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23-26 October,  
Tbilisi-Georgia

## 2<sup>nd</sup> Eurasian Multidisciplinary Forum



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GRIGOL ROBAKIDZE  
UNIVERSITY



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## **FROM CSR TO SOCIAL RISK MANAGEMENT– EXPERIENCES FROM MINING MNCS IN ARMENIA**

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### **Abstract**

When it comes to social risks multinational companies (MNC) within Mining are one of the most exposed businesses one can imagine. This paper examines how social risk management is practiced through the case of Teghout copper-molybdenum mine in North-Eastern Armenia, supplemented with evidence from other mining MNCs in the country, onsite fieldwork, interviews with key stakeholders, and public available information. This evidence suggest that a standards based social risk management strategy is adopted and that this strategy is based on international Corporate Social Responsibility (CSR) standards and philanthropic activities. However, evidence reveal that local and regional stakeholders, from whom social risk rise, feel disengaged from the process, continue to raise questions about transparency and in some cases actively oppose mining activities and that this is happening despite the use of stakeholder engagement management systems that is promoted through the standard. The implemented social risk management systems are ineffective because they makes the MNC unable to recognise the value of weak ties and fail to build legitimacy and trust with some of the key stakeholders resulting in the creation of more instead of less risk. It is argued that this is caused by MNC's use of CSR systems focuses on building strong ties, rather than on building trust with the stakeholders that actually pose the biggest social risk.

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**Keywords:** Mining, Armenia, Social risk, CSR standard

### **Introduction**

A quick look at multinational companies (MNC) websites shows that they routinely communicate that they aren't just in business to make a profit, but that their goals are equally focused on servicing the communities that they affect, for a broader and bigger social purpose (Vallex, 2014, Rusal, 2014, Geopromining, 2014). At the same time the very same companies are looking for compelling reasons why it make good business sense to engage in strategies looking for the connection between profit and 'doing good' (Schwartz & Carroll, 2003; Visser, 2010). This development has happened under the umbrella term Corporate Social Responsibility (CSR) promoting the idea that the actions of companies effects the societies that they operate in and the voices of these stakeholders should be included in the management decision making process (Carrol, 2004). One of the areas were business have found CSR useful is through the introduction into risk management and the argument that it enables companies to reduce social and environmental risks (Kytile & Ruggie, 2005; Vogel, 2008). An example of the use of CSR as Risk management can be witnessed in how MNCs within mining, that are present in Armenia, use standards to communicate with stakeholder groups. However, with globalisation and by that more easy access to information about company operations, it has become increasingly difficult to manage the number of stakeholders that could influence company operations. Research also supports that the principal reason why mining companies had to stop their operation is because they could not live up to the expectations of their local stakeholders (BSR, 2003). This paper is a

continuation of this research investigating how mining MNCs in Armenia use CSR standards in an effort to manage social risk in order to building legitimacy with local stakeholders. The central case company used is the Cyprus based MNC Vallex group who operates the mining company Teghout CJSC supplemented with evidence from other mining MNCs operating in Armenia. Empirical evidence is gathered using public sources and a series of interviews with Armenian government officials, politicians, Non-Governmental Organisations (NGO) and local stakeholders who are directly affected by or is affecting mining operations. Research was conducted April to June 2014 and included a two-week field study to Armenian.

### **Mining in Armenia**

Armenia is a country with a population of about three million and an area of 29,800km<sup>2</sup>, located in the southern Caucasus Mountains in between Azerbaijan and Turkey to the east and west, and Georgia and Iran to the north and south (Armenia, 2014). Armenia was one of the most industrialized republics of the former Soviet Union (USSR) including significant industries within metallurgy and mining. The mining sector in Armenia is quite diversified with over 670 mines currently operating of which 30 are metal mines (Mining Journal Armenia, 2011.). The industry is dominated by many smaller companies operates one or two sites. The biggest sites are within Copper, Iron, Gold and Molybdenum as well as some rare metals (Mining, 2011). As a developing country the mining sector plays an important part of the Armenian economy, accounting for a significant proportion of about 14% of the total foreign direct investments to the country (World Bank, 2014). Above 50% of the total exports come from the mining sector making the industry the single most influential driver for economic development (ADA, 2014).

### **The Concept of Social Risk**

There is no set definition of social risk, which has been universal accepted. However, the general opinion seem to converge on that the concept has something to do with stakeholders, corporate behaviour, vulnerabilities and our understanding of risk (Holzman, et al, 2003; BSR, 2003; Brown, 2013). In context the concept of Social risk is hence understood as corporate behaviour or the actions of others in the operating environment that create vulnerabilities which stakeholders might identify and use to apply pressure on the corporation for behavioural change. Understanding that the discourse of risk research have been a quest that has focused on expanding the field of 'existences' to be measured and improving the quality or measurability of parameters that are believed to be of relevance. It has been hoped that risks can be 'determined' in order to satisfy the anxieties of an audience that subjectively perceives the level of risk they are exposed to (Beck, 1992, p.58; Lupton, 1999, p.18). As businesses become increasingly aware that effective risk management is a valuable resource so has the field expanded in which it has been applied (Power, 1997, p.122; Olsson, 2002; McKellar, 2010). Where the outset was economic risk we now see assessment tools being applied to areas like politics, reputation, and environmental, sustainability and ethics (Morsing & Schultz, 2006; Olsson, 2002; Crouhy et al., 2006; Rotta, 2010; Raufflet et al., 2014). Social risk was a concept that was first proposed by the World Bank as a comprehensive approach drawing attention to the many threats related to poverty (Holzmann et al, 2003). Others have also been interested social risk and how uncertainty and dangers have influenced how organisations and individuals are exposed to risk in an increasingly globalised and institutionalised world (Beck & Beck-Gernsheim, 2002:10f, Arnoldi, 2009:50f).

### **MNC Social Risk Management in Armenia**

MNCs exploring opportunities in the Caucasus including Armenia there are

significant political, environmental, economic and not least social risks (Shaffer, 2009). In the effort to navigate in these conditions, systems for managing Social risks like the one presented by the World Bank (IFC, 2012), can be quite persuasive in assuring that some of these uncertainties are effectively identified and mitigated.

A concrete example of this development can be witnessed in relation to the Teghout Copper-Molybdenum mine in north-eastern Armenia (Vallex Mining, 2014). It has been known that there were copper in the mountains surrounding the villages of Teghout and Shnogh for many years and a national survey confirmed this as national effort to map all the mineral sites in Armenia, including Teghout, was conducted in order to boost the struggling economy and attract investments (Mining, 2011). The same year a license to operate the mine was granted to the Armenian Copper Program a subsidiary of the Vallex group a MNC based in Lichtenstein at the time. Assessments undertaken have estimated that around 1.6 million tonnes of ore are extractable within the upper part of the reserve and 99,000 tonnes of molybdenum (SEP Vallex, 2012). However, before work could start the long-term environmental impact of the project had to be investigated in an independent Environmental Impact Assessment survey as required by Armenian law (Vallex, 2014). The survey started in 2004 but was not accepted until 2006 and to this date still widely disputed by local and national NGOs mainly on the grounds that the survey was done by a Vallex controlled company (Judgment EKODAR, 2010; Teghout mine case, 2012).

In 2008 Danish FLSmidth supplied \$47 million worth of primary comminution and classification equipment (FLSmidth, 2008) in order to start the project and get the site prepared for excavation through a loan from a Russian bank. The land, that the mine was to be situated on, was primarily farmland, summerhouses and forest, which needed to be cleared and the landowners needed to be compensated for their losses. Despite several complaints, court trails and protests by local, national and international NGOs the project went ahead and more or less voluntary compensation agreements was reached with most of the landowners, paving the way for the extraction activities. In cooperation between FLSmidth, EKF and Pension Denmark it was possible to raise 350 million Danish Kronor (approximately 46,6 million €) so that Teghout CJSC (who would take over from the Armenian Copper Program) could buy processing equipment (FLSmidth, 2013). However, it was not possible to attract investments from EKF or Pension Denmark if it had not been for the 2012 CSR program that was put in place which resulted in a series of reports and surveys among those a comprehensive stakeholder engagement plan in-line with IFC guidelines, including Town hall meetings and other forms of engagement activities (SEP Vallex, 2012; Vallex, 2014). In a joint press release the investors stated, "We're naturally delighted to be able to enter into this agreement, which will increase Danish exports. And, what is more, for a project that is setting new standards for mining in Armenia. We have imposed a number of requirements, which will mean that the mine will be the first in Armenia to satisfy the international standards" (PensionDanmark, 2013). Vallex use of the IFC standard (IFC, 2012) and the subsequent reporting of findings made a compelling argument for investment in the project and assured investors that the risk arising from local stakeholders were identified and handled to the satisfaction of all parties. However, to this date local and regional NGOs continue to make claims against the project that the reporting and apparent transparency are falsified and that the local communities in Teghout and Shnogh have been misled. As the possibilities to address concerns of local stakeholders through the Armenian court system have yielded few results other avenues are being explored. The response has been that local and national NGOs have mobilised in order to confront the institutional investor and EKF in order to make them aware that there are serious flaws in the communication that they and the local community have received from Teghout CJSC and Vallex group with an aim of stopping the project.

At the core of social risk management lays the effort and systems that enables

companies to gain legitimacy from local stakeholders. As in the case of Teghout the communication surrounding CSR standards are not only directed at addressing the concerns of the local community but also at investors and government, who have implemented a comprehensive mining code with the help of the World Bank (Mining code, 2011). This has led to conflict between the company on one hand and the local community supported by NGOs on the other. In between this struggle are the investors who are relying on reports and analysis from the company and expect that the government are enforcing legislation that protects the local community. However, in the case of Teghout, NGOs are claiming that the government have sided with Teghout CJSC and Vallex group and the NGOs have therefore adopted a strategy of pressuring the investor to assert pressure in order for changes to occur that they deem necessary leaving the impression that social risk is not managed efficiently.

### **Understanding MNC use of CSR as risk management**

There is no doubt that mining companies have been confronted with social risk issues and have created different approaches to dealing with these over the years (BSR, 2003). What CSR as risk management propose is the use of structured approaches and normative standards, like the one initiated by the IFC or inclusion of normative philanthropic initiatives, to identify and possibly control social. CSR rely to a large degree on self-governance and self-reporting than other traditional risk management systems as they are designed to identify and enable engagement with issues which constantly change e.g. the aspirations and expectations of local communities, local and global NGO, civil society etc. (Bebington et al., 2008, Barkemeyer, 2009). This means that MNC information needs to have a high degree of validity and be able to withstand scrutiny by outside stakeholders and by having structure to the effort it is possible, or at least appearing to communicating transparency.

The drivers that promotes MNCs to creating CSR risk management systems and normative approaches can be described as threefold. First, it can be a daunting task to navigate between many different and multifaceted business environments that the MNCs operate in (Peng & Lou, 2000; Cavusgil et al. 2002). The number of individual stakeholders can be significant and not all can be expected to have the same influence on the MNC over time. This means that dealing with stakeholders on an ad-hoc basis can create inconsistencies in the way the MNC decision-making is perceived, which in turn create risks to the company reputation. Second, using different standards based on adaption to local social business environment norms can lead to issues with global stakeholders as companies can be accused of subscribing to double standards shopping around for the “easiest” place to operate (Kolstadt & Wiig, 2013). Third, the daily operations of the MNC need to be both efficient and effective putting severe strains on managers and other professionals working on measuring, analysing and assessing different social risk scenarios. This has also encouraged some MNCs, in favour of a more integrated strategy, to adopt international standards in an effort to incorporate national law within one coherent management system (Kemp & Owen, 2013; Raufflet et al., 2014). In summary there seem to be strong driving forces for using CSR systems as a way for organisations to work strategically with reducing their social risk exposure. But as seen in the case of the Teghout mine in Armenia there seem to be some serious gaps between the actions of the company and the expectations of its stakeholders.

### **The Role of Networks in Social Risk Management**

Coming back to the definition of social risk understood as corporate behaviour or the actions of others in the operating environment that create vulnerabilities which stakeholders might identify and use to apply pressure on the corporation for behavioural change. It has been found that CSR activities are not being effective in mitigating the risks constituted by stakeholder efforts in exploiting organisational vulnerabilities. Actually it would seem that

stakeholders are using CSR initiatives as a platform for identifying weaknesses in the claims made and a opportunity to confront a company like Vallex from even more issues.

In order to understand how these standards become so widely accepted even though they apparently have significant flaws in their ability to identify and mitigate social risk we need to understand the social structures that influences this process understood as both economic and non-economic entities that through interaction have either a direct or indirect impact on the outcome that the organisations produce (Granovetter, 2005). Social risk management is the incorporation of non-economic factors in order to manage the exposure to the company from salient stakeholders. There is continuous dialogue about the fundamental conceptual understanding on the impact of social structures and networks (Rauch & Casella, 2001). Elaborating even further on the work of Granovetter (1985, 2005) he emphasises that all economic (and non-economic) action is embedded in networks moving organisations away from a traditional understanding of the market as personal exchanges and the transaction cost perspective on among others risk mitigation. His claim is that this simplified view of the market basically subscribes to an idea of organisations as entities that can be decoupled from its context or be interchanged without significantly affecting their surroundings (Granovetter, 1985; Granovetter, 1992, p.61). This undersocialised view of the firm favours a standards based risk management approach as it supports the idea that companies can analyse its social environment and then choose which risks are important and which can be ignored. While this provides a clear and sanitized perspective on organisational performance its rational approach completely ignores that very few organisations get to choose whom, when and what will influence its decision-making process, as it becomes evident in the Armenian mining industry where local stakeholder risks arise despite the implementation of systems for social risk management. Alternatively organisations can by adopting a network approach where the operating environment is understood as made up connections between individuals that can have varying degrees influence or ability to exploit weaknesses. The process can be understood through the concept of strong and weak ties and how stakeholders, groups and organisations can influence each other creating risks and but also opportunities for the MNC (Granovetter, 1973; Swedberg, 1997; Rauch & Casella, 2001; Granovetter, 2005). This view on organisations relationship with their environment is in contrast to the standards perspective and here we find that organisations are always co-constructors of the context in which they are situated and that changings to the system will have an effect on the network as a whole.

A suitable way of describing the two risk perspectives in relation to social risk is to describe them as systems, which subscribe to different levels of organisational embeddedness. And the argument that the behaviour of institutions to be analysed are so constrained by on-going social relations (embedded) that to construe them as independent is a grievous misunderstanding (Granovetter, 1985; Granovetter & Swedberg, 1992:53). Moving from one perspective where we find the direct cause-and-effect system of traditional risk management over to alignment and integration of organisational processes with its operating environment (Taylor-Gooby and Zinn, 2006:202ff, Brammer and Smithson, 2008:250f). Outside influencers or stakeholders can serve as an analytical framework that enables understanding of how different actors, within a given sphere of influence and can contribute with varying degrees of risk. Showing how embeddedness can influence organisations ability to take quality decisions that will have a positive impact on its performance by including more distant stakeholders. Through a networks approach companies can be analysed how patterns of interlocked relationships emerges and the way they influence corporate risk management behaviour.

These networks are made up of nodes that can be analysed through the concept of strong and weak ties, which enables the understanding of how relationships can be influence

performance (Granoveter, 1973; Swedberg, 1997). Strong ties or close personal relationships are associated with reassurance and continuity. Strategies based on building these type of ties favours a relative deep understanding of each nodes processes and the challenges faced face. This enables organisations to identify risks that could possible disrupt information flows or hinder the effective execution of organisational processes. However, it also slow down or hinders creativity and introduction of the unknown and thereby new ideas, perspectives and innovation. Relationships based on weak ties can be a source of inspiration and an opportunity to be introduced to organisations who have adopted different approaches to problem solving. These groups become valuable when the organisation need to understand contexts that are radical different from the ones that they are accustomed to.

For the MNC networks also play a central role facilitating knowledge sharing across industries, subsidiaries and adaption to the local business environment adaption (Dunning, 1998; Dankbaar, 2004; White et al., 2014). In combination with MNC risk management strategies a process based on creating strong ties creates a strong pull towards normative systems, which can facilitate and optimize this process in line with risk management and CSR strategies. Suggesting that organisations create formal structures to cope with or replicate the internal and external environmental pressure (Westney, 1989; Ghishal & Westney, 2005). In the case where subunit or process is incompatible with already existing institutionalized patterns the organisation responds by creating ties across subunits. And as DiMaggio and Powell (1983) have pointed out in instances where uncertainty over the effectiveness of alternative organizational forms is high, organizations are likely to adopt the patterns of other organizations which have the reputation in their immediate environments of being successful effectively creating stronger ties. The argument being that organisations are pulled towards common organisational forms and systems adaption in this case towards adaption of common global standards or towards local adaption, moving away from the need to be efficient in favour of bureaucratic systems. The effect being that the possible valuable insights the MNC would gain from their network would be lost in favour of a systems focus, creating strong ties with salient stakeholders.

### **Conclusion and Perspectives**

When MNCs adopt a CSR standards approach they also commit to engage with the local, national and global stakeholders that have an interest or are affected by the actions and decisions that the company makes. This development has spurred a process of stakeholder engagement where mining MNCs in Armenia have adopted CSR standards and philanthropic initiatives. This isomorphic pull has originated from two directions, the institutional investors and from the Armenian government who have implemented a mining code and thereby the governance systems that the mining companies need to comply with.

While the convergence around systems and standards to manage CSR is positive when it comes to effectiveness and creating clear channels of communication it comes at a price. One of the roles of CSR standards is to identify and help mitigate social risk. However, when there is a horizontal institutional convergence between companies across a few key stakeholders in this case the Armenian government and Institutional investors, the CSR systems in themselves can produce risk as companies start to communicate about their activities. According to a network perspective and an understanding of the organisation as embedded in the social context through weak and strong ties, it is possible to offer an explanation why implementation of CSR systems seem to produce more and not less risk. As the CSR systems are based on the idea that companies should be in dialogue with their stakeholders and through the use of engagement programs, philanthropic initiatives etc. they create organisational strong ties. While these ties are effective when it comes to creating consistency and predictability they hinder creativity and new perspectives from which the

company can improve its understanding of the social context in which it is situated. Hence the use of CSR systems especially in the mining industry where there are a significant interest becomes a barrier for alternative perspectives and thereby becomes a vessel for social risk production rather than risk reduction.

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## REASONS CAUSING FINANCIAL CRISIS AND ITS THEORETICAL BASIS

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### Abstract

Under conditions of market economy, finances are not definitive for dynamic development of business. During absence of finances there will be economic deformation and incorrect management of finances will create crisis and destabilization. From the second half of 2008 Global financial crisis began to aggravate by unseen scales and temps after great depression of the past century. It achieved its peak in September of 2008, and on October 13, 2008, according to many economists, global financial system appeared to be on the verge of ruins. As a result of world crisis, almost all developed and developing countries appeared to be in economic recession. In comparison to 2007, in 2008 world economic growth was reduced to 3.1 percents. Global recession has sensitively reduced volumes of the world trade, reduction of demand on the most important markets of the world, mainly in the USA and EU zone caused reduction of international prices. Together with reduction of world production decrease of international prices has assisted disinflation processes, and many countries appeared before the challenge of struggle with deflation<sup>1</sup>. Financial and economic crisis has conditioned taking of unprecedented measures by many countries of the world. They began to conduct not only monetary policy, but also realization of fiscal stimulation programs. As a result, nowadays, question of stability of the world financial system is not under danger.

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**Keywords:** Financial crisis, Financial stability, Housing Bubble, Subprime Crisis

### Introduction

Globalization offers new challenges to the world economy which becomes more depended on unprecedented growth of financial assets by the world scale. Availability of information and development of technologies significantly increased the movement of capital in the world and the role of money and markets in the economics. From 1980 to 2007, global financial assets increased from 12 trillion USD to 206 trillion. In 2008, despite of suspension during the world crisis, growth was continued and in 2012 achieved a peak indication – 225 trillion USD, among them capitalization of stock markets – 50 trillion. If in 1980 the world financial assets made up 120% of total internal products of the world, in 2012 this index was equal to 312% (Lund, Daruvala, Dobbs, Harle, Kwek Ju-Hon, Falcon 2013).

