse effect of the right of economic processes).

In this case, it should be noted that the protection of their interests through further concentration – it is the prerogative of large shareholders, primarily for ordered enforcement.

In this regard, an important issue is the existence of economic and institutional prerequisites for attraction to a particular classical model of corporate governance.

The model with the domination of minority shareholders' interests is not impossible in Ukraine, as it quite complicated in practice. The implementation of such a model would require a serious economic breaking of the existing relationship. Sharp focus in favor of the interests of minority shareholders violates the balance of interests of all the other subjects of corporate relations. The role of minority shareholders, however, is crucial to ensure the corporate transparency.

However, the lack of legal protection of minority shareholders and the relatively low level of stock market development related in both direct and inverse feedbacks. The lack of liquidity of the majority of the shares of domestic corporations on the weak development of the stock market makes their owners substantially even less protected. The presence of such a situation, in its turn, promotes the concentration of corporate ownership and reduction of stock market mobility.

In fact, disparate components of all the traditional models are now formally presented in Ukraine:

- relatively dispersed ownership with illiquid stock market and weak institutional investors;
- steady trend towards concentration of ownership and control;
- elements of cross-holdings and the formation of complex corporate structures of different types.

Such a blurring of the Ukrainian model creates evident difficulties for decision-making in the field of economic policy and the law.

A type of financial system that dominates in the country provides a particular importance on the formation of a national corporate governance model. The main feature, constituting a particular type of financial system is the role of commercial banks in providing activity and financing of industrial corporations. Depending on the value of banks in long-term financing of economic growth can be spoken about either a banking-oriented, or a market-oriented financial system.

Nowadays, there is a situation where none of the above types of financial systems do not only prevail, but, more importantly, functioning in isolation from industrial corporations in Ukraine. The banking model of economic growth proved to be ineffective in the late 90s of the last century, and in 2008 - 2009. The stock market as a potential mechanism for financial resources mobilization throughout the time of its development was unable to cope with the tasks.

As a result, the only reliable option for which you can try to determine the attraction to a particular type of financial system is the structure and level of concentration of the share capital, which determines the form of the right of control.

Assuming that the result of many stages of redistribution of property in Ukraine will be a highly concentrated ownership, legal disclosure requirements in existing and even more tightening form does not have a real foundation. Moreover, they are also extremely poorly executed now.

The problem of selective law enforcement by order of interested private organizations – a key drawback of modern domestic model, that is systemic and cannot be rectified by editing regulations and codes of corporate governance.

The Ukrainian model of corporate governance is formed in two parallel trends:

- Managers are gradually becoming the controlling shareholders of the corporation, i.e. key feature is the "capitalism of Governors", which became the owners or "insider capitalism";
- external shareholders, as the consolidate control themselves, begin to function as managers or transfer those functions to an authorized representative of a group of shareholders associated with them not by a formal contract, but by a whole set of economic and non-economic interests.

Obviously, this is a forced situation, which is connected with a number of circumstances.

Firstly, the continued merging of functions due to the fact that under the current external environment ("gray" schemes of corporate finance "tax optimization", control of financial flows, asset stripping, etc.), and the continued trend of struggle for control, the formal owner must remove the risk of loss at the same time both the property title and control of financial flows.

Second, the system is organized on the principle of two, three, four partners that share both property (control), and business. There are at least two problems in such public corporations.

The first problem is concerns the short-term investments. It is necessary to take into account that many domestic corporations are guided by the foreign profit centers, and their ongoing activities make the most of the internal sources, including the pseudo-foreign loans, etc. It should be noted that in the period 2003-2007 reinvestment process is enhanced, by Ukrainian owners, and namely in the practice of various forms of pseudo-foreign investment. Consequently, the requirement of transparency insurance of ownership structure and finance, i.e. every tightening of enforcement, could indicate the break of the re-investment process from abroad.

The second problem is the accomplishment of a long-term investment strategy in such corporations. The system of partnership involves focus on current short-term profits, and thus there are problems regarding the negotiation and implementation of a long-term investment strategy. It is obvious that such an organization involves a strict system to minimize the losses associated with the opportunistic behavior of managers.

The ability to use the Ukrainian banking system as a driver of corporate governance and financing has been adopted by the beginning of this century and brought negative results. At present, banks are still not able to carry out long-term external financing of the real sector of the economy due to the insufficient domestic capital and short-term liabilities.

Some countries, with a transitive economy, were able to use foreign direct investment to stimulate corporate investment and restructuring.

It should be noted that the corporate governance model, based on a broad presence of foreign strategic investors in key sectors of the economy, requires a stable and carefully cultivated political climate (in this case, the stability is crucial, as the example of China). Although Ukraine's foreign direct investment should be a priority in some industries, a significant influx in the medium term is unlikely to happen.

CONCLUSIONS

As a result one can identify the following fundamental processes: for the prospects of forming a national model of corporate governance

- latency of the separation of ownership and control process will remain in the medium term;
- the financial system of Ukraine in its present precarious state does not evaluate the attraction of national systems of corporate governance in any classical models;
- concentration of share capital is an obvious process by which takes place not only the consolidation of control, but also the realization of economic methods of "self-sufficient" model of corporate governance;
- legal innovations in the field of corporate law itself (shareholder rights) are largely reached its peak in terms of current economic conditions;
- methods of protection of shareholders' rights cannot be further developed without adequate general measures in the area of enforcement.

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INTERNATIONAL TRADE WITH HIGHER EDUCATION SERVICES AND ECONOMIC GROWTH IN CENTRAL AND EASTERN EUROPE

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Abstract: *The higher education international market is currently in a continuous development. In this article, we have analyzed the statistical data in order to determine Central and Eastern European countries' flows of higher education. The aim was to see to which extent these countries are involved in international trade with higher education services, as well as the impact that this trade has on national economies. We have also tried to determine the conditions that would make these states benefit more due to educational flows.*

Keywords: higher education; international trade; Central and Eastern Europe.

JEL Classification: I29, N70.

INTRODUCTION

International trade with higher education services, or transnational higher education, refers to the movement of people, programs, providers, knowledge, ideas, projects, and services beyond national borders. The term is seldom used alternatively with “transnational education”, “offshore education”, and “education with no borders” (CVCP, 2000, p. 29).

According to GATS there are four modes in which a service can be traded. These are known as “modes of supply” and they apply to all of the twelve services sectors, education included. Table 1 presents a generic definition for each mode, applies them to higher education, and comments the relative dimension of the market.