For many decades in academic and business circles people do not stop to investigate and dispute in order to explain what are historical backgrounds (origin) of financial crisis, current significance and future trajectory.

Explanation and understanding of current financial crisis depend on understanding of crisis in historic context and study of their models.

According to **Veblen**, during making decision in business the profit is definitive and its level on its own side affects economics of the country<sup>2</sup>.

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<sup>1</sup>Financial stability report, National Bank of Georgia, Tbilisi, 2009, pg. 9.

<sup>2</sup>Thorstein Veblen, *The Theory of Business Enterprise* (New York: Charles Scribner's Sons, 1904), esp. Chapter VII, "The Theory of Modern Welfare. pp. 177-78,86, 92 and Chapter VI, "Modern Business Capital.

**Mitchell's** analysis of financial crisis is based on statistical analysis of changes of economic variables in direction of movement of business cycles.

"Hypothesis of Financial Instability" of **Minsky** is interpretation of general theory. Theoretical bases of Minsky are constructed on reinterpretation of Keinz's works.

Hypothesis of financial instability of Minsky is based on two thesis: **1. Capitalism is endogenously inclined to growth. 2. This growth will be endogenously turned into financial instability and financial crisis**<sup>3</sup>.

In connection with credit limitations it is interesting opinion of practical economists **Wojnilover and Sinai**.

According to Wojnilover, credit crisis does not create only recession. For recession the credit crisis is necessary<sup>4</sup>.

In the second half of 2007 and in the first half of 2008, important events were developed in the world history. Among them there shall be marked crisis of immovable properties of the USA and global limitation of credits, depreciation of USD and strengthening of inflation processes. These global events seriously affect financial stability. It is known that crisis of real estate of the USA was transferred to other countries too, but it applied to developing countries in lesser extent. Although, it does not mean that risk of financial crisis caused in the country by real estate sector is reduced to zero.

Why are finances necessary and why finances have inclination to crisis?

In order to answer this question it is necessary to examine the main characteristics of financial system.

Financial system is a pyramid of promises which is based on believe of reliance. Non-realization of promises may often be in direct interests of persons who give them. Formation of belief toward the complex structure from the part of humans is based on existence of strong and reliable institutes which are functioning within the framework of law. In case of correct management of financial system it brings an important benefit, and in case of incorrect management it may be followed by catastrophic consequence. I.e. according to "Financial Instability Hypothesis" of Minsky, 1) capitalism is endogenously inclined toward growth and at the same time; 2) growth will be endogenously turned to instability and financial crisis.

Financial crisis which caused a serious damage to countries by the world scale began in August of 2007 by blowing of assets prices and was connected to financial innovations of a new type<sup>5</sup>. John Marthinsen named four reasons of economic and financial crisis of 2008-2009 and called it four paradoxes of financial crisis, particularly paradox of saving, paradox of Leverage, diversification paradox and paradox of financial innovations<sup>6</sup>.

Mishkin examines dynamics of financial crisis in three stages: first stage revealing reasons of creation of financial crisis, particularly incorrect management of financial liberalization, financial innovations and blowing of assets prices and bursting. The second

<sup>3</sup> Hyman P. Minsky, "Policy Pitfalls in a Financially Fragile Economy," in U.S. Congress, House Committee on Banking, Finance and Urban Affairs, Employment Risks from Present Credit and Business Liquidity Conditions, Hearings before the Subcommittee on Domestic Monetary Policy of the House Committee on Banking, Finance and Urban Affairs, 97th Cong., 2d. sess., 1982, pp. 75-76. Minsky, "Financial Markets," p. 14.

<sup>4</sup> Wojnilover, "The Central Role of Credit Crunches, p. 324.

Wojnilover, "The Central Role of Credit Crunches, pp. 277-78.

Wojnilover, "The Central Role of Credit Crunches, p. 278.

Wojnilover, "The Central Role of Credit Crunches, p. 278.

<sup>5</sup> Martin N. Baily, Robert E. Litan., Matthew S. Johnson. The origin of the financial crisis. Lessons from the financial crisis: Causes, Consequences, and Our economics future. 2010. Jonh Wiley&Sons, Inc.

<sup>6</sup> John Marthinsen. Four Paradoxes of the 2008-2009 Economics and Financial Crisis. Lessons from the financial crisis: Causes,

Consequences, and Our economics future. 2010. Jonh Wiley&Sons, Inc

stage is related to the bank panic, and the third stage – to the blowing up of debts<sup>7</sup>. Asset bubble is phenomenon of price elevation during a long period of time which then ends with crash. In the USA and the world prices on living houses were increased equally from 2002 to 2007 and then began their sharp decrease.

Assets bubbles cannot explain financial crisis although they are important component of compositional dynamics which created problems in economics and prolonged economical recession.

Therefore, we can mark out three basic direct reasons which conditioned financial collapse and further recession

- Prices “bubbles” – artificial and sharp increase and reduction of prices on defined commodity or asset, which at first has sharply increased and then sharply reduced cost of dwelling houses.
- Boom of “substandard” hypothec credits which deepened size and influence of bubbles and defaced stimulus of financial sector which has caused substandard boom.

Real estate crisis in the USA was preconditioned by stable increase of prices on real estate during a long period of time. From 1997 to 2006, prices for dwelling house increased twice<sup>9</sup>.

What has conditioned extreme blowing up of “bubbles”? Basic answer is unexampled availability of credits in form of hypothec (for example dwelling houses loans). Average annual hypothec loans were increased from 0.2 trillion from 1993-1997 to 0.5 trillion to 1998-2002 and 1 trillion annually in peak years - 2003-2006.

Correlation between credit boom and price bubble was noticed for many times in historical retro perspective. Because of increase of loans has a tendency to stimulate increased demand on assets what, in its turn, increases prices. Indeed, stable availability of credit is usually considered as critical factor of economics functioning. Quick increase on domestic credit was accompanying and important determinant of financial crisis that happened in the world during the last decades. By blowing of short-term bubbles credit boom has an inclination to cause financial destruction. During examination of financial crisis of 2008, there was revealed that countries that gave credits in high quantities had inclination to acute economic conflict<sup>8</sup>.

### The Housing Bubble and Credit Access<sup>9</sup>

Figure 1



<sup>7</sup> Frederic S. Mishkin. Macroeconomics (policy and Practice). Pearson Education. 2012.

<sup>8</sup> Andrew K. Rose and Mark M. Spiegel, "Cross-Country Causes and Consequences of the 2008 Crisis: Early Warning. National Bureau of Economic research, working paper 15357, September.

<sup>9</sup> Graph assembled from data in Shiller, "Data" and "Historic Changes," Federal Reserve.

During the last two years market price of dwelling houses in the USA reduced by 6 trillion USD, what made up more than 40% of GDP of the USA. Collapse loss for each family made up approximately 53000 USD, reduction of prices for dwelling houses was gradually continued after 2009 and up to 2012 was constantly reduced at the time of which the price approached indexes of previous “bubbles”.

What assisted bursting of “bubbles”? As with all other bubbles increase of prices stopped by delivery of dwelling houses increase of which was based on increase of speculation demand, factually it exceeded demand<sup>10</sup>.

According to Minsky’s opinion about financial crisis, the first important aspect of substandard crisis that happened in 2007-2008 is monetary policy. And the second important aspect is financial deregulation.

From the one part, federal reserve policy of these factors and from the other part, financial deregulation and innovational processes influenced availability of credit and generally weakened credit standards. General result that is schematically shown (scheme 1) has increased volume of credits (Crd) and debt of non-financial sector (Ind). This calls us to analyze what has happened in the real sector of economy.

By increase of credit availability basic benefits got family economies. The first result was increase of demand on long-term consumption commodity ( $C^d$ ) and correspondingly-increase of income (Y). This caused growing spiral effect of known “consumption – income – consumption”. During the last decades, consumption between Europe and the USA maintained growing break. By the debt of family economies demand on dwelling houses was funded too. This conditioned creation of the second ascending spiral: Housing demand  $H^d$  increased prices  $P^h$ . Expectation for capital getting increase of prices on dwelling house  $P^h$  from its part stimulated demand on dwelling houses  $H^d$ . As it is known, just this fact has caused sub-prime problem.

### **What situation is in Georgia in this regard**

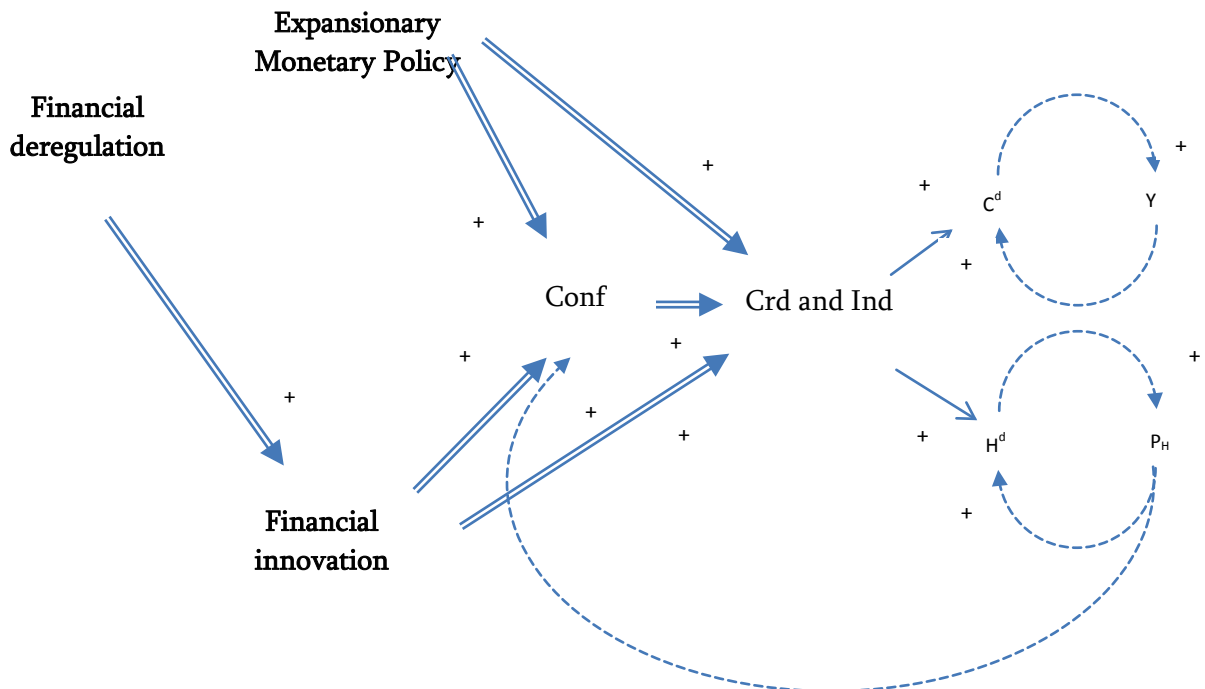
In the beginning of the second half of 2008, real as well as financial sectors of Georgian economics appeared to be in front of the biggest problems. Military aggression realized by Russian Federation in August of 2008 seriously impacted economics of the country. Important damage of infrastructure was accompanied by worsening of trust from the part of population toward banks and national currency. There was a danger for creation of “twin crisis“, bank and currency panic in the country. By influence of global financial crisis that achieved its peak in September of 2008, commercial banks of Georgia appeared to be before possible problem of average-term liquidity.

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<sup>10</sup> Baker D. The housing Bubble and the Financial crisis. Real world economics review, issue no 46. 2008. P. 74.

**Subprime Crisis: the antecedent facts**

Figure 2

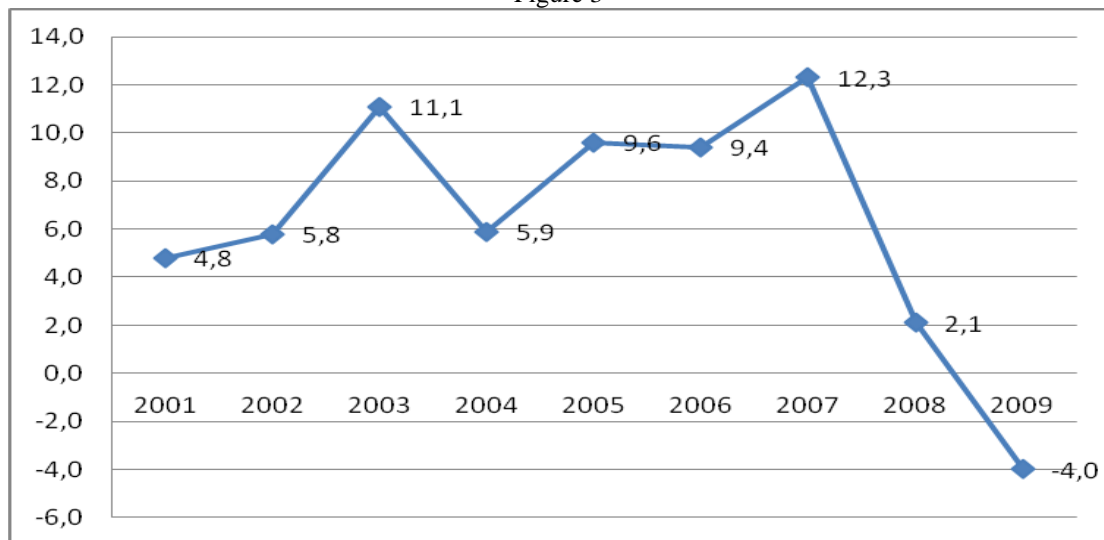


As a result of the world financial crisis, activity on financial markets where importantly reduced and crediting of private sector was reduced too; this caused global recession of real economics. World production was sensibly reduced and correspondingly - volume of world trade. Negative influence of the world crisis on Georgia was expressed in limitation of liquidity of commercial banks and reduction of export incomes.

In the second half of 2008, in comparison with the past year, real whole domestic product was reduced by 3.2 percent, and in the first half of the year real growth made up 8.7 percent. Finally, in 2008, real growth of the whole domestic product was expressed by 2.1 percent. Such low index of economic growth was not fixed after 2000<sup>11</sup>.

**Real GDP growth %**

Figure 3



<sup>11</sup> Financial stability report, National Bank of Georgia, Tbilisi, 2009, p. 13.

During financial crisis, most of all was damaged real estate sector. Demand for real estate was sharply reduced, what caused reduction in prices. When growing tendency of prices was noted, real estate was acquired for speculation purposes, because expectation of growth of future prices made investments at real estate markets very profitable. Complicated financial condition in real estate sector was directly affected quality of business loans issued to building sector. Volume of inactive loans in reporting period was significantly increased and according to June 30, 2009, it made up 52 percent<sup>12</sup>.

## Conclusion

From 2008 many spoke about the fact that crisis was caused by whole concession from the part of state of control over financial sector to the market. This thought has a logical continuation - the state shall toughen control. The last target is real estate market of America a bad debts of which brought the US economics to crisis.

Governments have new plan – with 90% insurance and assistance of the Government to avoid farther losses. Plan sounds good if not two problematic questions. First – it is difficult enough to think how the state can prevent risks. Second – what happened on real estate market of America was not caused by lack of governmental regulations at all; it was one of the most regulated industries in the world funded by taxpayers.

From 2008 began mass introduction of new rules. New regulations appeared for achieving more stability of financial sector toward liquidity and capital norms: as a result, US banks work by new leverage percent now.

Despite this fact, it is still highly felt that stability of financial market stands on state assistance and in case of danger nobody will give them the right of bankruptcy.

Theoretical evidence is grounded on historical factors too. During each crisis, regulators have to help more financial institutes. Five events of 1792-1929 can be considered as a base of modern financial system. This includes very successful innovations, starting from stock banks, ending with creation of the Federal Reserve System and formation of New York stock exchange.

Healthy financial system is moving axis of the economics; it applies needed resources in form of credits to different companies which need them. This ability makes the economics stronger and more competitive.

Modern financial world is more tendentious, where volume of savings is conditioned by applications between funding and taxes. Loan segment of real estate market becomes savage and investments in machineries and patents decrease, what hinders growth of economy.

“It is impossible to fully exclude from financial system of policy but it is real that interference of government should be more effective. Governments shall make funding of bank sphere more transparent, indexes of each bank shall become clearer, otherwise new crisis is irreversible” – consider western analyzers.

Such strong financial crisis as it was in the world does not happened directly in Georgia, but its results do spread to Georgia. Because liquidity was sharply reduced in the world, Georgian markets experienced difficulties in money loan. This was coincided with war; we can hardly define what was influenced the war and what influenced the crisis. Financial crisis in the world was quickly followed by economic crisis what was also expressed in Georgia by reduction of export demand and cheapening of import.

Solution of economic and political problems of Georgia depends just on the new world order and Russian-American relationships. Although here position of Europeans is

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<sup>12</sup> Financial stability report, National Bank of Georgia, Tbilisi, 2009, p. 18.



very important for our country, we shall think about the fact that their new members became a very heavy load for Europe and instead of bringing in they take away sufficiently high means and this weakens the Europe. Creation of new economics offers new opportunities to countries like Georgia.

The new world economic system is formed, putting up with which is as difficult as with all novelties for leading European countries. Of course, the system will be changed in Georgia too, how?! It highly depends on the system – whether we will be a Free State, what will be our future and where our place will be on the world economical map.

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# **CRISIS RESOLUTION IN THE FIELD OF THE FINANCIAL PRUDENTIAL SUPERVISION – SOME LEGAL AND ECONOMIC ASPECTS**

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## **Abstract**

The financial crisis of 2008 has challenged fundamental ideological changes among the financial policy makers and the regulatory authorities. The financial crisis was only “indicator” in the configuration of the new financial supervision framework of the EU, because it was the real need of the international financial markets, formed as a result of the change in the past decades.

The aim of the paper is to outline the causes and most important features of the global financial crisis and to introduce the evolving crisis management programs from the aspect of monetary and financial law regulation. Besides we introduce the newly established authorities of financial supervision at EU level and the legal method, the regulation of the Directive 2014/59/EU of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms.

The main conclusion of our paper is that the financial crisis may mark a new era and result a paradigmatic change in the relationship of the markets, not only in the field of financial economy, but at the field of law sciences as well.

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**Keywords:** Financial crisis resolution, recovery and resolution directive, resolution authority, bail-in tool

## **Introduction – Some critical points in the field of financial prudential supervision**

### **The new supervisory framework**

The financial governance, which comprises the regulation and supervision of the institutions, instruments and markets, suddenly disclosed severe and unknown problems when it was faced with the recent financial crisis. Indeed, national and international regulatory and supervisory systems revealed major weaknesses in almost every function: prevention, early detection, crisis management and ex post resolution.

Following the main conclusions of the "de Larosière Group" report in 2009 February, the European Commission published a communication for a reform of the "European financial supervision" (May 2009), which was approved by the Ecofin Council and then by the European Council. A package, comprising five legislative propositions was then published, 23 September. This architecture for a new supervisory framework was adopted and now it has two pillars:

- the European Systemic Risk Board (ESRB), with the support of the ECB (macro prudential level), to assess risks to the stability of the whole financial system, and to issue risk warnings and, when necessary, recommendations
- the European System of Financial Supervisors (ESFS) for the supervision of individual financial institutions (micro prudential level); it comprises three sector oriented European Supervisory Authorities (ESAs):

- European Banking Authority (EBA);
- European Insurance and Occupational Pensions Authority (EIOPA);
- European Securities and Markets Authority (ESMA).

The system also comprises national supervisory authorities, which remain supervisors of individual financial institutions; the objective of the European supervisory authorities is to improve the functioning of the internal market by ensuring appropriate, efficient and harmonised European regulation and financial supervision.

### **The European Banking Authority (EBA)**

The European Banking Authority is an independent EU Authority which was established on 1 January 2011<sup>13</sup> as part of the European System of Financial Supervision (ESFS) and is in charge of ensuring effective and consistent prudential regulation and supervision across the European banking sector. Its overall objectives are to maintain financial stability in the EU and to safeguard the integrity, efficiency and orderly functioning of the banking sector.

The main task of the EBA is to contribute to the creation of the European Single Rulebook in banking whose objective is to provide a single set of harmonised prudential rules for financial institutions throughout the EU. The Authority also plays an important role in promoting convergence of supervisory practices and is mandated to assess risks and vulnerabilities in the EU banking sector.

### **The new legal methods for crisis resolution**

#### **The new directive on establishing a framework for the recovery and resolution of credit institutions**

The financial crisis has shown that there is a significant lack of adequate prudential tools at Union level – and at Member State level too – to deal effectively with unsound or failing credit institutions and investment firms. Some Member States have already enacted legislative changes<sup>14</sup> that introduce mechanisms to resolve failing institutions; others have indicated their intention to introduce such mechanisms. So far there was no harmonisation of the procedures for resolving institutions at Union level. Some Member States apply the same procedures to institutions that they apply to other insolvent enterprises, which were adapted for institutions in certain cases, but a wide range of procedures and regimes existed at Member State level. A well-based system and regime of prudential supervision is therefore needed to provide authorities with a credible set of tools to intervene sufficiently early and quickly in an unsound or failing institution so as to ensure the continuity of the institution's critical financial and economic functions, while minimising the impact of an institution's failure on the economy and financial system. Therefore it has been a milestone when the European Parliament and the Council adopted the directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms.

### **Authorities responsible for resolution**

According to the directive, each Member State shall designate one or, exceptionally, more resolution authorities<sup>15</sup> that are empowered to apply the resolution tools and exercise the resolution powers. The authorities may be national central banks<sup>16</sup>, competent ministries

<sup>13</sup> The EBA took over all existing responsibilities and tasks of the Committee of European Banking Supervisors.

<sup>14</sup> e.g. in Hungary the Act XXXVII of 2014 on strengthening the financial prudential framework

<sup>15</sup> It shall be a public administrative authority or authorities entrusted with public administrative powers.

<sup>16</sup> In Hungary the resolution authority is the Hungarian National Bank.

or other public administrative authorities or authorities entrusted with public administrative powers.

Member States shall ensure that, within the competent authorities, there is operational independence between the resolution function and the supervisory or other functions of the relevant authority<sup>17</sup>.

Decisions taken by competent authorities, resolution authorities and EBA in accordance with this Directive shall take into account the potential impact of the decision in all the Member States where the institution or the group operate and minimise the negative effects on financial stability and negative economic and social effects in those Member States.

Member States shall ensure that each resolution authority has the resources and operational capacity to apply resolution actions, and is able to exercise their powers with the speed and flexibility that are necessary to achieve the resolution objectives.

### **Recovery plans (Article 5, 6)**

Member States shall ensure that each institution, which is not part of a group subject to consolidated supervision<sup>18</sup>, draws up and maintains a recovery plan providing for measures to be taken by the institution to restore its financial position following a significant deterioration of its financial situation.

Competent authorities shall ensure that the institutions update their recovery plans *at least annually or after a change* to the legal or organisational structure of the institution, its business or its financial situation, which could have a material effect on, or necessitates a change to, the recovery plan. Competent authorities may require institutions to update their recovery plans more frequently.

Recovery plans shall include an analysis of how and when an institution may apply, in the conditions addressed by the plan, for the use of central bank facilities and identify those assets which would be expected to qualify as collateral.

The directive deals with the definition of the *Group recovery plans* too, in this case the Union parent undertakings draw up and submit to the consolidating supervisor a group recovery plan.<sup>19</sup>

### **Resolution plans (Article 10)**

The resolution authority – after consulting the competent authority – shall draw up a resolution plan for each institution that is not part of a group subject to consolidated supervision.<sup>20</sup> This plan shall consist of the *resolution actions* which the resolution authority may take where the institution meets the conditions for resolution. The resolution plan shall not assume any of the following: extraordinary public financial support or central bank emergency liquidity assistance.

Resolution authorities may require institutions to assist them in the drawing up and updating of the plans. Plans shall be reviewed, and where appropriate updated, at least annually and after any material changes to the legal or organisational structure of the

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<sup>17</sup> The staff involved in carrying out the functions of the resolution authority pursuant to this Directive shall be structurally separated from, and subject to, separate reporting lines from the staff involved in carrying out the tasks pursuant to Regulation (EU) No 575/2013 and Directive 2013/36/EU or with regard to the other functions of the relevant authority.

<sup>18</sup> pursuant to Articles 111 and 112 of Directive 2013/36/EU

<sup>19</sup> Group recovery plans shall consist of a recovery plan for the group headed by the Union parent undertaking as a whole.

<sup>20</sup> pursuant to Articles 111 and 112 of Directive 2013/36/EU.

institution or to its business or its financial position that could have a material effect on the effectiveness of the plan or otherwise necessitates a revision of the resolution plan.

The directive mentions Group resolution plans as well.

### **Early intervention measures (Article 27)**

Where an institution infringes or, is likely in the near future to infringe the requirements of any EU Regulation<sup>21</sup> – concerning especially the minimum capital requirement and solvency – Member States shall ensure that competent authorities have at their disposal at least the following measures:

- require the management body of the institution to examine the situation, identify problems and draw up an action programme to overcome those problems and a timetable for its implementation,
- require the management body to convene, or if the management body fails to comply with that requirement convene directly, a meeting of shareholders of the institution,
- require one or more members of the management body or senior management to be removed or replaced if those persons are found unfit to perform their duties,
- require the management body of the institution to draw up a plan for negotiation on restructuring of debt with some or all of its creditors according to the recovery plan, where applicable,
- require changes to the institution's business strategy.

### **Temporary administrator (Article 29)**

Where replacement of the senior management or management body is insufficient, Member States shall ensure that competent authorities may appoint one or more *temporary administrators* to the institution, either to replace the management body temporarily or to work temporarily with the management body. If the competent authority appoints a temporary administrator to work with the management body of the institution, the competent authority shall further specify at the time of such an appointment the role, duties and powers of the temporary administrator. Authorities have the exclusive power to appoint and remove any temporary administrator<sup>22</sup>. The appointment of a temporary administrator shall not last more than one year. That period may be exceptionally renewed if the conditions for appointing the temporary administrator continue to be met.

### **Resolution objectives (Article 31)**

When applying the resolution tools and exercising the resolution powers, resolution authorities shall have regard to the resolution objectives<sup>23</sup>, and choose the tools and powers that best achieve the objectives that are relevant in the circumstances of the case. The resolution objectives are of equal significance, and resolution authorities shall balance them as appropriate to the nature and circumstances of each case.

The resolution objectives are the following:

- to ensure the continuity of critical functions;
- to avoid a significant adverse effect on the financial system, in particular by preventing contagion, including to market infrastructures, and by maintaining market discipline;

<sup>21</sup> No 575/2013, Directive 2013/36/EU, Title II of Directive 2014/65/EU or any of Articles 3 to 7, 14 to 17, and 24, 25 and 26 of Regulation (EU) No 600/2014

<sup>22</sup> A temporary administrator may be removed at any time and for any reason.

<sup>23</sup> Shall seek to minimise the cost of resolution and avoid destruction of value unless necessary to achieve the resolution objectives

- to protect public funds by minimising reliance on extraordinary public financial support;
- to protect depositors and investors (covered by Directive 2014/49/EU and investors covered by Directive 97/9/EC);
- to protect client funds and client assets.

### **Conditions for resolution (Article 32)**

Resolution authorities shall take a resolution action in relation to an institution only if the Authority considers that all of the following conditions are met:

- the determination that the institution is failing or is likely to fail has been made by the competent authority,
- having regard to timing and other relevant circumstances, there is no reasonable prospect that any alternative private sector measures taken would prevent the failure of the institution within a reasonable timeframe;
- a resolution action is necessary in the public interest.

### **General principles governing resolution (Article 34)**

When applying the resolution tools and exercising the resolution powers, resolution authorities take all appropriate measures to ensure that the resolution action is taken in accordance with the following principles:

- *There is no priority rule in accordance with the principles, nevertheless we may consider two of these principles the very most important: no creditor shall incur greater losses than would have been incurred if the institution had been wound up under normal insolvency proceedings and covered deposits are fully protected.*
- the shareholders of the institution under resolution bear first losses;
- creditors of the institution under resolution bear losses after the shareholders<sup>24</sup>;
- management body and senior management of the institution under resolution are replaced<sup>25</sup>;
- management body and senior management shall provide all necessary assistance for the achievement of the resolution objectives.

### **The bail-in tool (Article 43)**

Member States shall ensure that resolution authorities may apply the bail-in tool to meet the resolution objectives.

Member States shall ensure that resolution authorities may apply the bail-in tool only if there is a reasonable prospect that the application of that tool will restore the institution financial soundness and long-term viability. *We may consider the application of the “bail-in tool” in the Crisis resolution a unique and unconventional legal method and rule, since before this directive the European Financial Law did not apply this kind of resolution tool.*

### **Conclusion**

Regarding the project of reforming the regulatory and supervisory model in the EU, we have to follow whether the new structures are able to operate adequately. On the one hand, the supervisory institutions are already established at EU level, however on the other hand, the supervisory authorities at the level of member states should also take part efficiently in the common framework. In order to achieve such a properly working

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<sup>24</sup> in accordance with the order of priority of their claims under normal insolvency proceedings

<sup>25</sup> except in those cases when management body and senior management appropriate to the circumstances

framework of supervision the national legislations should consider and adopt the regulations in the Directive for recovery and resolution.

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# THE EMPIRICAL IMPORTANCE OF HABIT FORMATION IN DSGE MODELS: A BAYESIAN INVESTIGATION FOR POLISH ECONOMY

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## Abstract

In this paper I present the small scale DSGE model of staggered wage and price contracts with internal habit formation, where the utility from a current consumption is affected by the level of the consumer's own past consumption. Internal habit formation seems to be a reasonable compromise between catching up with the Joneses, where the reference level of consumption is given by the consumption of representative agent and deep habits. In order to assess the empirical importance of habit formation I estimate and compare using Bayesian techniques two variants of DSGE model: one with habit formation and the other without habit formation. The estimation and comparison is based on quarterly data for Polish economy. The results suggest that model with habit formation is clearly favored by the data. However, obtained Bayes factor seems to be very low in comparison to results for other economies. Comparison of impulse response functions shows that introduction of habit formation has rather limited impact on propagation mechanisms. Moreover, obtained posteriors seem to be stable between these models.

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**Keywords:** Habit formation, Bayesian model comparison, DSGE models

## Introduction

Habit formation in consumption is a widely used real friction in the dynamic stochastic general equilibrium models (DSGE). Historically, it was introduced by Abel [1990] and Constantinides [1990] to explain the equity premium puzzle, identified by Mehra and Prescott [1985], which cannot be solved using standard time-separable utility function and reasonable calibration of discount factor and relative risk aversion parameter. Introduction of habit formation to modern DSGE models was proposed by Christiano, Eichenbaum and Evans [2005]. It causes that model is able to generate hump-shaped response of consumption to various shocks that is more comparable to the results obtained from VAR models. Moreover, works by Smets and Wouters [2007] and Adolfson et. al. [2007] confirm that introduction of habit formation improves model fit to the data.

This paper presents the small scale DSGE model with internal habit formation, where the utility from a current consumption is affected by the level of the consumer's own past consumption. Internal habit formation seems to be a reasonable compromise between catching up with the Joneses, where the reference level of consumption is given by the consumption of representative agent and deep habits, proposed by Ravn, Schmitt-Grohe and Uribe [2006]. Moreover, following Erceg, Henderson and Levine [2000], I introduce price and wage rigidities in the spirit of Calvo [1983] to the model. The works by Rabanal and Rubio-Ramirez [2005; 2008] and Kuchta [2014] confirm the empirical importance of sticky wages assumption.

In order to assess the empirical importance of habit formation the model is estimated in two variants: one with habit formation and the other without habit formation using



Bayesian techniques. Next, the Bayesian model comparison is applied. The estimation and comparison are based on quarterly data for Polish economy. The results suggest that model with habit formation is clearly favored by the data. However, obtained Bayes factor seems to be very low in comparison to results for other economies. Moreover, obtained posteriors seem to be stable between these models.

The remainder of the paper is organized as follows. In the next section the theoretical model is derived and described. The third section contains a short description of estimation and comparison methods. The obtained results are presented in section forth. Finally, the last section presents some conclusions.

### Model

The final good ( $Y_t$ ) is produced by a perfectly competitive, representative firm, which combines a continuum of intermediate goods, indexed by  $j \in [0;1]$ , using the following technology [Dixit, Stiglitz, 1977]:

$$Y_t = \left[ \int_0^1 (Y_t^j)^{\frac{1}{1+\tau_p}} dj \right]^{1+\tau_p} \quad (1)$$

where  $\tau_p > 0$  is parameter, that govern the mark-up of the intermediate-goods firm, and  $Y_t^j$  represents the input of intermediate good  $j$ . The perfectly competitive firm takes its output price ( $P_t$ ) and its input prices ( $P_t^j$ ) as given and seeks to maximize profits. The profit maximization problem implies following optimal demand for the inputs:

$$Y_t^j = \left( \frac{P_t^j}{P_t} \right)^{-\frac{1+\tau_p}{\tau_p}} Y_t \quad (2)$$

where the output price has the form of:

$$P_t = \left[ \int_0^1 (P_t^j)^{-\frac{1}{\tau_p}} dj \right]^{-\tau_p} \quad (3)$$

Each intermediate good  $j$  is produced by a monopolistically competitive firm  $j$  using the following technology with a constant return to scale:

$$Y_t^j = \varepsilon_t^a L_t^j \quad (4)$$

where  $L_t^j$  is the labor input and  $\varepsilon_t^a$  represents productivity shock, which it is assumed to be identical to each firm and follow a first order autoregressive process of the form:

$$\ln \varepsilon_t^a = \rho_a \ln \varepsilon_{t-1}^a + \eta_t^a; \quad \eta_t^a \sim iid N(0; \sigma_a^2) \quad (5)$$

where  $\rho_a \in (0;1)$  is autoregressive parameter. Linear relationship between input of labor and output causes that real total cost is also linear, which means that real marginal cost ( $RMC_t^j$ ) is independent of output and directly related with real wage ( $w_t$ ) and productivity shock:

$$RMC_t = \frac{w_t}{\varepsilon_t^a} \quad (6)$$

Each intermediate-goods producing firm has some monopolistic power on the market, which causes that each of them can choose the price of produced goods. It is assumed that price-setting mechanism is governed by Calvo scheme. In each period there is set of a randomly chosen firms, with the measure  $1 - \theta_p \in (0;1)$ , which can set price optimally. Rest of firms leave the price unchanged. Calvo scheme implies that price of output (3) evolve according to:

$$P_t = \left[ (1 - \theta_p) (P_t^*)^{-\frac{1}{\tau_p}} + \theta_p (P_{t-1})^{-\frac{1}{\tau_p}} \right]^{-\tau_p} \quad (7)$$

where  $\theta_p \in (0;1)$  is parameter of price rigidities and  $P_t^*$  is optimally chosen price, set in period  $t$ . In this period each firm that can choose price optimally, set it to maximize the stream of expected profits:

$$E_t \left\{ \sum_{\tau=0}^{\infty} (\beta \theta_p)^\tau \frac{\lambda_{t+\tau}}{\lambda_t} \left( \frac{P_t^*}{P_{t+\tau}} - RMC_{t+\tau} \right) Y_{t+\tau} \right\} \quad (8)$$

subject to the demand constraint (2), where  $\beta \frac{\lambda_{t+\tau}}{\lambda_t}$  is marginal rate of substitution between period  $t + \tau$  and  $t$ , and it is used the fact that in the present of linear production technology marginal cost is equal to average cost, if fixed costs are zero. The first order condition of the firm is given by:

$$E_t \left\{ \sum_{\tau=0}^{\infty} (\beta \theta_p)^\tau \frac{\lambda_{t+\tau}}{\lambda_t} Y_{t+\tau}^* \left( (1 + \tau_p) RMC_{t+\tau} - \frac{P_t^*}{P_{t+\tau}} \right) \right\} = 0 \quad (9)$$

It is assumed that economy is populated by continuum of monopolistically competitive households, indexed by  $i \in [0;1]$ . Each household supplies a differentiated and imperfect substitute labor service and derives utility from consumption ( $C_t^i$ ) and disutility from hours worked ( $L_t^i$ ):

$$\sum_{\tau=0}^{\infty} \beta^\tau E_t \left\{ \varepsilon_{t+\tau}^b \left[ \ln(C_{t+\tau}^i - h C_{t+\tau-1}^i) - \varepsilon_{t+\tau}^l \frac{(L_{t+\tau}^i)^{1+\delta_i}}{1+\delta_i} \right] \right\} \quad (10)$$

where  $h \in (0;1)$  is parameter of internal habit formation,  $\delta_i > 0$  represents the inverse of the elasticity of labor supply,  $\varepsilon_t^b$  and  $\varepsilon_t^l$  denote preference shock and labor supply shock, respectively. It is assumed that each of them follow a first-order autoregressive process of the form:

$$\ln \varepsilon_t^b = \rho_b \ln \varepsilon_{t-1}^b + \eta_t^b; \eta_t^b \sim iid N(0; \sigma_b^2) \quad (11)$$

$$\ln \varepsilon_t^l = \rho_l \ln \varepsilon_{t-1}^l + \eta_t^l; \eta_t^l \sim iid N(0; \sigma_b^2) \quad (12)$$

where  $\rho_b \in (0;1)$  and  $\rho_l \in (0;1)$  are autoregressive parameters.

The intertemporal budget constraint has the form:

$$\frac{B_t^i}{R_t P_t} + C_t^i = \frac{B_{t-1}^i}{P_t} + w_t^i L_t^i + D_t^i + d_t \quad (13)$$

where  $B_t^i$  represents the amount of one-period riskless bonds purchased in period  $t$ ,  $R_t$  is the gross nominal interest rate,  $w_t^i$  is real wage,  $D_t^i$  is the household's net real income from participating in state-contingent securities at time  $t$  and  $d_t$  represents the shares in the intermediate firm's profits.

The household chooses the amount of consumption goods and one-period riskless bonds to maximize (10) subject to (13). The first order conditions are given by:

$$\lambda_t^i = \beta E_t \left\{ \lambda_{t+1}^i \frac{R_t}{\pi_{t+1}} \right\} \quad (14)$$

under transversality condition:

$$\lim_{t \rightarrow \infty} \beta^t \lambda_t^i B_t^i = 0 \quad (15)$$

where:

$$\lambda_t^i = \frac{\varepsilon_t^b}{C_t^i - hC_{t-1}^i} - \beta h E_t \left\{ \frac{\varepsilon_{t+1}^b}{C_{t+1}^i - hC_t^i} \right\} \quad (16)$$

is the marginal utility of consumption. Moreover in the model without habit formation ( $h = 0$ ) the marginal utility of consumption is reduced to:

$$\lambda_t^i = \frac{\varepsilon_t^b}{C_t^i} \quad (17)$$

It is assumed that there are labor agencies which aggregate heterogeneous, individual for each household, labor services in a homogenous input factor using following technology:

$$L_t = \left[ \int_0^1 (L_t^i)^{\frac{1}{1+\tau_w}} di \right]^{1+\tau_w} \quad (18)$$

where:  $\tau_w > 0$  represents the household's mark up. Labor agency tends to maximize profits and chooses labor input taking its prices as a given. Optimal demand for an individual labor has the form of:

$$L_{t+s}^i = \left( \frac{W_t^i}{W_{t+s}} \right)^{\frac{1+\tau_w}{\tau_w}} L_{t+s} \quad (19)$$

where:  $W_t^i$  represents individual nominal wage of household and

$$W_t = \left[ \int_0^1 (W_t^i)^{\frac{1}{\tau_w}} di \right]^{-\tau_w} \quad (20)$$

is an index of nominal wage.