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Table1 – Transnational higher education: modes of supply

Mode of Supply According to GATS	Explanation	Examples in Higher Education	Size /Potential of market
1.Cross Border Supply	-the provision of a service where the service crosses the border (does not require the physical movement of the consumer)	-distance education - e-learning -virtual universities	- currently a relatively small market -seen to have great potential through the use of new ICTs and especially the Internet
2.Consumption Abroad	provision of the service involving the movement of the consumer to the country of the supplier	- students who go to another country to study	-currently represents the largest share of the global market for education services
3.Commercial Presence	the service provider establishes or has presence of commercial facilities in another country in order to render service	-local branch or satellite campuses -twinning partnerships - franchising arrangements with local institutions	-growing interest and strong potential for future growth -most controversial as it appears to set international rules on foreign investment
4.Presence of Natural Persons	persons travelling to another country on a temporary basis to provide service	-professors, teachers, researchers working abroad	- potentially a strong market given the emphasis on mobility of professionals

Source: Knight, 2002, p. 60.

Student international mobility continues to stand for the main form of transnational higher education. In 2008 there were 3.3 million international students worldwide, marking an increase of 250% compared to the 1990 level, and an increase of over 400% compared to the year 1975 (OCDE, 2010). The OECD countries host about 85% out of the world's international students, 2.8 million to be more exact; in 2007, 67% of the foreign students located in the OCDE are were coming from a third country. These proportions have remained the same for the last decade (Vincent – Lancrin, 2009, p. 65).

According to UNESCO, 11% of the mobile students in the world were coming from Central and Eastern Europe. About 1.5% of the region's students are studying abroad. Russia has the lowest rate, of 0.5%, and Macedonia the highest, of 10.9%. The outgoing students rates have also been

significant in Slovakia (10.3%), Bulgaria (8.8%), Bosnia and Herzegovina (8.7%), Moldova (7.1%), and Estonia (5%).

More than half of the region's students that go abroad for education take the road of Western Europe. Nevertheless, the percentage of students heading to the Eastern European region has grown since 1999, from 25% to 28%. Russia and the Czech Republic are the main destinations. Generally, students from Eastern Europe tend to explore different options, excepting those from Albania, Byelorussia and Slovakia, who prefer destinations such as Russia, Italy, and the Czech Republic.

In the attempt to determine to which extent international trade with higher education services has an impact on economic growth in Central and Eastern Europe, we have identified two perspectives: on the short term, and on the long term.

1. SHORT TERM PERSPECTIVE

From the short term perspective, the financial evaluation of higher education services flows is taken into consideration, as they would be reflected in a national balance of payments. We have noticed that the education sector, the higher education sector the less, does not have affected a special account, being included in *Other services*. Therefore, based on national accounting, it is practically impossible to extract a certain value of education or higher education flows.

In a study aiming to estimate the economic impact of international higher education in Canada, the national situation of the higher education export sector is highlighted (Roslyn Kunin & Associates, 2009, p. 2). In this study, the methodology for evaluating the economic impact of Canada's foreign students consisted in corroborating the tuition fees and living costs in order to determine the total amount injected into the Canadian economy. For such a calculus the following are needed: a realistic number of foreign students; a clear distinction between self-supported expenses and host state's aid; a weighted average of the tuition fees; a weighted average of living costs. These data are practically non-existent in Central and Eastern Europe. Another example for good practice in collecting such data comes from Australia. The Australian Council for Private Education and Training has published a report that set the direct contribution of international students at over fourteen billion Australian dollars (and an indirect contribution of more than 12.5 billion Australian dollars), that is the counterpart of more than 126.000 full time employees. The statistic evidence and the questioning of international visitors has given the Australian educational sector a significant advantage and could stand for an example that other countries could follow in order to comprehensively evaluate the

economic impact of the commercial transnational higher education. Institute of International Education, another Australian institution, has carried on a parallel campaign aiming at the same purpose. Their approach is more realistic, as they have excluded scholarships and other forms of financial assistance that benefited foreign students. Nonetheless, according to Roslyn Kunin & Associates (2009, p. 10), the final amount is not “accurate”, because the calculus has not included tourism and leisure expenditures.

Relating to Central and Eastern European countries, which are less engaged than Australia in commercial transnational education, such a collection of data is not available. Instead, we have referred to the UNESCO Institute of Statistics data, from which we have selected information about the economic situation of the countries, the proportion of students in the countries’ population having the official age for pursuing university studies, the amount of exports and imports of higher education services, asserted in numbers of mobile students.

On the basis of these data, we have made a series of comments.

First of all, the majority of the region’s countries have attained mass education, with a proportion of about 50% of the people having the official age to follow university studies, actually being enrolled in universities. This figure does not yet apply to Albania, Macedonia, Moldova, and Turkey.

Second of all, the Central and East European states are developing countries (excepting the newly developed ones: Slovenia, Slovakia, and the Czech Republic), the GDP per capita weighted average being USD 16624.72, compared to the OECD average of USD 26000.

Regarding the international trade with higher education services, the most important form for this kind of trade is student mobility, as noted for the entire world. For our analysis, we have considered data dating back from 1990, up until 2010; however, we have noted that most of the countries have been active or have reported data in this sector starting with 1999, and not for all of them the information is up to date.

Albania, between 1999 and 2004, has registered modest higher education exports, the imports for the last year being 28 times more significant than exports. The main destinations have been Italy, Greece, the United States of America, Germany, and Turkey.

Belarus, in the period 1999 – 2008, has only once been a net exporter, in 1999, the imports in the following years (especially from Russia, Poland, Lithuania, Germany, and France) marking a gradual growth. As such, Belarus is a net importer of higher education.

Bulgaria has started with similar levels of higher education imports and exports in 1999. Both flows have grown, but the country has still remained a net importer even in 2004. Bulgarian students prefer destinations such as Germany, the United States of America, France, Great Britain, and Austria.

The Czech Republic attracts students from all continents, most of them from Europe, however. The percentage of foreign incoming students has grown from 2% in 1999 to 7% in 2009, this evolution being supported by a national policy for attracting international students. The Czech Republic is not appealing for students coming from Central and East European countries, their number increasing both in absolute value (from 1559 in 1999 to 24466 in 2009), as in relative value (from 34.02% in 1999 to 79.89% in 2009).

Croatia, as most countries in the region, is a net higher education importer too. Exports have fluctuated below the regional average level, and imports, although double than the exports, have also been below the average for the 1999 – 2009 period. The main destinations for Croatian students have been Austria, Italy, Germany, Slovenia, and the United States of America.

Estonia, similar to Croatia, has had fluctuations for imports and exports between 1999 and 2009, imports being significantly more important than exports. The main destinations for Estonians are Great Britain, Finland, Russia, Germany, and the United States of America.