It is assumed that each household has some monopolistic power and can choose nominal wage. Similarly to the price-setting mechanism, the wage-setting mechanism is governed by Calvo scheme. In each period a set of randomly chosen households can choose their wage optimally, to maximize (10) subject to (13) and (19), whereas rest of the households leaves their nominal wage unchanged. Introduction of sticky wages in the spirit of Calvo implies that nominal wage evolve according to:

$$W_t = \left[ \theta_w (W_{t-1})^{\frac{1}{\tau_w}} + (1 - \theta_w) (W_t^*)^{\frac{1}{\tau_w}} \right]^{-\tau_w} \quad (21)$$

where:  $W_t^*$  is the optimal nominal wage, which is given by the first order condition of the form:

$$\sum_{s=0}^{\infty} (\beta \theta_w)^s E_t \left\{ L_{t+s}^* \left[ (1 + \tau_w) MUL_{t+s}^* - \lambda_{t+s}^i \frac{W_t^*}{P_{t+\tau}} \right] \right\} = 0 \quad (22)$$

where:  $L_t^*$  and  $MUL_t^*$  are the labor demand and marginal disutility of labor at this wage, respectively.

The equilibrium conditions at the labor market and the market of intermediate goods imply that:

$$\frac{1}{\Delta_p} \int_0^1 Y_t^j dj = Y_t \quad (23)$$

$$\frac{1}{\Delta_w} \int_0^1 L_t^i di = L_t \quad (24)$$

where:  $\int_0^1 Y_t^j dj$  represents aggregate supply of intermediate goods,  $\int_0^1 L_t^i di$  is aggregate supply

of labor services,  $\Delta_t^p \equiv \int_0^1 \left(\frac{P_t^j}{P_t}\right)^{-\frac{1+\tau_p}{\tau_p}} dj \geq 1$  and  $\Delta_t^w \equiv \int_0^1 \left(\frac{W_t^i}{W_t}\right)^{-\frac{1+\tau_w}{\tau_w}} di \geq 1$  measure the ineffective

price and wage dispersions in the economy, respectively [see: Yun, 1996; Christiano, Trabandt, Walentin, 2010]. Moreover, the equilibrium condition at the final goods market is given by:

$$Y_t = C_t \quad (25)$$

In considered model the gross nominal interest rate is controlled by the Central Bank, which chooses its level according to Taylor rule [1993] of the form:

$$\frac{R_t}{R} = \left(\frac{R_{t-1}}{R}\right)^{\rho_R} \left[ \left(\frac{\pi_t}{\pi}\right)^{\phi_\pi} \left(\frac{Y_t}{Y}\right)^{\phi_y} \right]^{(1-\rho_R)} \exp(\eta_t^R); \quad \eta_t^R \sim iid N(0; \sigma_R^2) \quad (26)$$

where: variables without time subscript denote its levels in steady state and  $\rho \in (0;1)$  is the smoothing parameter,  $\phi_\pi$  and  $\phi_y$  are the long-run responses of the monetary authority to deviation of inflation and output from their steady state values.

### Estimation and comparison methods

In this part I present the method of estimation which is used to estimate structural parameters of the DSGE model. The procedure of estimation consists of several steps. In the first step the model is log-linearized around the deterministic steady state. Next, it is solved using perturbation method based on first order approximation of the policy and transition functions [Schmitt-Grohe, Uribe, 2004]. The solution of model can be interpreted as the transition equation in the state-space representation of the DSGE model. In the third step I use empirical time-series to construct measurement equation to obtain state-space model. In the next step the Kalman filter is used to evaluate likelihood function [see Hamilton, 1994, p. 372-409; Canova, 2007, p. 214-220]. After that, Bayes theorem is used to construct posterior distribution of parameters of interest according to the formula written below [Fernandez-Villaverde, 2010, p. 9; Kuchta 2011]:

$$p(\boldsymbol{\theta} | \mathbf{x}^T, m_i) = \frac{p(\boldsymbol{\theta} | m_i) p(\mathbf{x}^T | \boldsymbol{\theta}, m_i)}{p(\mathbf{x}^T | m_i)} \quad (27)$$

where:  $p(\boldsymbol{\theta} | \mathbf{x}^T, m_i)$  represents posterior distribution for the model  $m_i$ ,  $p(\boldsymbol{\theta}, m_i)$  is the prior distribution,  $p(\mathbf{x}^T | \boldsymbol{\theta}, m_i)$  is the likelihood function and  $p(\mathbf{x}^T | m_i)$  denotes marginal density of data which is defined as [Kass, Raftery, 1995]:

$$p(\mathbf{x}^T | m_i) = \int p(\boldsymbol{\theta} | m_i) p(\mathbf{x}^T | \boldsymbol{\theta}, m_i) d\boldsymbol{\theta} \quad (28)$$

The marginal data density averages all possible likelihoods across the parameter space, using the prior as a weight. It takes into account that the size of the parameter space for different model can be different. Hence, more complicated models will not necessarily rank better than simpler models, if the extra parameters are unimportant [Rabanal, 2007, p. 924-295]. Moreover, it can be also used to compare misspecified and/or nonnested models [Fernandez-Villaverde, Rubio-Ramirez, 2004] and it is directly related to the predictive density function [Smets, Wouters, 2003, p. 1139].

In order to compare alternative DSGE models I apply posterior odds ratio of the form [Fernandez-Villaverde, Rubio-Ramirez, 2004, p. 157-158]:

$$POR_{i,j} = \frac{p(m_i) p(\mathbf{x}^T | m_i)}{p(m_j) p(\mathbf{x}^T | m_j)} \quad (29)$$

where:  $\frac{p(m_i)}{p(m_j)}$  is prior odds ratio and  $\frac{p(\mathbf{x}^T | m_i)}{p(\mathbf{x}^T | m_j)}$  is the Bayes factor. Due to the fact that there are any important circumstances, I assign both models the same prior probability. Moreover I adopt from Jefferson [see Kass, Raftery, 1995] that Bayes factor higher than 150 means that one of compared models is strongly favored by the data.

Estimation and comparison is based on set for a Polish economy from I quarter 1995 to IV quarter 2011 which consist of real GDP in per capita terms, real average wage, CPI and the short-run (3 month) nominal interest rate. All data were expressed as logs, seasonally adjusted and transformed in the percent deviation from steady-state using Hodrick-Prescott filter [Hodrick, Prescott, 1997].

## Results

This part presents results of estimation and comparison of considered models. To obtain posterior distribution I apply Random-Walk Metropolis algorithm [see An, Schorfheide, 2007, p. 131] which consists of two chains, each of 400.000 draws. Posteriors are evaluated using only the last 100.000 draws. This ensures that the algorithm converged. Before estimation I divide parameters into two groups. First group consists of discount factor and household mark up parameter which are calibrated at the values 0.99 and 0.1, respectively. For the second group I choose prior distributions which are presented in table 1. Chosen priors ensure that possible values of parameters are consistent with economics assumption.

Results of the estimation are presented in table 1. Obtained posteriors seem to be similar in both models in spite of the fact that the estimated parameter of habit formation is statistically significant and implies high level of habits in Polish economy. According to presented results, significant level of price stickiness in Polish economy is observed. Estimate of the sticky price parameters suggests that the average duration of price is in the range of 4.3 to 10 quarters. These findings seem to be consistent with previous results for Polish economy [see Baranowski, Szafranski, 2012]. Obtained posteriors suggest also a moderate level of nominal wage stickiness. Estimate of the sticky wage parameter implies that the average duration of wage contract is found in the range of 2 to 3.7 quarters. It is quite surprising that the level of wage stickiness is much lower than the level of price stickiness, but it is consistent with other estimations of DSGE models for Polish economy [see Krajewski, 2013]. Moreover, the estimates of the parameters in Taylor rule suggest that in case of Polish economy, significant level of nominal interest rate smoothing and rather poor long-run response of the monetary authority to deviation of inflation from it steady state value are observed.

Table 1 Estimation results

Parameter	Prior		Posterior*	
	Type	Mean (Std. errs.)	Model with habit formation	Model without habit formation
$\delta_l$	Gamma	1.25 (0.50)	0.89 (0.31; 1.50)	0.82 (0.28; 1.38)
$h$	Beta	0.50 (0.20)	0.76 (0.67; 0.87)	-
$\theta_p$	Beta	0.50 (0.20)	0.83 (0.77; 0.89)	0.84 (0.79; 0.90)
$\theta_w$	Beta	0.50 (0.20)	0.60 (0.49; 0.69)	0.62 (0.50; 0.73)
$\rho$	Beta	0.50 (0.20)	0.77 (0.71; 0.83)	0.71 (0.64; 0.77)
$\phi_\pi$	Gamma	1.50 (0.25)	1.44 (1.12; 1.77)	1.27 (1.01; 1.54)
$\phi_y$	Gamma	0.125 (0.05)	0.13 (0.07; 0.20)	0.21 (0.12; 0.30)
$\rho_a$	Uniform	0.50 (0.29)	0.48 (0.29; 0.68)	0.48 (0.29; 0.65)
$\rho_b$	Uniform	0.50 (0.29)	0.09 (0.00; 0.20)	0.81 (0.70; 0.92)
$\rho_l$	Uniform	0.50 (0.29)	0.03 (0.00; 0.06)	0.02 (0.00; 0.06)
$\sigma_a$	Uniform	0.50 (0.29)	0.08 (0.03; 0.13)	0.09 (0.03; 0.15)
$\sigma_l$	Uniform	0.50 (0.29)	0.61 (0.30; 0.93)	0.64 (0.29; 1.00)
$\sigma_b$	Uniform	0.50 (0.29)	0.06 (0.03; 0.08)	0.02 (0.01; 0.03)
$\sigma_r$	Uniform	0.50 (0.29)	0.0026 (0.002; 0.003)	0.0028 (0.002; 0.003)
Log marginal data density			-295.54	-300.61
Bayes factor			159.17	

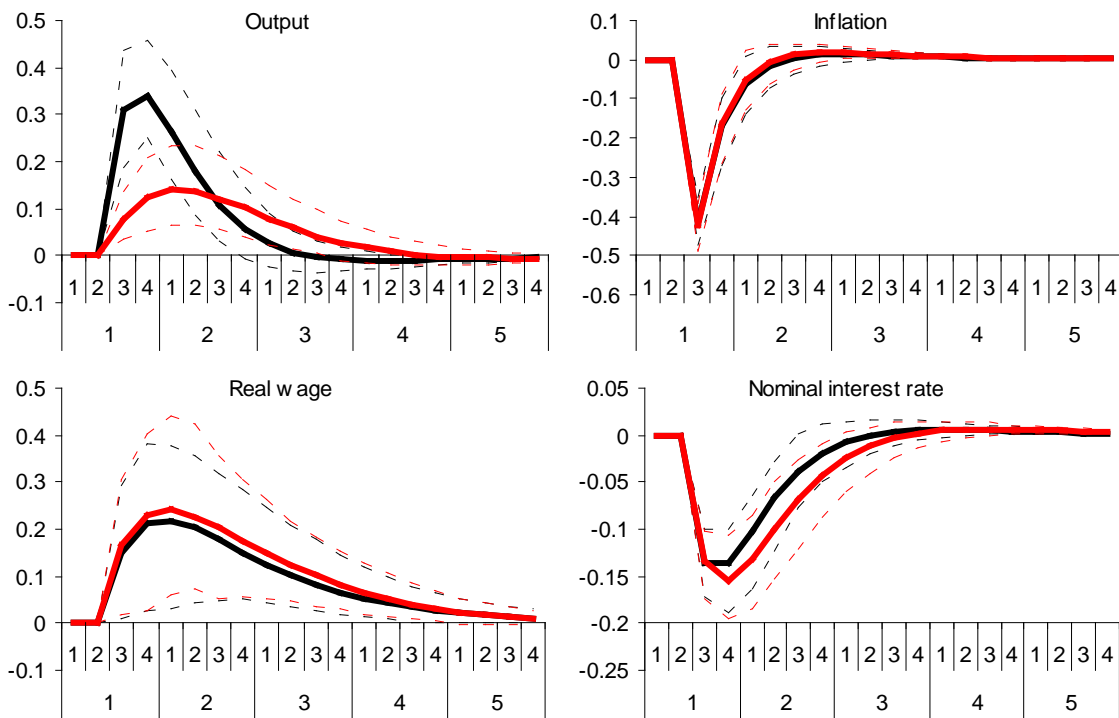
Source: own calculations in Dynare 4.2.5.

Note:\* presented values are means of the posteriors and in the parenthesis are 5<sup>th</sup> and 95<sup>th</sup> percentiles.

The draws obtained from Metropolis algorithm are also used to evaluate marginal data densities by applying the modified harmonic mean estimator. Received values together with Bayes factor which relates model with habit formation to the model without habit formation are presented in table 1. The value of Bayes factor is equal to 159. It suggests that model with habit formation is strongly favored by the data. This result is consistent with the findings for U.S. [Smets, Wouters, 2007] and euro area [Adolfson, Laseen, Linde, Villani, 2007]. However, its value seems to be very low in comparison with works by Smets, Wouters and Adolfson, Laseen, Linde and Villani. It is supposed that the low value of Bayes factor is mainly determined by the low dimension of the set of observable variables.

To evaluate impact of the introduction of habit formation to the propagation mechanism of the model of price and wage rigidities I compare impulse response functions for model with and without habit formation. I present only the responses for the output, real wage, inflation and nominal interest rate, because they are used as the observables in estimation and the explanation of their dynamics determines the results of the Bayesian comparison. Figure 1 presents selected moments (median, 5<sup>th</sup> and 95<sup>th</sup> percentile of distribution) of the posterior distributions of impulse response functions in case of temporary and positive shock in technology. The black lines represent response of the model without habit formation and the red lines – response of the model with habit formation.

Figure 1 Impulse response functions – technological shock



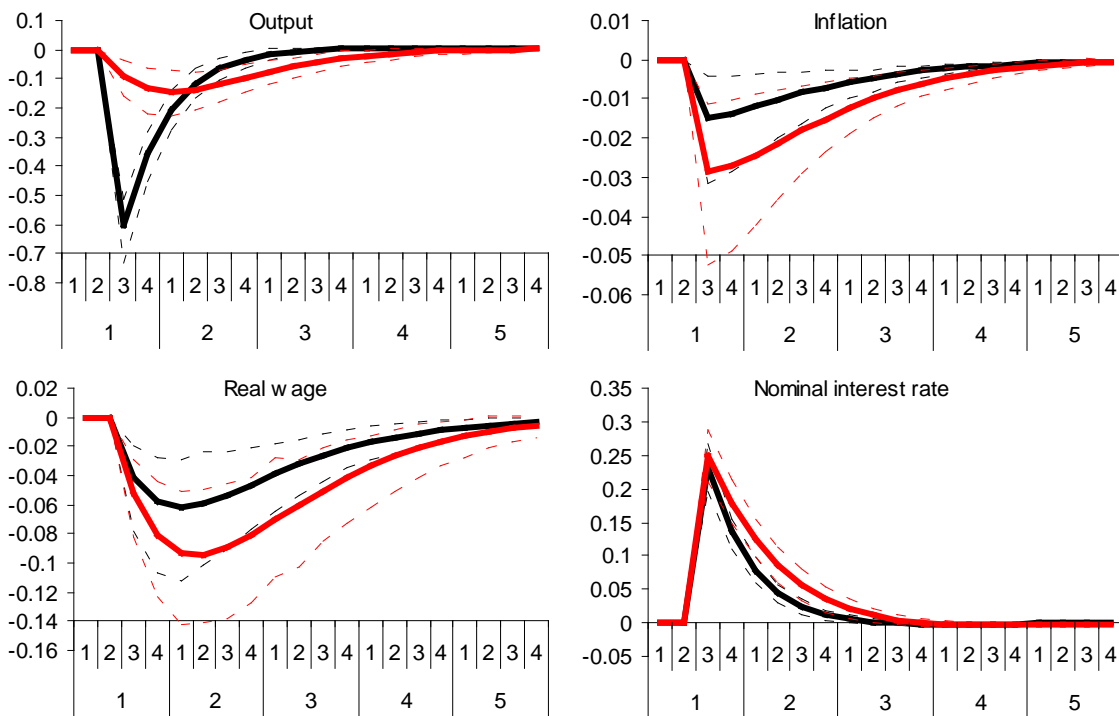
Source: own calculations in Dynare 4.2.5.

Note: black solid line – median for the model without habit formation, black dotted lines – 5<sup>th</sup> and 95<sup>th</sup> percentiles for the model without habit formation, red solid line – median for the model with habit formation, red dotted lines – 5<sup>th</sup> and 95<sup>th</sup> percentile for the model with habit formation.

In the theoretical model, higher level of technology increases the marginal product of labor sharply and causes that output and real wage grow. Introduction of wage and price rigidities leads to the sluggish response of real wage. As the consequence, the real wage increases through a year from the beginning of disturbance. Gradual growth of real wage results in immediate decrease of real marginal cost, because level of technology increases instantaneously. These changes cause that inflation decreases in the period of technological disturbance. The decrease of inflation despite the increase of output leads to decrease of nominal interest rate, which is consistent with Taylor rule.

Introduction of habit formation into the model of price and wage rigidities has rather small impact of the response to technological shock. It is quite surprising that obtained estimates of the reactions of inflation, real wage and nominal interest rate are similar in both models. Different response is only observed in case of output. The introduction of habit formation causes slightly more sluggish response. This arise from the fact that in case of habit formation households are interested in more spread response to changes in real income, since they are aware that if they consume more today, they should consume even more in the future, in order to remain at the same level of utility.

Figure 2 Impulse response functions – monetary policy shock



Source: own calculations in Dynare 4.2.5.

Note: black solid line – median for the model without habit formation, black dotted lines – 5<sup>th</sup> and 95<sup>th</sup> percentiles for the model without habit formation, red solid line – median for the model with habit formation, red dotted lines – 5<sup>th</sup> and 95<sup>th</sup> percentile for the model with habit formation.

Figure 2 presents selected moments (median, 5<sup>th</sup> and 95<sup>th</sup> percentile of distribution) of the posterior distributions of impulse response functions in case of temporary and positive shock in monetary policy. The black lines represent response of the model without habit formation and the red lines – response of the model with habit formation.

The appearance of monetary policy disturbance sharply raises the nominal interest rate above the steady state and thus increases its real value. Higher level of real interest rate encourages households to increase savings and reduce the consumption demand. As the consequence, fall in output is observed. Moreover, decrease of consumption demand forces firms to reduce labor demand and households to reduce their real wages. Similarly to technological shock, response of real wage is rather sluggish, because of introduction of staggered wage and price contracts. Moreover, the dynamics of real wage strongly determine the behavior of real marginal cost from a one side, and inflation from the other side. As the consequence inflation falls.

Introduction of habit formation into the model of sticky wages and prices has rather limited impact of the response to monetary policy shock. Similarly to technological shock, the main difference is observed in response of output. In the model without habit formation, the appearance of monetary policy shock results in sharp decrease of output, whereas in the model with habit formation the response of output is sluggish and hump-shaped. Moreover, the responses of real wages and inflation are stronger in the model with, than in the model without habit formation.

## Conclusion

This paper evaluated the empirical importance of the introduction of habit formation into small scale DSGE model of price and wage rigidities. Habit formation implied that the utility from a current consumption is affected by the level of past consumption and led to



sluggish response of consumption to changes in real income. The analysis was based on quarterly data for Polish economy from 1995:1 to 2011:4. To assess the empirical importance of habit formation, two version of the theoretical model was estimated and compared using Bayesian techniques. Moreover, this paper presented the comparison of impulse response functions with respect to technological and monetary policy shocks.

Obtained results suggested that model with habit formation was strongly favored by the data in comparison with model without habit formation. However, estimated Bayes factor was very low in comparison with results for other economies. It was supposed that the low value of Bayes factor was mainly determined by the low dimension of the set of observable variables. This conclusion was partially supported by the results of impulse response comparison. The comparison shown that introduction of habit formation had rather limited effect on propagation mechanism of the disturbances in the model of staggered price and wage contracts. The differences were only observed in the response of output which seems to be more sluggish and hump-shaped in the model with habit formation than in the model without habit formation. This arose from the fact that in case of habit formation households were interested in more spread responses to changes in real income, since they were aware that if they consume more today, they should consume even more in the future, in order to remain at the same level of utility.

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## EUROPEAN ASSOCIATION AGREEMENTS AND SOME ASPECTS OF GEORGIA ECONOMICS

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### Abstract

Association agreement between the EU and Georgia, unlike the prior similar agreements, takes into account very important mechanisms of real convergence with European Union, European legislation and standards. Association Agreement with the European Union does not imply affiliation, (ex. Turkey an association agreement was signed in 1960, but the country is still not an EU member). However, an Association Agreement with the EU legislation implies such a high level of convergence that the effective implementation of the Europeanization process is irreversible. In addition, the Association Agreement with the European Union is the real mechanism of political association and gradual economic integration. However, it should be understood that the agreement is contributing to a lot of things, many of which gives rise to liability. For the proper execution of agreement relevant levers like many aspects of Georgian economy, trade policy and legislation, which we will discuss in this paper, are required.

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**Keywords:** Association Agreement, Free Trade, Civil Society, Readiness, Engagement

### Introduction

Georgia is a partner country within European Neighborhood Policy (ENP).

EU-Georgia relations date back to 1992, shortly after Georgia declared its sovereignty following the break-up of the Soviet Union. Bilateral relations have further intensified since 2003, as consecutive governments have undertaken ambitious programmes of political and economic reforms.

On the June 27, 2014, the EU and Georgia signed an unprecedented **Association Agreement** which includes a Deep and Comprehensive Free Trade Area (AA/DCFTA). The Agreement significantly deepens political and economic ties with the EU under the Eastern Partnership. It follows the Partnership and Cooperation Agreement, the previous basis for EU-Georgia bilateral relations since 1999. An EU-Georgia Association Agenda was also agreed in June to help implement the AA/DCFTA through joint priorities for 2014-2016. It replaces the EU-Georgia ENP Action Plan of 2006.

The Deep and Comprehensive Free Trade Area is expected to bring many economic benefits to **Georgia** by giving firms access to the EU's single market – the world's largest. This will create business opportunities, bring better goods and services, and boost competitiveness. The EU will work with the Georgian Government and businesses to achieve reform, and help upgrade goods and industries to the necessary standards.

Georgia's main economic activities include the cultivation of agricultural products such as grapes, citrus fruits, and hazelnuts; mining of manganese, copper, and gold; and

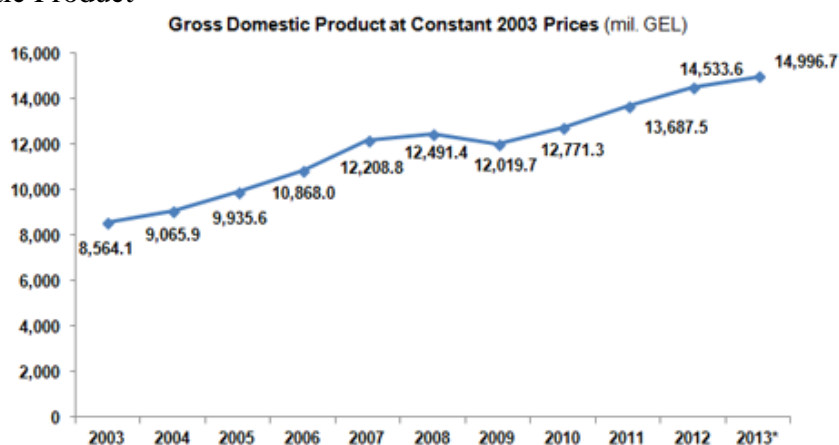
output of a small industrial sector producing alcoholic and nonalcoholic beverages, metals, machinery, and chemicals. Located on the shortest route between Europe and Asia, Georgia's transport system is a key link in the historic "Silk Road." The Government's commitment to rehabilitating main, secondary and local road networks has intensified in response to the global economic down-turn, as road rehabilitation will improve access to markets and services, and create short-term employment through civil works. Construction of the Baku-Tbilisi-Ceyhan oil pipeline, the Baku-Tbilisi-Erzurum gas pipeline, and the Kars-Akhalkalaki Railroad are part of a strategy to capitalize on Georgia's strategic location between Europe and Asia and develop its role as a transit point for gas, oil, and other goods.

Georgia's economy sustained GDP growth of more than 10% in 2006-07, based on strong inflows of foreign investment and robust government spending. However, GDP growth slowed following the August 2008 conflict with Russia, and sunk to negative 4 percent in 2009 as foreign direct investment and workers' remittances declined in the wake of the global financial crisis.

Macroeconomic and financial developments of Georgia's economy demonstrated a remarkable recovery after the 2008-09 dual shock, recording a 6.5% annual average growth in 2010-12. As a result, GDP growth slowed down to 6.1% in 2012 from 7.2% a year earlier.

The main growth driver in 2012 remained buoyant investment activity driven by large-scale infrastructure projects financed by the state and through borrowings from IFIs.

#### Gross Domestic Product



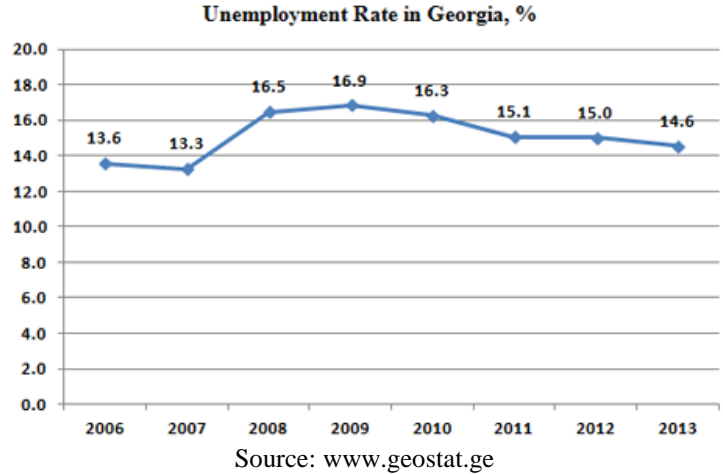
\* Adjusted data will be published on November 17, 2014.

Source: [www.geostat.ge](http://www.geostat.ge)

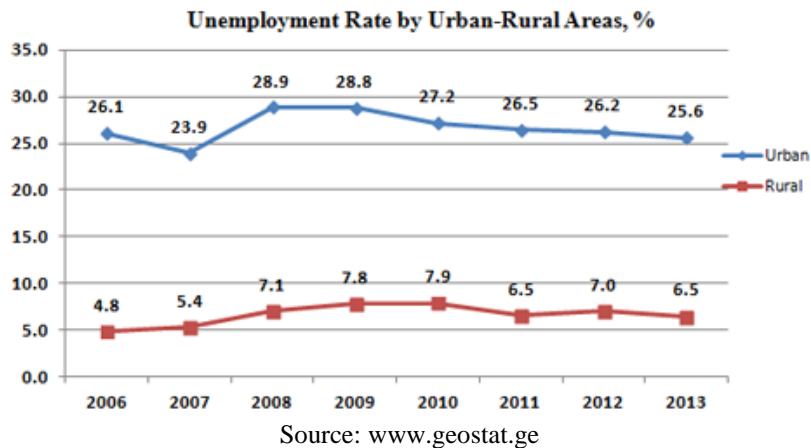
The World Bank expects Georgia to have 6.3 percent economic growth in 2014. The estimate was published in the Bank's Global Economic Prospects 2014, which reads that the prognosis for economic growth in Georgia in 2014 is 6.3 percent. The expectation for 2015 is also 6.3 percent and 6.5 percent for 2016. Georgia achieved robust economic growth between 2003-2012, averaging 6.1 percent annually following structural reforms that stimulated capital inflows and investment. The reforms helped improve the business environment, strengthened public finances, upgraded infrastructure facilities and liberalized trade. Growth was also supported by increased foreign direct investments (FDI) and was driven by capital accumulation and sound use of excess capacity rather than by net job creation, with productivity gains concentrated mainly in the non-tradable sectors.

Unemployment remains the most significant public policy challenge in Georgia. The capital-intensive nature of Georgia's robust growth performance was reflected in relatively high unemployment, which remained in the 12-13 percent range even during the pre-crisis boom. Although economic situation in Georgia is undergoing a certain revival, the labour market situation still remains largely unfavorable and unstable. Unemployment peaked

during the crisis to 16,3 percent in 2010 and then fell to 14,6 percent in 2013. According to the research methodology of the National Statistics of Georgia, this 16.3% represents: “persons at the age of 15 or above, who were not employed (even for one hour) 7 days prior to the interview process, were looking for a job for the last 4 weeks time and were ready to start working within the next 2 weeks time” (www.geostat.ge).



Furthermore, according to the survey conducted by National Democratic Institute (NDI), out of 16,161 questioned, 67% of the respondents consider themselves unemployed (www.ndi.org). Of course, this number includes non-active labor force and persons not looking for a job. This issue is discussed later in the paper.



With economic transformation in Georgia, some of the older sectors and industries died, shedding their labor force. New industries grew during the same period but have not been able to absorb the workforce as effectively and overall labor demand remains weak while skills mismatches persist. The majority of the work force – more than 55 percent – is employed in agriculture (mostly self-employed), which contributes to only 8.2 percent of GDP and is characterized by family-based subsistence farming.

When talking about unemployment, another point that economists find worthy of attention is the education level of the unemployed workers. According to the Human Development Report (2010), Georgia is among the leaders with the unemployed workforce who have secondary or higher education levels. 81% of unemployed have secondary or higher education. This means that the educated workforce is idle and cannot contribute to the country’s economy. At the same time, according to the World Competitiveness Report (2011-2012), it is inadequately educated workforce that represents a major constraint to doing business in the country (www.weforum.org).

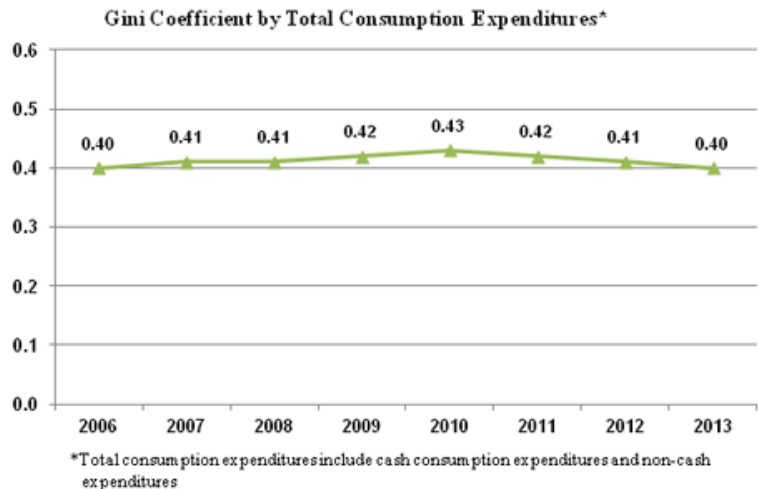
This particularly concerns the former Soviet Republics where the values have been revised and the Soviet-educated workforce ended up with the “wrong” kind of skills. Inadequately, educated workforce does not only concern older generations; even though educational reforms are under way, the system is still inefficient in preparing future leaders with the skills that meet current market needs. On the graph that depicts the age groups of the unemployed, we see that the latter statement holds true, since the largest share of unemployed are representatives of the younger generation - aged 20-35.



After the collapse of the Soviet Union, as well as under the forces of globalization we are faced with the lack of skills or language barriers among the workers. This brings us to the problem of age discrimination on the Georgian Labor market, since Soviet-educated work force lacks the skills or language requirements demanded by the companies. Quite often we are faced with the job advertisements that convey a discriminatory message asking for a specific gender or age for an eligible applicant. In western countries this type of discrimination is regulated by strict laws that are not in place in Georgia.

Another unemployment type that we believe is of interest in Georgian reality is cyclical unemployment. This type of unemployment is a short term one and occurs during economic recessions, when economic output falls and when business cycles are affected by low demand on the market.

Gini Coefficient is the most popular indices of living conditions which measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution.



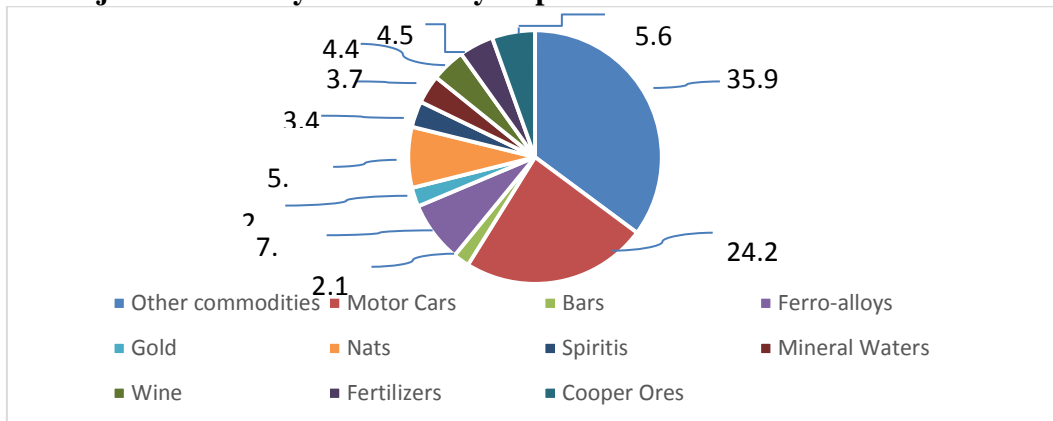
These indices and Coefficients of EU member countries are essentially different. For example, Gini Coefficient for Belgium is 33.0% (0, 33), 26 0% (0, 26) for Czech Republic and 28, 3 (0, 28) for Germany.

ON the way of its independence, the most important moment for Georgia economy was its enrolment in the World Trade organization. These processes took place so rapidly that the government has not even made a deep, thorough analysis of the existing opportunities and consequences of the step. However in 1998-2001 the multilateral meetings, negotiations and extensive discussions were held on joining of the WTO. Among the many problematic issues, there were also issues like Georgian status, tariff rates, intellectual property rights, the role of subsidies and foreign aid.

No matter how paradoxical it may seem, in 200 Georgia joined the WTO as a developed country only due to agricultural production. Otherwise, he would have had the status of the transition period, which would only be a factor of obstacle to the integration process. This is the first mistake that was made by the authority. He does not even take into account that the developed countries are significantly different from the requirements of developing and low developed countries. They should be more open space partners. Discriminatory factors, in goods and service trade in this case enjoy a higher level. Wouldn't this step follow economic dependence instead of independence? These issues were left open at this time. But if we look into the issue, liberal trade policy, in accordance with the national supporting regime, implies horizontal, vertical and specific commitments. The latter is connected to the national supporting regime, as well as market access. According to B. Hoekman's methodology, the absolute level of Georgian specific obligations is 315, which is quite high not only in low and middle-income countries, but also compared to developed countries such as Bulgaria-308, Slovakia-306, the Czech Republic-304; that means that commitments connected to Georgia service are quite liberal.

Despite the huge army of supporters to join the WTO, in the first few years of WTO accession it was clear that positive changes have not taken place in the trade of Georgia. According to the statistics if in 2000, the trade balance was 359 thousand USD, in 2002 it was 384,4 thousand USD and in 2003-it reached 613.7 thousand USD.<sup>26</sup> Export import coverage ratio in this period of time was 42%. Nowadays, real picture is not of a reliable value. The balance is still negative and equals 4065 thousand dollars. It is not good that in 2013 Georgian export structure cars held the largest export commodity positions- 24%. (Figure 1.)

**Share of major commodity Positions by Export <sup>27</sup>**  
**Share of major Commodity Positions by Export in 2013%**



<sup>26</sup> Georgian Economic Trends 2000. #1; p.105.

<sup>27</sup> Geostat.ge; 2013; External Trade Of Georgia; p.16.

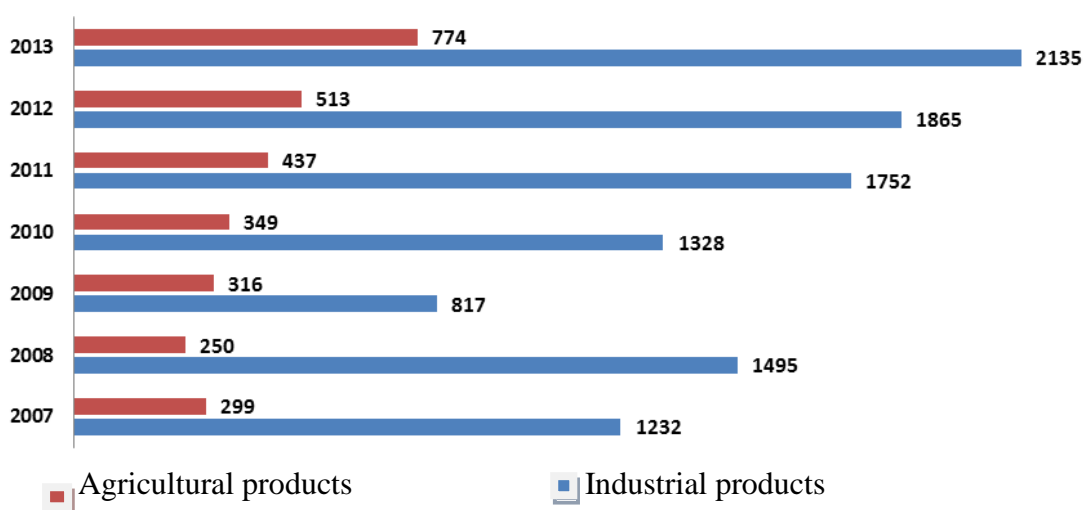
The picture does not really reflect the growth of the real sector of Georgian economy. Damping prices have a significant impact on the results of this study which were regulated improperly from the very beginning. By 2001, the government of Georgia announced that antidumping, countervailing duty and security measures would be used prior to full compliance with the WTO provisions. More general security measures were regarded as the main tools against “unfair competition”. They do not need more sophisticated legislative base and were easy to use. In this connection, many developing countries used only security measures to protect local manufacturers. This is a kind of mistake that is very hard for the fledgling.

Implementation of subsidies in agriculture, which were distributed to farmers for tea and grape, were regarded as another mistake. These subsidies belonged to “de minimize” category. In case of developed countries, aid does not exceed the amount of 5 percent. (It is worth paying attention that as we mentioned above, Georgia joined WTO as a developed country). Under general conditions the agreement provides a broader aid. In this case it is also clear that the interest of WTO should be taken into account and its rules and regulations should be followed. Here arises the question: where are the interests of Georgia? Where is dual interest seen? “De minimize” is not enough volume to be necessary for the rehabilitation of agriculture of Georgia in that period of time.

A confirmation of the abovementioned is the structure of dynamics of exports in 2007-2013 (Figure 2) which shows that the growth of agricultural products even nowadays carries on in a low speed.

#### Export dynamics in the structural context. 2007-2013 (million USD).

Figure 2<sup>28</sup>



In 2013 export of agricultural products was 774.2 million USD. The figure is increased by 261.7 USD 2012 compared with 2012. It is worth noting that the decline in export is marked on such products as wheat, fruit and vegetable juices; live sheep and lamb meat; export taxes are also hindering the growth rates in agriculture.

Why were these mistakes made? What was the main reason? If these questions remain open and error cases are not addressed, the next steps will be more severe for economical life of the country.

<sup>28</sup> Ministry of Economy And Sustainably Development of Georgia; External Trade of Georgia; 2013 p.10



From our observation it is clear that the first and the main reason is the economic and legal aspects of non complexity. They are not considered as a whole and their harmonization cannot occur, which is vital for the proper management and successful outcomes.

If aspects of political, economic and legal harmonization do not occur inside the country, the convergence of European standards cannot be implemented. For economic and business development of the country just “one shop” principle is not enough. We should not deceive ourselves, and we should not forget that it is the only condition for the quick start of the business.