Latvia is a country that has had a surplus for the higher education account between 1999 and 2001, due to a strong increase of exports. From 2002 until 2009, however, exports have decreased, and imports have grown. This trend has made Latvia a net importer of higher education services. Main sources of imports are Great Britain, Russia, Germany, the United States of America, and Denmark.

Lithuania occupies, in average, the fifteenth place in the region, out of nineteen, regarding both exports and imports in higher education, for the period 1999 -2009. Both flows have increased during the considered decade. Lithuanian students go to study abroad in countries such as Great Britain, Germany, Russia, Poland, and Denmark.

Macedonia imports more education than it exports, being the sixteenth importer and the nineteenth exporter in the region. Main destinations are Bulgaria, Germany, Austria, Italy, and Turkey.

Moldova is also a net importer, ranking in the lower part of the region's top, main destinations being Russia, Romania, Ukraine, France, and Italy.

Poland has also a negative balance for trade in higher education services. We note, however, several particularities: exports have continuously grown from 1999 to 2009, and imports have grown

faster until 2007, gently decreasing afterwards; commercial flows with higher education are among the most significant in the region, Poland ranking third and sixth, for imports and exports, right after Romania. Main destinations for Polish students are Germany, Great Britain, France, the United States of America, and Austria.

Romania has been a net exporter between 1999 and 2000, after which the fluctuant decrease in exports and the continuous increase in imports have made it a net importer also. In the region, however, Romania is the sixth importer in terms of volume, and the fifth exporter. As for main destinations, Romanian students got to France, Germany, Italy, the United States of America, and Hungary.

Russia is the main importer in Central and Eastern Europe. Although imports have been growing in the period 2000 – 2008, the higher level of exports and their substantial growth in 2008 has made Russia a net exporter of higher education. If foreign students originate mainly from Asia, Russian students prefer destinations such as Germany, the United States of America, Ukraine, France, and Great Britain.

Serbia is a newer actor on the international higher education arena, the data for this country covering three years: 2007, 2008, and 2009. In this period, Serbia has imported more in the first year, and has exported more in the next two. The flows have been superior to the regional average. For studies abroad, nationals go to Austria, the United States of America, Hungary, Germany, and Macedonia.

Slovakia is an important importer, ranking the sixth, the top destinations being the Czech Republic, Hungary, Austria, Great Britain, and Germany.

Slovenia is a country that is less involved in international education, being the weakest importer and one of the least important exporters. All in all, it is a net importer.

Turkey records a strong implication in international student mobility. Most students head to the United States of America, Germany, Azerbaijan, Bulgaria, and Great Britain. Turkey is also the number three destination in the region for mobile international students. Although the flows are highly important, Turkey remains a net importer for the years 1999 – 2009.

Ukraine is another significant actor in the region, being the fourth most important higher education importer.

A constant growth, though less pronounced than the Czech Republic, has had Hungary, the percentage of foreign students going from 3% in 1999 to 4% in 2009. Most of these students originate from Europe. On the other hand, exports have gone from 63.01% in 2001 down to 50.03% in 2009.

Considering all the above, the region has been a net importer of higher education beginning with 1999. Net exporters have been Belarus in 1999, Latvia between 1999 and 2002, Romania in 1999 and 2000, and Serbia in 2008 and 2009. Net exporters for the entire analyzed period have been the Czech Republic, Russia, and Hungary.

The Czech Republic and Hungary have outlined strategies to attract foreign students and to facilitate their stay in these countries. Both offer courses in English, Hungarian, and German. In this way, an essential barrier, the language, is overcome. A problem recorded in the region consists in the lack of programs in a foreign language, more accessible to foreign students.

Another issue is the recognition of diplomas. A good example is the degrees offered in the Hungarian system to medical school graduates, which are recognized by the World Health Organization and the EU.

In this context we refer to the Top 500 Universities classification, all three aforementioned countries appearing in it. The Czech Republic has four universities in top 500, Hungary two, and Russia eight. Besides these, we find one university from Estonia, four from Poland, two from Romania, and one from Slovenia. This top is becoming more of a reference point for students looking to study abroad. They are looking for better quality than in their own country or good quality but at lower prices than those of the most prestigious universities. Therefore, the Czech Republic, Hungary and Poland have a comparative advantage in Europe in terms of cost and comparative advantage in the Central and Eastern European bloc in terms of quality. Moreover, implementing a higher education export development strategy, secures the premises for success in this area.

2. LONG TERM PERSPECTIVE

Higher education importing states can integrate this flow into a long-term development strategy, providing an increased capacity in the higher education sector. In this vision, the improvement and enhancement of the human capital stock is included in the analysis of endogenous growth theories. Increasing human capital and capacity development in higher education and related areas (sectors of the economy that are in contact with the university system) is achieved by training a greater number of young people at higher international standards.

Thus, capacity development principles can be applied. But, for this mechanism to work, a number of conditions are requested.

From the perspective of student mobility, for a higher education importing country that aims at capacity development and at carrying forward the development mechanism through the involvement of human capital, it is crucial to create national conditions to attract the best brains back into the national area. Although a developing country cannot offer the exact remuneration as in the developed ones, the minimum conditions such as study recognition and employment facilities are required. Again, this would imply the existence of a specific strategic and tactical plan. In addition to capacity building strategy, at national level higher education exports can be pursued, namely attracting foreign students for studies. For this, small steps can be taken until a better development of the university system. Notably, the implementation of study programs in a foreign language, especially English, easy procedures for obtaining visas where appropriate, clear and easily accessible regulations explaining the steps to be followed for enrolling.

From the perspective of teacher mobility, a valuable import with long-term effects consists in inviting leading teachers, on topics covered less at a national level, to take part in diversifying the information transmitted in universities.

Regarding foreign universities' campuses, legislation gaps are recorded in the countries of Central and Eastern Europe, making it difficult to invest in this area. Also, the country risk is an important factor in this area and forecasts are not very favourable, especially considering the continuing effects of the recent economic crisis. A successful strategy, however, would be attracting a renowned investor and the establishment of a regional university centre. The country that would have such an approach would achieve substantial potential benefits.

CONCLUSIONS

The higher education systems in this area, due to having experienced a relatively long period in the Communist regime, have followed a path of development that has distanced itself from the systems in the developed world. After the collapse of the Soviet regime, they followed the path of transition, which involved a series of reforms and adapting to new market conditions, reforms that in practice continue today. Before 1990 little was said about transnational education, even less about the commercial form. Entering the market economy and having it easier to travel beyond borders have generated considerable imports of higher education to these countries. In fact, only three states from the region are net exporters due to the development of their education systems or geo-strategic position. An analysis of the impact of international trade on the economic development in these

countries therefore primarily aims at correlating with capacity development. Education imports, although determining capital outflows, can ensure sustainable economic development, through national strategies involving higher education.