EU Association Agreement means in terms of the deadline, according to the concrete commitments, Georgian legislation to be in content with EU legislation, and most importantly, to implement and establish European instruments ‘standard’. The legislation takes into account to make Georgian legislation closer to 300 EU legal acts. Thus, the whole set of normative (rules, instructions etc.) and sub-normative acts gradually should be developed /or changed, which should set up the mechanism of law enforcement of European implementation, but, to what extent is the civil society ready for this change, when in fact the adoption of anti-discrimination law was followed by an anxiety of small but agitated people. Therefore, in the process of implementation of the agreement right awareness and involvement of civic society is of paramount importance. In this regard, the Association Agreement, economic corporation and taxation issues (Chapter V) are very important, where it is mentioned that “The European Union and Georgia will spur economic reform process through rising awareness about fundamental principles of their respective economies, formulation and implementation of economic policy.” Not a single verse of this record is random. In this case we can mark out the aims of raising awareness about the fundamental principles of economics, economic policy formulation implementation of economic policy. At the same time, the chapter of the Association Agreement practically emerges these obligations: “Georgia should aspire to establish gradually and converge its economic, tax and financial regulations to EU regulations and at the same time to ensure the correct tax policy.” It is no secret that more than a dozen years in the annual reports of the World Bank about Georgia the following statement is given: “in the country the level of business and tax culture still has remained low. Most part of payers is not aware of the rules and the nature of calculation”. Evaluation is real; it may have been more sever. Unfortunately, for decades the country has not been established the equal duty relationships between the taxpayer and the tax collector. In this chapter of the Association Agreement it is marked out that “the parties that collaborate in the tax are to strengthen good governance”. May be it is clear for everyone what is meant by collaboration - “In terms of good governance”. This is creation of such climate of tax policy and administration when the tax payer and the tax collector are equal, both, together with their rights, properly understand their duties. When the tax collector is not only punitive administrative body, but the supportive, serving body of a taxpayer, such standards of regulations of tax relationship is seen in Europe, a serious effort is required to achieve this level of standards.

The Article 280 of the Aassociation Agreement should be taken into account: “The parties acknowledge and undertake to carry out the principles of good governance in the tax area, such as transparency, exchange of information and fair tax competition. They facilitate the development of fair tax revenue administration, and take steps to ensure the effective implementation of the above mentioned principles.”

The Article 282 also states that “the parties will also strengthen and intensify their cooperation aimed at the development of tax administration system, including strengthening of tax collection and control capabilities, ensure efficient collection of taxes and become more active in the fight against tax fraud.” In this part main accent is made on performing particular actions against the fraud and smuggling of excise goods and on retaliatory actions.

This collaboration includes gradual convergence, growth of excise tariffs on tobacco products.

In addition, according to the Article 285, unilateral commitment is imposed on Georgia, which is established as an imperative norm saying that “it could converge national legislation, EU legislation and international legal instruments due to the same Appendix of XXII contract” which is an integral part of this contract. The appendix is a common and in some cases different tax regimes and regulations, general instruments, including a list of laws that must be implemented step by step, including value added (VAT) of the total system, which should be enforced in five years time.

Georgia takes the commitment gradually, in approximate terms to converge native legislation, EU legislation and international legal instruments in the following areas:

- . Tax exemption;
- . Operations within the European Community
- . Import and Export;
- . International transport Trade;
- . Total system of value-added tax (VAT), invoice generation, declaring, accounting rules.

In addition, special liabilities and schemes related to the import and export of goods are determined, for example, special scheme for electronic commerce, etc.

There are exceptions in the above listed appendix, which are still in force in some EU member states. It is worth emphasizing that practically all countries taking into account their national interests fix some reservation in connection with some kind of taxation regime or with special mechanisms of control.

Georgia will be no exception in this regard. For example, Georgia reserves the right to exempt spirits from excise tax which are produced by individuals in small quantities and are intended for home consumption and not for the market.

Also Georgia has the right to exempt goods and service delivery from VAT tax that comes into force on the basis of the Georgian tax code. But as for the question – “the exemption of goods from value added tax and excise tax, imported by the passengers from the third countries”, it used only the part of the directive, which imposes quantitative restrictions. It is noteworthy that these provisions should be performed in a different period from the effective date of this Agreement, not in five but in three years period of time, etc.

The next step is to form a Deep and Comprehensive Free Trade Area (DCFTA) and to sign appropriate contract between Georgia and EU.

In Association Agreement, DCFTA is a real actual mechanism of economic integration with EU. DCFTA gives opportunity to Georgia to receive three of four freedoms from EU internal market: goods, services and free move of capital.

In addition, the formation of a deep and comprehensive Free Trade Area opens the way to EU internal market for Georgian goods and service and contributes to the growth of the country’s investment and attractiveness. A deep and comprehensive trade area opposed to conventional free trade agreement includes both tariff and non tariff barriers to smooth and regulate a wide range of trade-related issues. For example, food safety, product safety, competition policy, intellectual property rights, customs issues, public procurement, etc. Unlike other trade agreements, DC FTA covers trade legislation and the creation/modification of institutions. There is no doubt that the establishment of free trade area will support formation of a trading system compatible with EU market; transparent, stable business environment, the investment attractiveness and therefore, the growth of foreign investments; creation of new enterprises and export products; at the same time creation of new working places in regard with the growth of the local industry; limit export expenditure for Georgian exporters; secure and safe delivery of the product for Georgian customers; development of public administration body (including tax) in accordance with the

best European practice; in general, formation of economic growth and the country's economic development; step by step convergence with the relevant EU regulation and administrative mechanisms (according to agreed schedule).

It is important that from the date entry into force of this agreement, the parties shall eliminate all customs duties on products originating in the other party, except certain cases. In this section it should be considered and well calculated what will be the amount of revenue loss for revenue part of Georgia budget and how it should be compensated. One thing is clear - the budget revenue, without customs tax got from import, will be reduced by about ¼. We think, we can fill it in the expense of gradual increase of excise on cigarettes/tobacco and spirits.

“No party is at liberty to impose or maintain prohibition customs or other tax”, except domestic fees, in accordance with agreement connected with the export of goods on the territory of the other party. However, according to the record, each party shall ensure that all types of payments and fees that are imposed on or associated with the production of export or import should not exceed the approximate costs of rendered services. The products listed in Appendix II-A of the agreement, are the subject of separate analysis.

They should be imported as duty-free within the framework of the tariff quota. Naturally, we have a question - what happens if the product exceeds the import tariff quota. The Appendix II-A of the agreement clearly explains the process and in case if the goods are delivered more than required by quota, there should be used the most favored/preferential rate of customs duty. At the same time, “neither party shall establish or maintain a prohibition or restriction on the import or export of other side, or exports for sale which is for other country.

“Contracting parties agree that their respective customs, tax and trade legislation should be stable and comprehensive. The provisions and procedures should also be proportionate, transparent, fair, predictable, non-discriminatory, equitable, efficient and uniformly enforced. Of course, it is obvious that parties lay out the obligations first of all to the Georgian side, as from the side of EU, standards of border integrity and liabilities, standardization of simplified documents, quick set-up of goods at the border, are much higher. For Georgia, due to geographical situation, transit theme is very important. In the agreement, the parties take responsibilities to facilitate the process of cooperation between the agencies and departments. As for transit, the EU countries will try to help and support Georgia to implement their progressive transit system and achieve mutual connection. It is important to agree on customs fees. In trade between the two sides, the determination of the customs value of goods will take place in accordance with the WTO agreement. Georgia takes responsibility to share the best practices related to customs operations, in particular, control system based on risk management and in the sphere of intellectual property protection, especially counterfeit goods, etc.

## **Conclusion**

As we can see, despite the integration of Georgia in the World Trade Organization, its export products are not still fully depended on donor countries' consumer market and the question of being a savior will remain a myth for good, if we do not realize policy properly and hastily make decisions. Of course, the West and the World have their reasons for fast and wide creation of economic and political blocs. This is primarily interest for the resources of the Caspian Sea and Central Asia. On the other hand, the World wants to reduce Russia's influence over the former Soviet Union. In this regard, the energy provider has a favorable geo-strategic location between energy supplier and the West. Effective realization of this goal is the implementation of trade and economic relations with the west would be acceptable to it, which of course reflects the type of agreement in a manner that does not endanger their own economic interests. But for Georgia it is important to be an equal partner of the West.

Further 3-5 years of the signing the association agreement will be important when we move to the stage of implementation. First of all, it will be important for Georgia to ensure the irreversibility of the European perspective. According to experts, by the Association Agreement /DCFTA - domestic product of the country will grow by 6.5%, while the amount of foreign direct investment of USD 2014.8 thousand (2007) will reach 11.36 billion (2020sec.). For example, in Poland after the Association Agreement, quantitative investment increased by 4.5 times. In addition, in 2012, according to the joint survey about DCFTA, results made by the company "Ecorys"- (the Netherlands) and the Case (Poland), increase of export from Georgia to EU is expected by 12% and import by 7.5%. According to an independent survey, it is expected that the long-term perspective of the gross domestic product may rise 4.2%, - 292 million Euro, etc.

But in every case, if the Association Agreement is soon followed by a deep and comprehensive Free Trade Agreement, its results will be properly implemented and preserved. Today, Georgia is in this content. The case is how properly and promptly we can use this opportunity.

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- [http://www.geostat.ge;\\_2013](http://www.geostat.ge;_2013)
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## STATISTICAL ANALYSIS OF FINANCIAL ACCOUNTS IN CASE OF NON-FINANCIAL CORPORATIONS

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### Abstract

In the present economic conditions it is more and more important for the macroeconomic analysts to use new processes based on theoretical and practical approaches which differ the present technics for analysis and to make forecasts. In this paper we deal with a new approach can be used to analyse the financial instruments of non-financial companies. Our research does not observe the income and consumption of the system of national accounts, but we focused on the financial accounts which are based on more reliable information. The purpose of our research was to analyse the financial accounts of non-financial corporations' sector data. In this paper we analysed the financial accounts of Hungary using statistical tools. We aimed to determine the potential regularities and regressions in the time series.

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### Keywords:

### Introduction

The 2008 financial crisis highlighted that the traditional methods, the current approaches have risks in case of macro-economic analysis because they are not able to predict and forecast the turning points in each cases. Stiglitz and his co-authors went further in their study (2009). They pointed out that new methods, new approaches, new indicator systems should be developed and applied for measuring and comparing national economies in the future. Our study follows this approach, because we use not only the system of national accounts but also their subsystem, the financial accounts to make a more detailed analysis of the internal processes and correlations.

In our research we were interested in which methods can be used to analyse the financial accounts that contain large amount of information and how can we build the new results into the process of the economic analysis. In our work we studied the dynamics of the integrated financial accounts, especially the analysis of internal processes, in order to make forecast on the future changes of the various financial instruments. Now we present only a part of this research, we present only the analysis of some financial instruments which are the major part of the assets of non-financial corporations.

### Statistical analysis of non-financial corporations' financial accounts

We use the following methods in the mathematical and statistical analysis of the financial accounts' time series in case of the non-financial corporation sector:

- Dynamic and trend analysis,
- Analysis of the relationship,
- Co-integration test,
- VAR model.

The first question in the analysis of the historical data is to decide whether the time series is stationary, does it contain a trend or seasonality. In some cases it is easy to

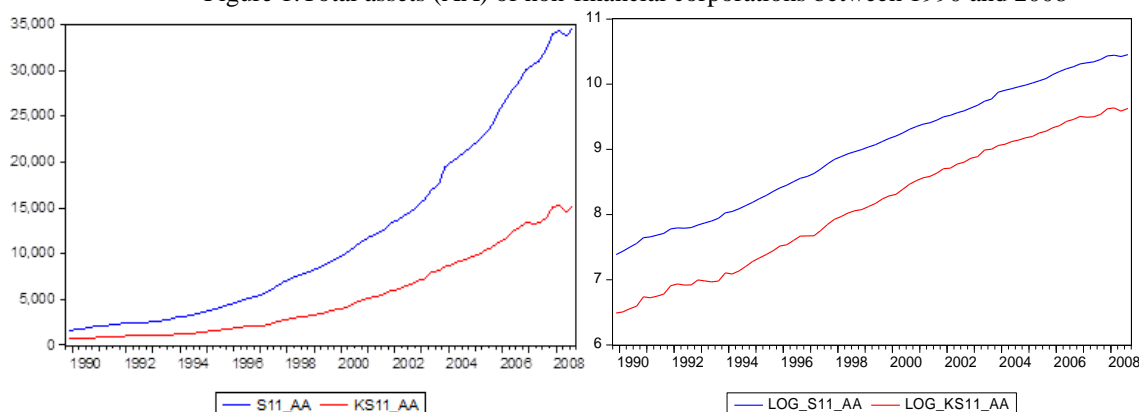
answering a diagram to represent our data. This analysis is particularly important when we fit the initial model. The aim is to find the theoretical model which describes the empirical time series with the best accuracy.

In case of the dynamic analysis we identified the common trends and their effects, and then we examined the systematic deviations from this trend because they may refer to some changes in the preference. In the next step we explored the relationships between the real and financial data as well as within the financial data. These relationships make possible to forecast the real variables on the basis of financial data, which was the primary purpose of our analysis. The relationships were tested by co-integration tests to eliminate the virtual relationships caused by the common trend (Stark 2012).

To classify the non-financial corporations into a separate sector is justified by the special features of these corporations and their role in the economy. It is easy to prove that their activities, the structure of the financial asset and liability, and the financial solutions basically differ from the other sectors.

The rest of the sectors have financial assets for different purposes. The composition of the assets of non-financial companies is very heterogeneous, cash, deposits and loans have the largest share. We can state that the structure of the non-financial corporations' assets in Hungary is different from the other countries' structure. At the end of 2011, in the European Union the equity (45.5%) had the highest rate, followed by loans (17.4%) and cash and deposits (13.1%)

Figure 1: Total assets (AA) of non-financial corporations between 1990 and 2008



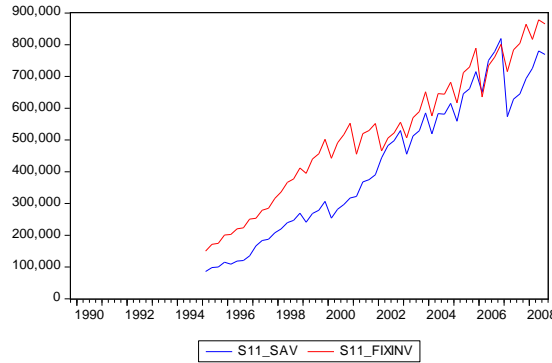
The asset of non-financial corporation sector is a steadily increasing time series. The stock data follow an exponential trend due to the effects of inflation which explain extremely well the changes in capital stock. Significant difference cannot be detected between the consolidated and unconsolidated financial time series. In the logarithmic form there is only one constant difference (Figure 1), which means that the growth rates of the two time series do not differ, the outstanding difference is due to the initial conditions. The co-integration tests show a real relationship with high reliability.

Based on the above there is no major empirically relationship between the consolidated and non-consolidated assets. The relative proportion of the two time series is constant, which provides a single average growth rate. If we explain the total assets by the sector's gross domestic output or by value added, we can discover a strong relationship at the level of the stocks. Due to the strong relationship between the output and value added none of them has a strong relationship with the assets. However, observing the differences the relationship is insignificant, even though the co-integration tests show a real relationship. Introducing various delays or forecasts does not solve this problem.

If we use the secondary accounts and the capital accounts we can explore real relationships. The gross savings show a strong relationship with the change of assets (Figure

2). This relationship does not exist in case of the original data, but it exists if we introduce a significant quarterly delay or quarterly expectations. The savings have some effect on the changes of assets typically through semi-annual, annual delays, while the investment effect on the changes of assets through the expectations and plans. If we suppose rational expectations we find a real relationship in the future data. Using these results together we find signed errors due to the extremely high multicollinearity.

Figure 2: Real economy savings (SAV) and investment (FIXINV) in case of non-financial companies between 1994 and 2008



In the aggregated data we can find the company's purpose that they save for a future investment while on the other hand it is easy to see that the real economic savings and borrowings do not appear immediately in the financial accounts. The financial accounts show a kind of smoothed value, the fluctuations of the real economy slowly appear in the changes. Thus, the information obtained using the financial accounts may be used to predict the future changes of investment.

The stocks of cash and deposits can be explained by the given percentage of total assets and it follows the same trend from statistical point of view. The time series follows a smooth, exponential trend.

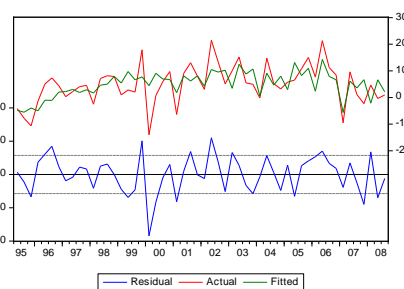
The time series are cointegrated by the total assets, i.e. there is a real relationship between them. However, the cash and deposits rate cannot be considered to be stable in the examination period. The significant trend indicates that their share within the total assets permanently decreases. Analysing this proportion the inflation shows a significant, but not very strong correlation, its sign is typically negative, i.e. in case of increasing inflation companies reduce their liquid reserves. Due to the strong relationship with the total assets it can be well explained by the gross domestic production level.

Examining the differences we can conclude that the cash and deposits have a stronger relationship with the changes of the production than the total assets in accordance with our theoretical expectations. The change of the output level directly affects the liquid assets, the relationship means direct and delayed effects, too. Inflation is also significant here (Figure 3). Omitting the inflation the relationship remains, but the delayed variables become insignificant. Overnight interest rates paid on deposits are in all cases insignificant.

Figure 3: Relationship between cash (A21) and inflation (INFL) in case of non-financial corporations

Dependent Variable: D(S11\_A21)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(S11_OUTPUT)	5.40E-06	1.46E-06	3.708577	0.0005
C	53.24159	21.61776	2.462864	0.0173
INFL	-0.899904	0.240059	-3.748671	0.0005
LOG(@TREND)	-10.33834	5.036931	-2.052508	0.0454
R-squared	0.429626	Mean dependent var		4.952315
Adjusted R-squared	0.395404	S.D. dependent var		7.364481
Prob(F-statistic)	0.000003			



The rate of cash within liquid assets is constant, but a slight negative trend can be observed. The trend of cash represents a change of practice, the enterprises progressively reduce the amount cash reserve over the changes of real economic variables, independently of them. In case of cash there also a strong relationship between the levels of production and cash. In case of differences we find real relationship, which is not smoothed by the effects of inflation.

If case of the differences the inflation is significant with negative sign, i.e. due to the high inflation companies reduce their cash much more than the external trend. However, observing the proportion of the cash within the liquid assets the inflation does not explain the changes of this rate.

In case of *the deposits* - as a complementary of liquid assets - we can draw similar conclusions. Its rate is constant, in case of decreasing cash it slightly increases. There is also a strong relationship with the real economy. Inflation does not have relationship with the deposit, but the interest rates of payable demand and fix deposits are also insignificant. It proves that for the companies the interest received is not as important as the liquid nature of the asset.

If we use the three sub-groups together in the same regression, we conclude that the cash and deposits are not substitutes, but rather complementary instruments. That is, the cash and deposits - although both are for turnover goals - are not competitive instruments to each other in the operation of companies. As a result of rising inflation cash does not become a deposit, but other kinds of more profitable forms. Our observation shows that the rate of corporate deposits is not relevant in the corporate sector aggregated on macro level.

The major part of the consolidated *loans* which is given by non-financial corporations is a credit for foreign partners. A significant part of loans to foreigners is not a real investment, but a form of disinvestment of the parent companies. This part cannot be explained by the variables of the national economy, so we could analyse only the remaining part. The internal loan can be approximated by an exponential trend and the proportion of total assets is assumed to be constant. The first-order differential does not have a relationship with the production variables, but the operating income and the savings are good explanatory variables. It can be assumed that internal loans of the sector are not operational, but their main purpose is savings. Changes of the loan show a strong relationship with the sector's planned investments.