The problem that we ran into, however, is precisely the lack of regulations and strategies for transnational higher education. The positive premises for development by enhancing capacity can be eroded by factors such as brain drain, brains that are not involved in the production process of the national area of origin and are not encouraged to stay.

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THE CONTAGION EFFECT AND THE RESPONSE OF THE EUROZONE TO THE SOVEREIGN DEBT PROBLEM

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Abstract: *This paper addresses a number of phenomena that characterize the euro area, one of them being the contagion effect. This is one of the mechanisms by which financial instability becomes so widespread that the crisis reached global dimensions. The following lines argue that contagion plays a crucial role in exacerbating the sovereign debt problems in the Eurozone. Consequently, the management of the crisis by the competent authorities should focus on policy measures that are able to mitigate the contagion. Therefore, many of the European Central Bank interventions (ECB) in the European Union were motivated by the need for understanding and mitigating the contagion phenomenon.*

Keywords: international financial contagion; crisis; macroeconomic indicators; fiscal policies; sovereign debts.

JEL classification: E44; F34.

INTRODUCTION

The contagion term refers to the way in which a crisis is transmitted from one economy to another, being a key player in spreading economic recessions of the past. It's amazing the way in which this phenomenon appears and develops or how the effects of an economic shock in one country can be felt in different markets around the globe, regardless of their size and structure. Sometimes the synchronicity and the virulence of the financial crisis seem unrelated to other internal market issues. However, history has shown us moments when the crisis caused massive failures of currencies without a visible connection between trade flows and involved capital markets. This type of phenomena has aroused an increased interest to investigate the economic contagion. Given the fragility of some emerging countries, including Romania, their analysis takes the form of a natural and necessary phase in order to reduce the negative effects of the economic contagion.

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1. THE EFFECTS OF THE CONTAGION PHENOMENON: DEFINING ELEMENTS AND TYPOLOGY

For many emerging countries structural crises with which they have confronted for a longer period of time were accompanied by a systemic crisis imported from the outside. This crisis began in the U.S. system (due to an almost continuous monetary expansion policy led by this country) and spread rapidly on the global level. The phenomenon of the spread or propagation of the crisis is known in the literature as the "contagion effect". The term "contagion" comes from the medical field and it was recently introduced into the economic literature. The interest of the economists for "the contagion phenomenon" of the financial crises started to grow only in the second half of the 90s when the crises propagation effects became more visible from one emerging country to another. Practically speaking, the crisis where the contagion effect was observed for the first time was in Thailand (July 1997) on the foreign exchange market when the Thai government decided to suspend the support of the dollar currency and adopt a free exchange rate of the national currency-Baht (the maintenance for a very long period of a fixed exchange rate encouraged lending from foreign sources and attracting foreign investment but, at the same time, the economy has been greatly exposed to the currency risk). Very quickly the crisis has spread to all the neighboring countries: the Philippines, Malaysia, Singapore, South Korea were among the most affected countries in the region. Then the crisis spread to Russia and Brazil. Even in developed countries from Europe and North America the effects of this crisis were felt and they had the effect of a "domino effect" for more and more countries as the time went by.

The introduction of the concept of contagion in the financial crises literature was based on the devastating effect that they have on the level of income and welfare of a large number of people and in a very short period of time (as it is the case of a massive epidemics). The concept of contagion not only takes into account the impact of the crises on the local level, but also the channels through which these crises are propagated at an international level. The contagion effect also refers to the spread of a crisis in some sectors of the economy (e.g., the crisis in the U.S. mortgage market began to gradually affect all sectors of the economy). In defining the contagion effect one has to take into consideration the existence of a direct or an indirect contact between the countries (or areas) affected by the crisis.

The contagion effect takes into account the emotional response of the investors and the consumers to the radical changes on the international markets reflecting thus a strong psychological and behavioral dimension. The imperfections of the international financial markets can generate

speculative bubbles, an irrational behavior of market participants, speculative attacks, falling stock markets and other events of this kind. These imperfections that can cause major imbalances in the balance of external payments influence the fundamental macroeconomic indicators (inflation, exchange rate, interest rate, unemployment) in countries that initially seemed economically stable.

Currently one can operate with many definitions of the contagion effect of financial crisis:

- the general approach: contagion is the mechanism through which shocks are transmitted across countries, creating a globally domino effect. Contagion can occur both during economic growth and in times of crisis. This phenomenon is taken into account only when it comes to a crisis propagated on an international level (it is often forgotten that there is a "positive" contagion through which the economic growth or development is exported to other countries);

- the restrictive approach: contagion is the mechanism through which economic shocks are internationally transmitted or when there is a correlation between two or more countries, beyond any fundamental link between them and which are different from the common shocks of those areas. This definition refers to that additional training effect that arises between two or more countries and it is explained by specific behavioral attitudes at the investor or consumer level;

- the strict approach: contagion occurs when the correlation between two or more countries increases significantly during crisis times compared with periods of calm. The definition refers practically about the influence that a crisis may have upon the intensity of the relationship between two or more countries.

Most economists operate with a strict definition of the contagion phenomenon: "contagion is a fast growing link between various financial markets in times of crisis". A derivative form of the strict definition of the contagion effect is given by Kaminsky and Reinhart (Kaminsky and Reinhart, 1999) and Eichengreen and Rose (Eichengreen and Rose, 1998): "contagion effect is the situation in which information about the existence of a crisis in another country increases the probability of a crisis on local plan". A number of authors (Gertsman, 1998; MacMahon and Trichopoulos, 1996; Edwards, 1999) have restricted even more the contagion effect terminology: "Contagion is the situation where the magnitude and the extent of the transmission of the international shocks overcome the ex-ante expectations of the operators in the market".

2. THE GOVERNMENT DEBT CRISIS AND THE ECONOMIC EVIDENCE OF CONTAGION

We shall try to briefly expose the arguments that certify the current unfolding crisis at the sovereign level. When the crisis has become much more severe and Moody's downgraded Portugal, the key factor was the development of events in Greece. The international rating agency Moody's found that the contagious effect propagated by the Greek economy will cause a second round of funding. In addition, using Greece as a precedent, the Agency indicated that the second round of official financing would involve private sector participation of Portugal. Unfortunately, this was not the end of the story. The fact that Portugal has downgraded and most of all, the continuous fears about Greece's bankruptcy, have initiated a mass sale of government bonds from Spain and Italy. By that time there was no evidence to suggest that the economies of Italy and Spain or their budgetary situation were situated on a threatening position. Around July 2011, the yield of the Italian government securities had already increased by almost 100 % and by more than 80% the Spanish ones. What mechanism has caused these market movements? We think that a major role was played by the economic contagion. The initial increase of government bond yields can be explained by the growing concern over the extent of the phenomenon and the increased possibility of "bankrupting" the private sector in Greece. For this reason, some investors consider it rational to begin reducing the sovereign debt, while others simply believe that their exposure to countries from the monetary union must be reduced. Taking into consideration the high volatility, other investors may also prefer to withdraw from certain segments of the market.

3. THE EUROZONE ANSWER TO THE PROBLEM OF THE ECONOMIC CONTAGION

We shall turn our attention to political actions in the euro area, respectively, of anchoring the euro zone to the sovereign debt crisis issue. In this case, we shall begin by discussing the role of the European Central Bank and then we will analyze the responsibility of the other public authorities.

European Central Bank Policies

In order to ensure the functioning of the monetary policy transmission mechanism, it is essential for the European Central Bank to maintain the price stability on a medium term and thus the ECB has adopted a series of unconventional measures for monetary policy all along the financial crisis. The measures that were taken have helped not only to stabilize financial conditions and credit the economy but also to maintain price stability.

After the outbreak of the crisis in August 2007 and its aggravation in September 2008, the ECB has provided liquidity in various ways and for longer terms in order to correctly address to a fairly dysfunctional money market. The ECB also collaborated with other central banks to provide solutions for the international money market. Joint provision of liquidity in U.S. dollars to several central banks, including the ECB, has been labelled by some observers as a kind of "Plaza Accord" of the money markets. Following the bankruptcy of Lehman Brothers, the ECB has initiated a policy of "credit support". Concretely, the ECB provided a series of measures to improve the credit flow, thus the impact was more penetrating than it would have been by reducing the interest rate. These measures include providing unlimited liquidity through "fixed rate tenders with full allotment"; provision of cash with maturities extended to one year; providing greater amounts of liquidity into the currency of euro area banks and these, in turn, to offer euro liquidity to local banks; a program of purchases of guaranteed bonds. Since normally the banks may benefit from the liquidity provision from the ECB if they have sufficient warranties, the ECB has expanded the list of assets it accepts as warranties.

Taking into account the evolution of the market after the crisis, collateral eligibility criteria were adjusted in order to eliminate any inconsistencies and avoid possible abuses. The total amount of eligible collateral marketable instruments is very high, being approximately equal to 13,500 billion euros, an amount that represents approximately 150% of euro area GDP. Out of this amount, euro area banks have on their balance sheets, approximately 21 thousand billion euros already approved for use (including some guarantees of certain assets that are not traded). It therefore creates leeway in providing liquidity amounts to around 900 billion euros. In response to the repercussions of the government debt crisis in the euro area, the ECB established in May 2010 security markets' program (Securities Markets Programme - SMP). In the SMP, which supports the prohibition of monetary financing, the Eurosystem buys securities of dysfunctional segments of the government debt markets in order to correctly transmit monetary policy in all sectors of the monetary union. Contagion is one of the mechanisms that obstruct the transmission of monetary policies through the interest rate.

European debt crisis has reached new heights in the summer of 2011 and the ECB and the ECB has responded by resuming and implementation of security markets' program (SMP). The relative size of the program represents only 2.3 % of euro area GDP. By comparison, the amounts allocated to similar programs in England and the U.S. were 13.7% of GDP in the first case and 11.4 % in the second case.

On the Governing Council meeting of the 6th of October 2011, the ECB has taken a number of decisions in response to market pressure:

- to conduct two longer-term refinancing operations;
- to apply fixed procedures for the allocation of liquidities as long as necessary (at least until mid-2012);
- to engage itself in the second bond purchase program (Covered Bond Purchase Programme - CBPP2). The purpose is to absorb 40 billion euros over a period of one year since November 2011.

On the 30th of November, the banks of Canada, England, Japan, USA, Switzerland and the European Central Bank have initiated a coordinated action in order to ease the funding channels for the U.S. dollars. Therefore, the price of dollar liquidities was reduced by 50%. Moreover, temporary bilateral exchange agreements of liquidities (the swap type) were concluded, which allowed each central bank to provide for liquidities for the other participants' currencies. On the 8th of December 2011, the ECB decided to conduct two longer-term refinancing operations. These operations aim to reduce pressures facing banks when they need long-term funding. The first operation has attracted an unprecedented demand of about 489.2 billion euros, which underlines the usefulness of this measure.

Longer-term operations were supplemented by an increase of the reserve area of the eligible collateral. Although, on average, the eligible collateral area is very high, it is likely that individual banks do not have sufficient collateral to cover its financing needs. First, the rating threshold for certain asset-backed securities has been reduced. Second, the national central banks were allowed to temporarily accept credit claims as collateral. Moreover, the reserve ratio was halved from 2% to 1%, which increased the supply of liquidity in the banking sector to 100 billion euros.

Clearly, according to their goals, all of these actions have had positive effects. Looking at past experiences, the ECB measures have activated the monetary policy transmission mechanism, causing it to perform relatively well in the Eurozone. Given the fact that contagion is present in the Eurozone, one must recognize that the transmission mechanism still remains severely disrupted in some euro area countries.

Other European and national authorities' policies

The involvement of the European Central Bank was rapid, targeted and decisive, but could not undertake the task of solving all the problems by itself. Eurozone governments must take responsibility and this implies measures both for member states and for the euro area. It is extremely important that member states continue to implement policies that place public finances on a sustainable path. At the same time, it is necessary for member states to engage in structural reforms that increase the potential growth of the economy. In addition, clearly, the states that have joined the programs proposed by the EU /IMF must remain particularly attentive to their commitments.

Only in this way fundamental factors and imbalances from the root of the crisis can be removed. At the European level, the ECB encourages progress in redesigning the fiscal governance. Since the 9th of December 2011, the heads of state or government of the EU agreed upon a new fiscal pact that limited structural deficits to 0.5% of the nominal GDP. Contrary to the rules of the Stability and Growth Pact, this rule, of a balanced budget will eventually be inserted in the Community legislation. It is very important to note that this rule will provide automatic correction, if it is broken. The transposition into national legislation is subject to scrutiny by the European Court of Justice. Taken together, these measures strengthen in a significant manner the preventive component of the European fiscal governance framework and thus limit the emergence and development of a future sovereign contagion. Because anticipatory measures cannot cover all possible scenarios, it is important to have a protection, a shield that limits the risk of contagion between different EU markets. Following the increase of the public debt in the Eurozone, the member states have decided to create the European Financial Stability Fund (EFSF). EFSF allows state budgets that are in a difficult position in the Eurozone to receive funds and this funding is subject to conditions negotiated by a committee of the European Commission, IMF and ECB. The program improves the macroeconomic variables throughout time and thus the solvency problem is bettered, which provides countries with the opportunity to strengthen their domestic markets.