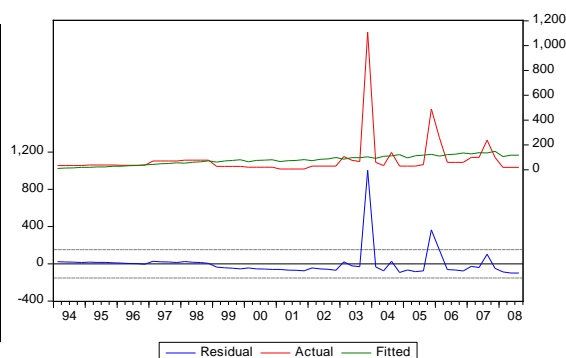
On the asset side the *shares* of non-financial companies can play multiple functions. First, this instrument is an equity, so the main part of this stock shows the relationship between the parent company and the subsidiary. The second function is a saving form. The first form is more important in the case of Hungarian data. The major part of the instrument is unquoted shares and not shares, while the external portfolio is almost entirely foreign shares. The time series can be approximated by exponential trend. We can detect only a weak relationship with the production levels, and the savings and investment activity are not significant (Figure 4). In the case of sub-groups the main changes are the transactions of shares. The investment and stock market transactions differ from these trends, showing two fundamentally different changes. There is no significant relationship with yield variables, even in case of quoted shares. We can detect a significant relationship only with the planned investment in the real economic variables, but its strength is significantly lower compared to the case of loan instrument.



Figure 4: Relationship between shares (A512, A51) and investment (FIXINV) in case of non-financial corporations

Dependent Variable: S11\_TRA512+S11\_TRA513-KS11\_TRA512-KS11\_TRA513

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-15.36624	54.39809	-0.282478	0.7786
S11_FIXINV(4)	0.000175	9.44E-05	1.855476	0.0687
R-squared	0.056960	Mean dependent var	78.66639	
Adjusted R-squared	0.040415	S.D. dependent var	155.0202	
Prob(F-statistic)	0.068701			



In order to examine the relationships in the *corporate assets* more precisely we build up a vector-autoregressive (VAR) model using the main instrument groups. The main objective of this analysis is not the interpretation of coefficients and significance levels, but the detailed examination of the conjugate impulse response functions describing the long-term relationships.

### Application possibilities

The model can be expanded by the analysis of the liability of this sector, and the analysis of the further financial sector's total assets. In these cases it is needed to determine the relationships between the financial and real economic time series data, and to detect the time-series dynamics and finally to develop the vector auto-regressive model. It means that the sector analysis of the assets and liabilities, the simulation of the VAR model allows us to build a complex structured model which may be an appropriate tool to estimate the future changes of the macroeconomic processes. VAR models can be applied in such cases when there is a strong relationship between the variables so using these relationships we can improve the forecast accuracy. Using appropriate assumptions for cross-correlation the VAR models may be able to create *impulse response functions* and we may be able to quantify the direct impact of the macro economic scenarios.

It is important to emphasize that one change in one financial asset causes multiple changes in the model due to the double-entry bookkeeping of economic transactions, since this change has an effect to the asset and liabilities within the sector, and a further effect between the sectors as well due to the relationships between the sectors.

### Conclusion

In summary, analysing the financial accounts using statistical tools can be integrated to the process of economic analysis. The financial accounts statistics is suitable to gain information on the economic players and processes. It would be useful to compare the results with using financial data of other European Union member countries or any other countries. It is the next step in our research work.

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## CORPORATE NATIONALITY IN INTERNATIONAL INVESTMENT LAW

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### Abstract

International investments are common feature of globalized economy. Such investments need protection against arbitrary and discriminatory measures by the host state. International investment law, through a web of international bilateral and multilateral treaties, provides such protection. These treaties offer extremely generous guarantees to foreign investors. Each international investment treaty has its own scope of application. Many of them protect investments made by companies, incorporated under the laws of another Contracting State. The formal criterion of incorporation allows nationals of the host state or nationals of third states, not parties to the relevant treaty, benefiting from investment treaty protection, by incorporating companies in a Contracting State.

In this article, author presents a short overview of arbitration practice, interpreting the corporate nationality requirement. The author argues that international investment treaties, determining corporate nationality by means of incorporation, must be applied literally, without requiring any additional links between the corporate entity in question and the place of incorporation.

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**Keywords:** Investment law, interpretation of international treaties, corporate nationality

### Introduction

Protection of foreign investors is an important task of international law. Historically, certain level of protection was achieved through the means of diplomatic protection. The idea behind diplomatic protection is that “an injury to a state’s national is an injury to the state itself, for which it may claim reparation from any responsible state.”<sup>29</sup> From this premise follows its main weakness – a foreign investor “has no right to diplomatic protection.”<sup>30</sup> The state of his nationality has discretionary power to decide whether to take up the case.<sup>31</sup> Once it takes up the case, it has the right to claim reparation for damage caused to its national by another state.

In last two decades, situation has changed. States have ratified numerous bilateral and multilateral investment protection treaties. These treaties contain generous guarantees protecting foreign investors. A violation of the treaty by the host state, for instance, impairment of the investment by means of expropriation, or arbitrary and discriminatory measures, gives rise to the investor’s claim. However, most importantly, they allow foreign

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<sup>29</sup> Newcombe, A., Paradell, L. *Law and Practice of Investment Treaties: Standards of Treatment*. New York: Kluwer Law International, 2009, p. 5.

<sup>30</sup> Muchlinski P., Ortino F. and Schreuer C. eds. *The Oxford Handbook of International Investment Law*. New York: Oxford University Press, 2008, p. 991. See also, Shaw M. *International Law*. 5th Edition. Cambridge: University Press, 2003, p. 723.

<sup>31</sup> Muchlinski P., Ortino F. and Schreuer C., eds. *The Oxford Handbook of International Investment Law*. New York: Oxford University Press, 2008, p. 991.

investors to bring direct claims against Contracting States. These claims are brought before investment arbitration tribunals.

A Contracting State violating an investment treaty may face serious consequences. It is enough to mention three recent arbitration awards, obliging Russian Federation to pay shareholders of Yukos Oil Company compensation worth US \$50 billion.<sup>32</sup> This sum Russian Federation must pay for violations of the Energy Charter Treaty,<sup>33</sup> a multilateral treaty protecting foreign investments in the energy sector of a Contracting State.

In order to bring such a claim against a Contract State, a claimant must be a national of a Contracting State, other than the host state. Since a corporate entity may act as an investor, the question comes up how to determine corporate nationality. In Yukos cases, the tribunals faced with deciding, whether claimants qualify as foreign investors. Article 1(7)(a)(ii) of the Energy Charter Treaty provides that “investor” means: “a company or other organization organized in accordance with the law applicable in that Contracting Party”. Claimants were companies incorporated in the Isle of Man and Cyprus, while their beneficial owners were Russian nationals. This posed the question, whether such companies may enjoys protection under an international investment treaty, if their owners are nationals of the respondent state.

This problem has another variation. A national from a third state could attempt benefiting from the Energy Charter Treaty. For example, Brazil is not party to the treaty. Thus, normally, a Brazilian investor would lack protection provided therein. Nevertheless, he could incorporate a company in a Contracting State. Both Latvia and Georgia are parties to the Energy Charter Treaty; hence, a Brazilian national could incorporate a company in Latvia and use it to make an investment in Georgia, in order to benefit from guarantees under the Energy Charter Treaty.

Similar patterns may arise under numerous other bilateral and multilateral investment treaties, determining corporate nationality by reference to incorporation. For example, Article 1 of the investment treaty between Georgia and Latvia provides that any corporate entity registered in one of these states will benefit from the treaty in respect of its investments made in another state.<sup>34</sup> Similar definitions are included in numerous international investment treaties, thus drastically enlarging their personal scope of application.

The author of this article will provide a short overview of different approaches to corporate nationality in practice of investment arbitration tribunals. First four parts of the article describe four different approaches to determination of corporate nationality. The first one deals with the literal approach, the second – multi-prong test approach, the third – with piercing the corporate veil approach, the fourth – with origin of capital approach. The fifth part of the article is devoted to their critical analysis.

### **Literal Approach**

Problems with corporate nationality arise under investment treaties, defining investor as a corporate entity incorporated in a particular jurisdiction. In many states, incorporation is

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<sup>32</sup> See, *Hulley Enterprises Ltd v Russian Federation*, Final Award, PCA Case No AA 226, 18 July 2014, available at [http://www.pca-cpa.org/showfile.asp?fil\\_id=2722](http://www.pca-cpa.org/showfile.asp?fil_id=2722) [30.08.2014]; *Yukos Universal Ltd v Russian Federation*, Final Award, PCA Case No AA 227, 18 July 2014, available at [http://www.pca-cpa.org/showfile.asp?fil\\_id=2723](http://www.pca-cpa.org/showfile.asp?fil_id=2723) [30.08.2014]; *Veteran Petroleum Ltd v Russian Federation*, Final Award, PCA Case No AA 228, 18 July 2014, available at [http://www.pca-cpa.org/showfile.asp?fil\\_id=2724](http://www.pca-cpa.org/showfile.asp?fil_id=2724) [30.08.2014].

<sup>33</sup> Energy Charter Treaty. Entered into force on 16 April 1998, available at [http://www.encharter.org/fileadmin/user\\_upload/document/EN.pdf](http://www.encharter.org/fileadmin/user_upload/document/EN.pdf) [30.08.2014].

<sup>34</sup> Agreement between the Government of Georgia and the Government of the Republic of Latvia for the Promotion and Reciprocal Protection of Investments, entered into force on 5 March 2006, available at <http://investmentpolicyhub.unctad.org/Download/TreatyFile/1322> [30.08.2014].

a fast and simple procedure. As a result, incorporation neither establishes, nor proves a genuine economic link between the incorporated entity and the place of incorporation. A company incorporated in a particular jurisdiction may turn out to have foreign beneficial owners and lack any real economic interests therein. Fiscal considerations, considerations of corporate law or even considerations of international investment law regime may determine the place of incorporation.

An investment treaty determines the circle of persons whose rights it protects. If this circle in respect of corporate entities is determined by the sole criterion of incorporation, a tribunal, hearing the case of an investor against a Contracting State, must decide, whether to apply treaty language literally or seek limiting the circle of corporate entities protected by the treaty.

The tribunals in Yukos cases supported the literal approach.<sup>35</sup> As it was said before, the Energy Charter Treaty establishes corporate nationality through incorporation. The claimants in a case against Russian Federation were companies incorporated in Contracting States, holding shares in Yukos Oil Company. Beneficial owners of these companies were Russian nationals. Russian Federation argued that „[c]laimant[s] [do] not qualify for protection under the ECT since [they are] shell compan[ies] beneficially owned and controlled by Russian nationals and, as such, by nationals of the host State.”<sup>36</sup> The tribunals declined this line of reasoning, finding “no general principles of international law that would require investigating how a company or another organization operates when the applicable treaty simply requires it to be organized in accordance with the laws of a Contracting Party.”<sup>37</sup>

Literal approach is also shared by other tribunals.<sup>38</sup> The approach has the advantage of respecting the treaty language, while establishing transparent method for determining corporate nationality. Usually such approach favors investors,<sup>39</sup> since every company

<sup>35</sup> *Hulley Enterprises Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 226, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0411.pdf> [30.08.2014]; *Yukos Universal Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 227, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0910.pdf> [30.08.2014]; *Veteran Petroleum Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 228, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0891.pdf> [30.08.2014].

<sup>36</sup> *Hulley Enterprises Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 226, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0411.pdf> [30.08.2014], p. 149, para. 407; *Yukos Universal Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 227, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0910.pdf> [30.08.2014], p. 149, para. 407; *Veteran Petroleum Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 228, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0891.pdf> [30.08.2014], p. 149, para. 407.

<sup>37</sup> *Hulley Enterprises Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 226, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0411.pdf> [30.08.2014], p. 152, para. 415; *Yukos Universal Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 227, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0910.pdf> [30.08.2014], p. 152, para. 415; *Veteran Petroleum Ltd v Russian Federation*, Interim Award on Jurisdiction and Admissibility, PCA Case No AA 228, 30 November 2009, available at <http://www.italaw.com/sites/default/files/case-documents/ita0891.pdf> [30.08.2014], p. 152, para. 415.

<sup>38</sup> See, for instance, *Rompetrol Group NV v Romania*, Decision on Respondent’s Preliminary Objections on Jurisdiction and Admissibility, ICSID Case No ARB/06/3, 18 April 2008, available at <http://www.italaw.com/sites/default/files/case-documents/ita0717.pdf> [30.08.2014], pp. 23-37.

<sup>39</sup> In atypical cases, the non-literal approach may favor investors. The *Sedelmayer* case is a good illustration. Mr. Sedelmayer, being a German national, attempted to benefit from the investment treaty between Germany and the Soviet Union. The investment was made through a company incorporated in the US. The tribunal,

satisfying the formal requirement of incorporation in a Contract State, other than the host state, may benefit from the treaty in question.

### Multi-prong Test Approach

Some tribunals have considered that incorporation is subject to abuse by investors, creating companies with the purpose of benefiting from treaty protection. In order to restore justice, these tribunals have listed different criteria, qualifying otherwise vulnerable investor definitions. Failure to satisfy these criteria prevents an investor from bringing a claim under the relevant investment treaty.

In a case that arose under the Dominican Republic - Central America Free Trade Agreement,<sup>40</sup> one tribunal established a multi-prong test, with ambition to limit abusive use of incorporation.<sup>41</sup> Here, a company owning the investment changed its nationality by means of corporate restructuring. The tribunal commenced its reasoning by setting out the first prong of the test, relevant for triggering further analysis of the abusive behavior. For the tribunal, the first prong was satisfied, if gaining access to the investment treaty protection was the dominant motive behind the corporate restructuring.<sup>42</sup> Once the first prong was satisfied, the tribunal went on to analyze the second prong - the time of corporate restructuring in relation to the alleged violation.<sup>43</sup> The tribunal agreed, stating that “if a corporate restructuring affecting a claimant’s nationality was made in good faith before the occurrence of any event or measure giving rise to a later dispute, that restructuring should not be considered as an abuse of process.”<sup>44</sup>

Variations of this legal test exist. Thus, in the Tidewater case, the tribunal presented a somewhat different combination of similar criteria. In accordance with the tribunal, a change of corporate nationality was considered abusive, if the dispute arising from the treaty was foreseeable at the time of corporate restructuring and the latter was done with the motive to benefit from the investment treaty protection.<sup>45</sup> As to the second criterion, the tribunal found that it was enough that the motive of benefiting from the investment treaty protection was just one among others.<sup>46</sup>

This last prong of the legal test seems particularly redundant. Nowadays, most of large businesses would consider advantages from investment treaty protection, before making any changes in their business structure. Particularly, once their investment is endangered by the host state. Thus, in most, if not in all cases, securing investment treaty protection will be among the motives behind the corporate restructuring.

however, ignored this fact, considering that Mr. Sedelmayer must “be regarded as an investor under the Treaty, even with respect to investments formally made by [his company].”<sup>39</sup> See, *Sedelmayer v Russian Federation*, Award, Ad hoc arbitration rules, 07 July 1998, available at <http://www.italaw.com/sites/default/files/case-documents/ita0757.pdf> [30.08.2014], p. 59.

<sup>40</sup> Dominican Republic - Central America Free Trade Agreement, entered into on force 2006, available at <http://www.ustr.gov/trade-agreements/free-trade-agreements/cafta-dr-dominican-republic-central-america-fta/final-text> [30.08.2014].

<sup>41</sup> *Pac Rim Cayman LLC v El Salvador*, Decision on the Respondent’s Jurisdictional Objections, ICSID Case No ARB/09/12, 1 June 2012, available at <http://www.italaw.com/sites/default/files/case-documents/ita0935.pdf> [30.08.2014], paras. 2.41-2.111.

<sup>42</sup> *Ibid.*, para. 2.41.

<sup>43</sup> *Ibid.* para. 2.45.

<sup>44</sup> *Ibid.* para. 2.47.

<sup>45</sup> *Tidewater Inc, Tidewater Investment SRL, Tidewater Caribe, CA, Twenty Grand Offshore, LLC, Point Marine, LLC, Twenty Grand Marine Service, LLC, Jackson Marine, LLC, Zapata Gulf Marine Operators, LLC v The Bolivarian Republic of Venezuela*, Decision on Jurisdiction, ICSID Case No ARB/10/5, 8 February 2013, available at <http://www.italaw.com/sites/default/files/case-documents/italaw1277.pdf> [30.08.2014], pp. 59-63, paras. 183-198.

<sup>46</sup> *Ibid.*, p. 59, paras. 183-184.

### **Piercing the Corporate Veil Approach**

As a rule, under domestic legal systems corporate entities have their own legal personality. Thanks to this principle, shareholders are not personally liable for corporate debts. However, in some legal systems, courts may pierce the corporate veil and subject shareholders to personal liability. In short, under some exceptional circumstances, a corporate personality may be overpassed.

In international law, piercing the corporate veil is most closely associated with the Barcelona Traction judgment by the International Court of Justice, dealing with international customary law on diplomatic protection. The Court indicated that the corporate personality might be disregarded “to prevent the misuse of the privileges of legal personality, as in certain cases of fraud or malfeasance, to protect third persons such as a creditor or purchaser, or to prevent the evasion of legal requirements or of obligations.”<sup>47</sup> The Court did not pierce the corporate veil, only hinting at hypothetical powers to do so.

Following the same path, in investment cases, piercing the corporate veil is more often mentioned than actually applied. A good illustration is the Tokios Tokelès case.<sup>48</sup> Here, a dispute arose between a company incorporated in Lithuania and the Republic of Ukraine. The tribunal was faced to decide, whether a Lithuanian company, owned by Ukrainian nationals, qualified as an investor in a case against Ukraine. The bilateral investment treaty between Lithuania and Ukraine required incorporation as the only criterion for establishing nationality of an investor.<sup>49</sup> The tribunal applied treaty language literally, finding no reason to deny the claimant its rights under the said treaty.<sup>50</sup>

In addition to literal interpretation of the treaty, the tribunal considered, whether piercing the corporate veil, arguably, permissible in the context of diplomatic protection, was relevant for international investment law. The tribunal recognized the hypothetical relevance of piercing the corporate veil principle, but came to a conclusion that this approach was justified only towards investors abusing rights flowing from a legal personality.<sup>51</sup> Facts of the case gave no reason to believe that the investor used the corporate personality in order to hide its identity<sup>52</sup> or that the corporate entity was created manifestly for the purpose of gaining access to investment protection.<sup>53</sup> The corporate entity had been incorporated in Lithuania six years before the relevant bilateral investment treaty entered into force.<sup>54</sup> In the light of these findings, the tribunal concluded that “there [was] no evidence in the record that the Claimant [had] used its formal legal nationality for any improper purpose.”<sup>55</sup>

### **Origin of Capital Approach**

According to the fourth approach, origin of capital is crucial to determine corporate nationality. With the greatest force, this opinion was expressed in relation to the ICSID Convention.<sup>56</sup>

<sup>47</sup> Barcelona Traction, Light and Power Company, Limited, available at <http://www.icj-cij.org/docket/files/50/5387.pdf> [30.08.2014], p. 39, para. 56

<sup>48</sup> Tokios Tokelès v Ukraine, Decision on Jurisdiction, ICSID Case No ARB/02/18, 29 April 2004, available at [http://italaw.com/documents/Tokios-Jurisdiction\\_000.pdf](http://italaw.com/documents/Tokios-Jurisdiction_000.pdf) [30.08.2014].

<sup>49</sup> Ibid., p.7, para. 18 and p. 13, para. 30.

<sup>50</sup> Ibid., p. 13, para. 30.

<sup>51</sup> Ibid., p. 23, para. 55.

<sup>52</sup> Ibid., p. 24, para. 56.

<sup>53</sup> Ibid., p. 24, para. 56.

<sup>54</sup> Ibid.