The European Central Bank considered auspicious the recent actions of the heads of state or government, which strengthened the position of the EFSF, as well as that of its successor, the European Stability Mechanism (ESM). In the first place, the Eurozone leaders have pledged to review the mechanisms of protection until March. In the second place, the ESM will enter into force by July 2012, earlier than it was originally planned. In the third place, the private sector's involvement in the Eurozone will use the established practices of the IMF, which will reinforce confidence among

investors. Finally, it will be introduced a voting procedure for establishing emergency rules for MES, an action that will facilitate rapid decision-making in situations of economic crisis. However, it is important for the EFSF to be operational as quickly as possible. In order to achieve this, it was decided that the European Central Bank along with other central banks to act as a field agent for the EFSF, in its market implementation. Last but not least, it is essential that the affected governments will not try to implement new financial stabilization tools, but rather to provide support for the measures taken.

CONCLUSIONS

We conclude by reiterating some of the important information presented in this paper. First, historical experience suggests that central banks play an important role in creating financial stability, including reducing the risk of the economic contagion. They do this by creating price stability or providing liquidity as quickly and as widely widespread as possible during economic crisis. Second, taking into consideration that the European Central Bank supervises the phenomenon of the systemic risk, significant resources are being used, not only for an early detection of imbalances and negative changes in macroeconomic indicators, but also to identify and assess the risk of contagion.

No matter how difficult it is to collect relevant information and to shape the appropriate financial instruments, most evidence suggests the presence of a major risk of the sovereign and financial contagion in the Eurozone over the current crisis. In the third place, understanding the phenomenon of contagion is essential to overcome the present sovereign debt crisis in Europe. There would have been devastating effects, in terms of social and economic point of view, if the ECB and other competent authorities have not intervened immediately and decisively. In the fourth place, even if the ECB's actions were decisive and effective, this is not enough. All political parties must take responsibility. The cooperation between the heads of the state or government of the Eurozone and the EU institutions it is also a basic condition. Moreover, all the countries must meet their fiscal targets and introduce structural reforms to restore competitiveness and growth potential, elements that were lost in the last decade.

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THE INFLUENCE OF CULTURE AND TIME ON ANY RESEARCH REGARDING ETHICS

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Abstract: *The current study presents the most important theoretical frameworks in the field of ethical behavior involving employees and shows how the results of previous research are influenced by culture and time. At the same time, the risks that follow the universalization of the results are presented and a series of recommendations are made for researchers in the field, in order to obtain valuable results.*

Keywords: ethical behavior; culture; time; universalization.

JEL Classification: A13.

1. A REVIEW OF THE MOST IMPORTANT THEORETICAL MODELS IN ETHICAL DECISION-MAKING

The first steps in creating a model that analyzes ethical behavior were undertaken by Kohlberg (1969, in Ferrell, 1989), who has created a process of ethical justification and evaluation. He has identified 6 stages of development for an individual. Depending in which stage he is, the individual will react differently to the same ethical dilemma. These stages are as follows:

1. Punishment and Obedience: the individual is obedient to rules and the power of authority;
2. Individual Instrumental Purpose and Exchange: the individual is concerned in making fair deals;
3. Mutual Interpersonal Expectations, Relationships and Conformity: the individual is being concerned with others and shows that he is loyal;
4. Social System and Conscience Maintenance: The individual is doing ones duty;
5. Prior Rights, Social Contact or Utility: The respect towards the rights, values and legal contracts of society;
6. Universal Ethical Principles: All should follow a universal ethical principle;

This is the first theory that presents the development of ethical behavior from an evolutionary perspective. We also encounter the idea of universal values that will determine ethical behavior. The model is built as a ladder on which the individual matures gradually and in a cumulative way. Although the model was used over a large period of time, it also developed numerous critics, such as Gilligan (1982 in Rest, 1999) who considered the theory as being sexist, Shweder (1982) that considered the theory as culturally biased.

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The next theoretical model was created by Ferrell and Gresham (1985) in the form of a *multistage model of ethical decision-making*. They have identified a couple of ethical issues or dilemmas, such as: advertising deception, falsifying research data, price collusion, bribes and bid rigging, all influenced by social and cultural environment. They have also identified three factors that influence the individual decision making process: individual factors, organizational factors and environment related factors. Individual factors include knowledge, values, attitudes and intention. Individuals are also influenced by socialization, education and cultural background. Ferrell and Gresham also show the importance of the environment on the development of ethical behavior. The model suggests that the closer individuals are to each other, the more they will have similar ethical behaviors. The influence of managers and role-models is also taken into consideration and its impact is shown in the model. Opportunity to engage in unethical behavior also plays a vital role in the behavior of employees. The greater the reward and the less the punishment for such behavior, the more likely the individual will engage in unethical behavior. Policies and codes of ethics will promote an ethical organizational environment, if they are implemented and not just in a formal state.

The model introduces for the first time the idea that the behavior of employees can be influenced by the social and cultural environment, thus being impossible to universalize. Unfortunately the model does not offer a component analysis of ethical behavior to help with further empirical research. Another aspect of the model is the fragmentation of two factors, *opportunity* (that contains professional codes, corporate policy and reward/punishment) and *significant others* (that contains differential association and role-set configuration). In essence, as does Ferrell admit in 1989 (Ferrell et al. 1989), these two factors are strongly related to the organizational environment. Another problem that the model has is the evaluation of behavior into two possible outcomes: ethical and unethical. There is no gray area, the conclusion is you either are ethical or you are not.

Hunt and Vitell (1986) have considered a *general theory of ethical decision making*, starting from the importance of individual perception during the ethical dilemma, a perception that has two components: the individual deontological evaluation and the individual teleological evaluation. The model has a multitude of factors that must be analyzed in order to observe the ethical behavior of the employees: cultural environment, professional environment, industry environment, organizational environment and personal characteristics. For the first time a model tackles the issue of religion and the fact that highly religious people are more likely to be ethical. We also encounter the importance of a strong organizational culture, strong moral character and the importance of role models. The

study also points towards the importance of culture, focused especially on religion, legal systems and political systems.

The model was empirically tested on 200 US sales and marketing managers in 1989. The results showed that managers did tend to depend both on deontological and teleological factors and that it would be better to reward ethical behavior than to punish unethical behavior. They have also found that female marketers are more inclined to ethical behavior. In conclusion *the study found the model to fit the data like a glove*. Did the model fit the data like a glove because it was constructed by marketing experts in the US and tested on marketing managers in the US? Fortunately the answer to that question is no, because the model has been tested in a large number of empirical studies and has generated valid results. By valid results it should not be understood that the results were identical to Hunt and Vitell, but that the theoretical framework was useful. An example is the research undertaken by Menguc (1998). He used a sample of 450 Turkish sales managers and found out that they rely primarily on deontological evaluations to determine the correct ethical response, not on a balance of teleological and deontological evaluation, as the results of Hunt and Vitell have shown. These results support the premises of the current research that results of empirical studies in ethical decision-making should not be universalized.

Hunt and Vitell have reviewed their model in 2006 and created probably the most used model of analysis for ethical behavior, which has served as a theoretical support in numerous empirical studies. To conclude and bring together the main facts of this chapter I have constructed in Figure 1 a comparison between the two great models of Ferrell and Grasham and Hunt and Vitell.

Figure 1 - A comparison of the model proposed by Ferrell and Gresham and Hunt and Vitell

	Ferrell and Gresham model	Hunt and Vitell model
Micro/Macro Orientation	Macro perspective of the decision process	Micro aspects of the individual's cognitive decision process
Factors	Individual factors <ul style="list-style-type: none"> - Knowledge - Value - Attitudes - Intentions - Socialization - Education - Cultural background 	Individual factors <ul style="list-style-type: none"> - Religion - Value system - Belief system - Strength of moral character - Cognitive moral development - Ethical sensitivity
	Opportunity <ul style="list-style-type: none"> - Professional codes - Corporate policy - Reward/punishment 	Professional environment, Industry environment and Organizational environment <ul style="list-style-type: none"> - Informal norm - Formal codes - Code enforcement
	Significant others <ul style="list-style-type: none"> - Differential association - Role-set configuration 	
	Social and cultural environment <ul style="list-style-type: none"> - Religion 	Cultural environment <ul style="list-style-type: none"> - Religion - Legal system - Political system

In the 70s John Rest has introduced the DIT (Defining Issues Test), an interpretation of Kohlbergs interview in the form of a questionnaire. The DIT presents a series of ethical dilemmas, each one containing 12 statements that have to be evaluated and rated on a 5 point Likert scale. The DIT generates a P-score, a value for *the relative importance a subject gives to the principled moral considerations in making a decision about moral dilemmas* (Rest, 1979). Even if the DIT has been successfully used in thousands of studies, generating valid results, there has been criticism about the so called American bias. The American bias is determined by the fact that P-scores from researches done in the United States seem to be higher than the P-scores around the world. The difference in results might be a cause of the differences between cultures.

2. THE INFLUENCE OF CULTURE

John Locke (1963, in Ruegger & King, 1992), by addressing the question *Why must a man keep his word?*, to which he answers from the perspective of a Christian, a hobbyist and an old philosopher, formulates the theory of *depends on who you ask*. Similar to the respondents of Lock, the subjects of ethical studies in the field of business ethics belong to different cultures, which is why they will give different answers to the same questions. The usage of a model without investigating the cultural background of the population will result in an inconsistency of the results, without real practical value.

Culture has been taken into consideration as a factor that influences the ethical behavior of individuals and shapes their moral sensitivity. This fact is relevant for any study that has ever used culture as a factor of influence in determining the ethical behavior. Culture can be examined for example by addressing variables such as religion, legal system or political environment, as is the case of the Hunt-Vitell model. These variables were built to determine the ethical behavior of managers in the field of marketing in the United States. If we would test marketing managers in another country, the variables of the cultural factor might be different depending on the cultural specificity of the population. Values, customs, national identity or loyalty might replace or be added to the existent variables of the Hunt-Vitell model.

Vitell et al (1993) have used Hofstede's Typology in a theoretical attempt to answer the question *how culture influences ethics and ethical decision making*. Hofstede argues that societies differ in four major cultural dimensions: power distance, individualism, masculinity and uncertainty avoidance (Hofstede, 1984).

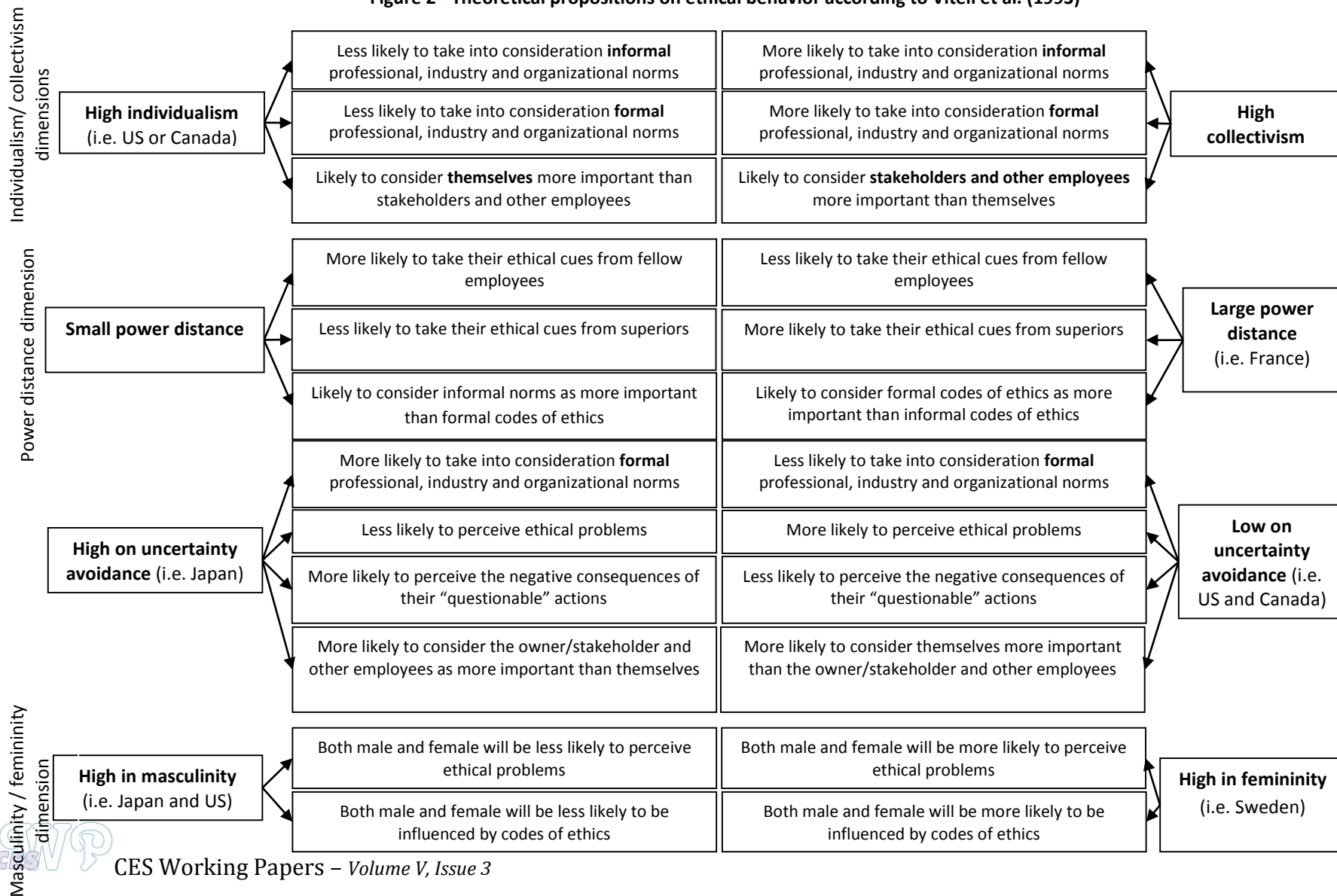
According to Hofstede (1984) the power distance is the extent to which the less powerful individuals in a society accept inequality in power and consider it as normal. Individualist cultures are the ones where individuals are primarily concerned with their own interests and the interests of their immediate family. Collectivist cultures, in opposition, consider that individuals belong to one or more in-groups, such as an organization. This attitude promotes loyalty between the in-group and its members. Masculinity is the extent to which individuals expect men to be assertive, ambitious, competitive, to desire material success. Masculine cultures expect women to serve and to care for the house, children and for the weak. Feminine cultures promote equality in the roles of both sexes, and do not promote ambitious behavior. Uncertainty avoidance is defined as the extent to which individuals within a culture are made nervous by situations that are unclear and unpredictable, and

the extent to which these individuals attempt to avoid such situations by adopting strict rules of behavior. Cultures with strong uncertainty avoidance are active, aggressive, emotional and intolerant.

On this basis, Vitell et al. (1993) created a couple of theoretical propositions that can be observed in Figure 3. The authors encourage further empirical research in testing the theoretical propositions and combining the result in obtaining a better image of the phenomenon.

The research of Hofstade (1984) and Vitell et al (1993) shows once more how different cultures are and how careful researchers must be in selecting the right variables in analyzing the influences on the ethical behavior of employees. A researcher must first identify which dimension fits the culture and then test the propositions in the form of hypothesis.

Figure 2 - Theoretical propositions on ethical behavior according to Vitell et al. (1993)



3. THE INFLUENCE OF TIME

Rugger and King (1992) have stated that *ethical beliefs change as the nation's view of morality changes*. Therefore the same research in the field of ethics may generate different results in the same national and cultural environment at different moments in time. The results of studies concerning the ethical behavior of employees are influenced by certain events that take place in that period of time leading to the investigation. Therefore, researchers that wish to use previous research in their own studies must know not only the cultural characteristics of the population, but also the historical events of the time period in which the study was conceived. Studies undertaken in periods of conflict or economic crisis will have results inclined towards an unethical behavior, a tendency towards the accumulation of material goods, without the barriers settled by ethics.

In conclusion the results of an investigation in the field of ethical behavior reflect only a picture of reality, which is specific to a certain culture, at a given moment in time. This posed reality is most of the time valid for a period of years or until a major social or economic event takes place and changes the ethical orientation of employees. The change can take place rapid, produced in general by violent events, such as war or the occupation of territories, or can take place gradually, being influenced by the evolution of society.

If studies regarding the ethical behavior were made on a regular basis, we would be able to determine the ethical evolution of a certain population in time. By analyzing the historical changes during that period in time, we would be able to identify important variables that have shaped the ethical behavior. Such variables could be political changes, legal developments and very important historical events, such as war or massive deportations.

4. THE DANGER OF UNIVERSALISATION

The entire study and the ideas proposed lead to the fact that in the study of ethical behavior, the researcher must not begin from premises or axioms, but instead he must construct hypothesis and test them. The usage of previous research has a role in the shaping of hypothesis, but their result must never be generalized.

The danger of this universalization in results is the vitiation of your own research, by using result obtained in a different culture and in a different period of time. The process of universalization is therefore similar to the process of globalization, a phenomenon which in the field of social behavior

can only be harmful. People so different regarding culture and history cannot be similar in shaping their ethical behavior.

This fact does not lead to the rejection of great theoretical models, as is the case of the one promoted by Hunt and Vitell. The authors themselves have stated that *the acceptance of any theory is based on its support over time through empirical testing, not how it was initially formulated* (Hunt and Vitell, 2006). The model of Hunt and Vitell has definitely lasted the test of time and has been used in a large number of empirical researches. The most important thing is to understand that a model is just a theoretical framework and should be adjusted to the culture and time period of the researcher. The best method of adjustment is the usage of variables based on the factors proposed by the theoretical model that are specific to ones culture and time.

The results of the researches undertaken in the field of ethical behavior are rarely comparable do to the fact that there are a number of differences in the cultural and historical environment. This is why a universal theory of the ethical behavior of employees is impossible to formulate.

CONCLUSIONS

Empirical research in the field of ethics should always be based on the testing of hypothesizes. Using theoretical models or propositions, as the ones reviewed in the current study, will grant researchers a theoretical framework on which they can test their hypotheses.

When using theoretical models that analyze ethical behavior it is important to understand the difference between the factors of the model, which are universally valid and the variables of the model, which may change over time and from one culture to another. In the case of Hunt and Vitell (1986) the main categories of factors are: Cultural environment, Professional environment, Industrial environment, Organizational environment and Personal characteristics. They can be applied successfully by any researcher in a study of ethical behavior. The demarcation of ethical studies is in the usage of variables, as is the case of religion, a variable of the cultural environment, which can have deep implications in an Arabic country and close to no implications in a country like France for example. Authors must construct their own variables, according to their own culture and time and create their own hypothesizes to test.

In conclusion, the existing models for analyzing the ethical behavior of employees can be used by any researcher, as long as he understands that the variables that influence this behavior are not universal. This information is very useful for researchers which use the results of previous studies as

a starting point or as a measure of comparison in their own research. They must study the moment in time and the cultural environment in which past research has been done and decide if they resemble his own time and culture. Only by doing so, they will be able to determine if they can use past research as a starting or comparison point in order to reflect the best image of the real economic environment.

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