<sup>55</sup> Ibid.

<sup>56</sup> Schreuer C. H., Malintoppi L. et al. The ICSID Convention: A Commentary. New York: Cambridge University Press, 2010, pp. 136-137.

The ICSID Convention is multilateral convention with a truly global reach.<sup>57</sup> Unlike investment treaties, this instrument does not provide substantive guarantees to investors, instead it provides a supranational dispute settlement mechanism for international investment disputes. An investor may benefit from this dispute settlement mechanism, only if falling within the personal scope of the Convention. In regards to corporate entities, Article 25(2)(b) of the ICSID defines “National of another Contracting State” as:

“any juridical person which had the nationality of a Contracting State other than the State party to the dispute on the date on which the parties consented to submit such dispute to conciliation or arbitration [...]”

Interpretation of this provision was given in the above mentioned Tokios Tokelès case, where the tribunal, relying on literal interpretation, concluded that the Lithuanian company, owned by Ukrainian nationals, was a foreign investor in context of Article 25(2)(b) of the ICSID Convention. However, Prof. Weil in his dissenting opinion took an opposite stance.<sup>58</sup> The preamble of the ICSID Convention refers to “the role of private international investment”.<sup>59</sup> This, according to Prof. Weil, meant that “[t]he ICSID mechanism and remedy are not meant for investments made in a State by its own citizens with domestic capital through the channel of a foreign entity, whether preexistent or created for that purpose.”<sup>60</sup> A company created in Lithuanian, owned by Ukrainian nationals and using their capital, did not qualify as a foreign national vis-à-vis Ukraine.

The argument as formulated by Prof. Weil in his dissenting opinion, has limited relevance. It does not apply to cases where the capital flows from a third country not party to a given treaty.<sup>61</sup> There is still an international economic exchange among states. Likewise, it makes no sense in respect of treaties that explicitly mention incorporation in a given jurisdiction as the sole criterion of corporate nationality. An unambiguous treaty language may hardly be ignored based on contextual hints. Hence, for cases like those of Yukos, the reasoning is inapplicable, because the Energy Charter Treaty expressly refers to incorporation as the sole criterion, determining investor’s nationality.

### Analysis of Different Approaches

Vienna Convention on Law of Treaties provides rules on treaty interpretation.<sup>62</sup> Article 31 of the convention contains the principle rule. Its first paragraph reads, “a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.” Interpreting this provision, the International Court of Justice has noted that it is necessary to give effect to treaty provisions “in their natural and ordinary meaning in the context in which they occur. If the relevant words in their natural and ordinary meaning make sense in their context that is an

<sup>57</sup> Convention on the Settlement of Investment Disputes Between States and Nationals of Other States, entered into force on 14 October 1966, available at [https://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/CRR\\_English-final.pdf](https://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/CRR_English-final.pdf) [30.08.2014]. Entered into force in Latvia on 7 September 1997. Entered into force in Georgia on 6 September 1992. In total 150 States have ratified this convention.

<sup>58</sup> Tokios Tokelès v Ukraine, Dissenting Opinion of Prof. Weil, ICSID Case No ARB/02/18, 29 April 2004, available at <http://www.italaw.com/sites/default/files/case-documents/ita0864.pdf> [30.08.2014].

<sup>59</sup> Ibid., p. 11, para. 19.

<sup>60</sup> Ibid.

<sup>61</sup> ADC Affiliate Ltd and ADC & ADMC Management Ltd v Hungary, Final award on jurisdiction, merits and damages, ICSID Case No ARB/03/16, 27 September 2006, available at <http://italaw.com/documents/ADCvHungaryAward.pdf> [30.08.2014], pp. 68-69, para. 360.

<sup>62</sup> Vienna Convention on the Law of Treaties, entered into force on 27 January 1980, available at <https://treaties.un.org/doc/Publication/UNTS/Volume%201155/volume-1155-I-18232-English.pdf> [30.08.2014]. Entered into force in Georgia on 8 June 1995. Entered into force in Latvia on 4 May 1993.



end of the matter.”<sup>63</sup> However, if “the words in their natural and ordinary meaning are ambiguous or lead to an unreasonable result, then, and then only, must the Court, by resort to other methods of interpretation, seek to ascertain what the parties really did mean when they used these words.”<sup>64</sup> Thus, it follows that reasonable and unambiguous provisions must be given effect in accordance with their ordinary meaning.

A tribunal faced with establishing corporate nationality, must look at the ordinary meaning of words used in a treaty. An investment treaty may determine corporate nationality based on different facts. For example, Article 1(2)(b) of treaty between Georgia and Iran, defines corporate investors as “legal entities which are established under the laws of that Contracting Party and have their seat together with their real economic activities in the territory of that Contracting Party.”<sup>65</sup> Here, a mere incorporation of corporate entity in a Contracting State will be insufficient to qualify as a foreign investor. A company must engage in economic activity in the particular jurisdiction.

Likewise, states may enlarge scope of their treaties beyond incorporation. For example, Article 1(c)(ii) of the treaty between Finland and the Slovak Republic defines corporate investor as “any legal person having its seat in the territory of either Contracting Party, or in a third country with a predominant interest of an investor of either Contracting Party.”<sup>66</sup> Such formulation protects even those investors that have incorporated their companies in third countries. This shows that states know how important it is to define the notion of investor and have preferred nuanced definitions when necessary.

This confirms that words used in treaties are crucial for determination of corporate nationality. When the treaty requires no more than incorporation of a corporate entity, no other criteria may be introduced.

The deviating practice, introducing piercing the corporate veil principle is erroneous. Firstly, there seems to be insufficient amount of state practice in order to consider such approach part of customary international law.<sup>67</sup> Tribunals themselves seem to have difficulties in determining precise circumstances that would justify piercing the corporate veil, implying that the principle has no real basis in international law.<sup>68</sup>

<sup>63</sup> Competence of Assembly regarding admission to the United Nations, Advisory Opinion, available at <http://www.icj-cij.org/docket/files/9/1883.pdf> [30.08.2014], p. 8; Arbitral Award of 31 July 1989, Judgment, available at <http://www.icj-cij.org/docket/files/82/6863.pdf> [30.08.2014], p. 20, para. 48.

<sup>64</sup> Competence of Assembly regarding admission to the United Nations, Advisory Opinion, available at <http://www.icj-cij.org/docket/files/9/1883.pdf> [30.08.2014], p. 8; Arbitral Award of 31 July 1989, Judgment, available at <http://www.icj-cij.org/docket/files/82/6863.pdf> [30.08.2014], p. 20, para. 48.

<sup>65</sup> Agreement on Reciprocal Promotion and Protection of Investments between the Government of the Republic of Georgia and the Government of the Islamic Republic of Iran, entered into force on 22 June 2005, available at <http://investmentpolicyhub.unctad.org/Download/TreatyFile/1319> [30.08.2014].

<sup>66</sup> Agreement between the government of the Republic of Finland and the government of the Czech and Slovak Federal Republic for the promotion and protection of investment, entered into force on 23 October 1991, available at <http://investmentpolicyhub.unctad.org/Download/TreatyFile/1213> [30.08.2014].

<sup>67</sup> Brownlie I. *The Principles of Public International Law*, 7th ed. Oxford: Oxford University Press, 2008, pp. 482-483; *Barcelona Traction, Light and Power Company, Limited*, Separate Opinion of Judge Ammoun, available at <http://www.icj-cij.org/docket/files/50/5409.pdf> [30.08.2014], p. 295, para. 6.

<sup>68</sup> For the Tokios Tokelès tribunal, the use of the corporate entity to hide the identity of the investor or creation of corporate entity manifestly to gain excess to investment protection mechanisms could trigger piercing of corporate veil. *Tokios Tokelès v Ukraine*, Decision on Jurisdiction, ICSID Case No ARB/02/18, 29 April 2004, available at [http://italaw.com/documents/Tokios-Jurisdiction\\_000.pdf](http://italaw.com/documents/Tokios-Jurisdiction_000.pdf) [30.08.2014], p. 23, para. 55.

In another case, the tribunal considered that piercing the corporate veil “only applies to situations where the real beneficiary of the business misused corporate formalities in order to disguise its true identity and therefore to avoid liability.” *ADC Affiliate Ltd and ADC & ADMC Management Ltd v Hungary*, Final award on jurisdiction, merits and damages, ICSID Case No ARB/03/16, 27 September 2006, available at <http://italaw.com/documents/ADCvHungaryAward.pdf> [30.08.2014], p. 68, para. 358. Thus, here an avoidance of liability becomes a precondition for piercing the corporate veil. See,

Secondly, even assuming that the piercing the corporate veil is a well attested principle of international public law, two principles must be used, in order to solve contradictions between the customary rule and the treaty rule – *lex posterior derogat legi priori* and *lex specialis derogat legi generali*. According to the first principle, in case of a conflict between “two rules of the same subject-matter differ in their contents, [...] the rule originating later in time shall prevail.”<sup>69</sup> The International Court of Justice rendered the Barcelona Traction judgment in 1970. This implies that the piercing the corporate veil principle must have been part of international law some time before this moment, as the Court cannot create legal rules, but only apply those in existence. The majority of international investment treaties are much younger than this legal principle and would prevail over piercing the corporate veil principle. According to the second principle, “the more special rule prevails over the general rule.”<sup>70</sup> Again, it is reasonable to assume that a specific investment treaty provision prevails as a special rule over a much more abstract principle, allowing under undefined circumstances to disregard corporate nationality determined by incorporation. States have reasonable motives for implicit exclusion of piercing the corporate veil principle from their treaties, since this principle is ambiguous, while its application would create additional uncertainty costs.

For similar reasons it is hard to welcome attempts of introducing different multi-prong tests for the purpose of determining corporate nationality. Such legal tests are not supported by treaty language and create additional uncertainty risks. Incorporation is a suitable method for establishing corporate nationality. It is extremely easy to ascertain. A simple inquiry in a foreign corporate register, allows gathering all the necessary information about corporate nationality. Both the investor and the Contracting State may foresee, whether the corporate entity enjoys rights arising from an investment treaty. Notably, the host state, knowing the nationality of the company, may evaluate the risk of taking any adverse action. This is particularly important, when the investment treaty creates substantial guarantees to the foreign investors, not found in domestic or customary international law. Blending this simple criterion, with a non-defined number of other criteria, calling for profound inquiry into corporate ownership structure, deprives investment treaties of their simplicity.

Finally, the origin of capital principle is likewise subject to criticism, even in relation to the ICSID Convention. Article 25(2)(b) of the ICSID Convention uses the term “national”, without defining it. Thus, one could say that this provision is ambiguous. Consequently, according to the rules of Article 31 of the Vienna Convention, such provision must be read in the light of its context and purpose. An important element of context is the preamble of the treaty. The preamble of the ICSID Convention recognizes “the need for international cooperation for economic development [...]”. The most reasonable reading of the ICSID Convention is one that stimulates economic relations among Contracting States. Determination of corporate nationality by incorporation establishes the widest personal scope of the ICSID Convention, thus stimulating economic relations between Contracting States.

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Another tribunal stated that “the corporate form may be abused and that form may be set aside for fraud or on other grounds.” *Aguas del Tunari SA v Bolivia*, Decision on Respondent's Objections to Jurisdiction, ICSID Case No ARB/02/3, 21 October 2005, available at [http://www.iisd.org/pdf/2005/AdT\\_Decision-en.pdf](http://www.iisd.org/pdf/2005/AdT_Decision-en.pdf) [30.08.2014], p. 57, para. 245.

Finally, in the *Saluka* case it was decided that piercing the corporate veil is “a remedy which, being equitable, is discretionary.” See, *Saluka Investments BV v Czech Republic*, Partial Award, PCA—UNCITRAL Arbitration Rules, 17 March 2006, available at [http://www.pca-cpa.org/showfile.asp?fil\\_id=105](http://www.pca-cpa.org/showfile.asp?fil_id=105) [30.08.2014], p. 47, para. 230. According to this view, there is a lack of precise preconditions for piercing the corporate veil.

<sup>69</sup> Villiger M.E. *Customary International Law and Treaties: A Study of Their Interactions and Interrelations, with Special Consideration of the 1969 Vienna Convention on the Law of Treaties*. Dordrecht: Martinus Nijhoff Publishers, 1985, p. 36.

<sup>70</sup> *Ibid.*

Therefore, even in regards to the ICSID Convention incorporation is the most solid foundation for determining the circle of persons to whom it applies.

### **Conclusion**

Both Georgia and Latvia are parties to the Energy Charter Treaty, the ICSID Convention and a number of bilateral investment treaties, explicitly or implicitly defining corporate nationality by means of incorporation. Such treaty language drastically enlarges the circle of persons that can benefit from these international instruments.

The issue of corporate nationality remains controversial. Due to divergent case law, it is difficult to ascertain in advance, whether all corporate investors, formally satisfying the incorporation requirement, will be able to enjoy treaty protection. Literal interpretation of incorporation requirement seems to be the most appropriate response to such uncertainty. True, it has a disadvantage - it allows a large number of persons – nationals of the host state and third states – to benefit from investment treaty regime by incorporating a company in a Contracting State. However, the same disadvantage may turn out to be a virtue, as it motivates foreigners to invest in the host state and nationals of the host state to preserve their investments therein, relying on international investment treaty protection. Moreover, the literal approach to incorporation requirement respects treaty language, while providing a simple and transparent criterion for establishing corporate nationality.

It follows that corporate nationality under investment treaties must be determined by literal interpretation of the relevant treaty provisions. When these provisions are unambiguous and refer to incorporation as the criterion establishing corporate nationality, there is no justification for ignoring explicit treaty language.

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# THE ROLE OF CONTEXT IN KNOWLEDGE AND INNOVATION STRATEGIES: GLOBAL VS. EGYPTIAN SAMPLE

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## Abstract

Management research on knowledge and organizational innovation (OI) is a vast field which covers numerous topics and occurs at multiple levels of analysis (Crossan & Apaydin, 2010). However, the role of context in this research has been underexplored. The importance of inclusion of context in management research has been repeatedly highlighted by Tsui and colleagues (2004) with reference to Chinese context. This paper investigates the role of context in development and implementation of knowledge and innovation strategies by benchmarking an Egyptian sample (8 companies) with the Global Sample (68 companies), using the Innovation Audit Instrument developed based on the Comprehensive Model of OI (Crossan & Apaydin, 2010). The results indicate that the Egyptian companies lag behind the Global Sample in all aspects of the determinants of OI: leadership, managerial levers and business processes. Their innovation strategies are based on exploitation rather than on exploration. Also, only one company was practicing *Sustainable* innovation strategy (as defined in Zona, 2009), while most had no explicit innovation approach. Increasing company awareness about the comprehensive model of innovation and the imperative of an explicit innovation strategy is one of the managerial implications of this study.

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**Keywords:** Knowledge strategies, knowledge transfer, innovation, practice-based view

## Introduction

### Contextually Grounded Research

Tsui (2004) argues that organizations are open systems and thus context represents a major source of influence on the outcome of their activities. In the notion of 'context' she includes the current context (culture, the political and legal system, the stage of economic development) and the history, the geography and its ecology and all that have produced this context. The national culture can be an important boundary condition for the generalizability of the existing management theories (Hofstede, 1993). Tsui (2004) discussed three types of global management knowledge: context-free (theories that apply to all contexts), context bounded (apply in some contexts but not in others) and context-specific (applies only in one context). She repeatedly called for testing of management theories and models in different national contexts. This paper answers this call but comparing the results of innovation audit in the Egyptian sample with the Global sample.

## Theoretical background

### Comprehensive Model of Innovation

Innovation Audit questionnaire is grounded in the comprehensive innovation model developed by Zona (2009), and Crossan and Apaydin (2010). Based on a systematic review

of literature published over the past 27 years, this model synthesizes various research perspectives into a comprehensive multi-dimensional framework of organizational innovation –linking meta constructs of *Leadership*, *Managerial Levers*, *Business Processes* with *Innovation as a Process*, and *Innovation as an Outcome*.

According to the theory proposed by the authors, the comprehensiveness of the model is a necessary and sufficient requirement for success. A firm demonstrating innovation in all the components of the comprehensive framework (leadership, managerial levers, business processes and culture) will achieve sustainable innovation outcomes (Zona, 2009: 63). A comprehensive innovation strategy should include all components of the model. A partial innovation strategy, however, will include only some of them. For a firm to achieve sustainable innovation outcomes, both its *espoused* and *enacted* innovation strategies should be comprehensive and *congruent*.

### **Espoused and Enacted Innovation Strategies**

In their seminal work, Argyris and Schon (1974) differentiate the espoused and enacted strategies. Espoused strategies are mental representations of an intended plan of action, while enacted strategies are those implemented in practice. The authors suggest that most of the time espoused and enacted strategies not only differ but also may be incompatible. Zona (2009) further classified innovation, into ‘espoused’ and ‘enacted’ and developed a 2x2 matrix along those two dimensions (Figure 1) (Zona, 2009: 63), using Argyris and Schon’s (1974) premise.

Each of the four quadrants in Figure 1 symbolizes either an incongruent or congruent state between the firm’s enacted and espoused innovation strategies. On one hand, leaders may have comprehensive innovation strategies but enact them only partially (*Symbolic Innovation*), while on the other hand, firms may de facto enact comprehensive strategies without realizing that their innovation strategies are comprehensive (*Spontaneous Innovation*). These two scenarios represent a case of incongruence between espoused and enacted innovation. Two congruent scenarios are having a partial innovation strategy and enacting it partially (*Sporadic Innovation*), or having a comprehensive innovation strategy and implementing it comprehensively (*Sustainable Innovation*).

### **Methods**

To assess the degree of comprehensiveness of espoused innovation strategies, the survey-based measurement instrument (Innovation Audit Tool), developed based on Crossan and Apaydin (2010) was used. The innovation audit tool (IAT) was administered to Egyptian companies, referred as the *Egyptian Sample* hereafter (Table 1). Establishing the degree of comprehensiveness of the enacted strategies was done based on a linguistic-physiological approach proposed in Zona (2009).

This analysis involved (a) using the comprehensive innovation framework to assess the degree of comprehensiveness of those companies’ innovation strategies; (b) applying IAT to benchmark them against the consolidated data of a *Global Sample*; (The Global Sample’s consolidated data is available from a research conducted by Crossan and Apaydin in 2008 which encompassed 68 publicly listed companies in 20 countries) and (c) employing a unique methodology, developed in Zona (2009), to assess the gap between their espoused and enacted innovation models and classify their innovation strategies according to Figure 1.

In the following sections we will benchmark and compare the Egyptian sample with the Global sample along each meta-construct of the comprehensive innovation model. Furthermore, we will present classification of these companies’ innovation models according to the 2x2 matrix in Figure 1.

## Results

### Benchmarking against the Global Sample

The comprehensive innovation framework was used to measure the degree of innovativeness of the Egyptian Sample; the data was then consolidated and juxtaposed against the Global Sample for benchmarking and analysis. Table 2 provides a summary of the Egyptian Sample benchmarked against the Global Sample. Companies that fell in the 'low percentile' of the Global Sample are represented with the letter L and those that fell in the 'high percentile' are represented with the letter H (Table 2). Descriptive statistics of the Global Sample's *Meta-Constructs*, *Innovation Outcomes*, and *Innovation Dynamics*; including Low and High percentile values; can be found in Table 3.

As depicted in Table 2, six of the eight companies fell in the low percentile of the *Meta-Constructs*, and two in the low percentile of *Innovation Outcomes*. On the other hand, two companies fell in the high percentile of the *Measures of Successful Innovation*, which indicated that their management are quite aware of what the necessary measures of successful innovation are, yet they scored low on mostly all other meta-constructs and dimensions, indicating that they do not apply their understanding of those measures to their innovation strategies.

### Comparison of Means

Table 4 presents the means and standard deviations of the *Determinants and Dimensions of Innovation* of both the Global and Egyptian Samples at an aggregate level. The difference in standard deviations of the two samples is approximately 0.3, which can be attributed to the multiple-country effect in the Global Sample vs. a more homogeneous Egyptian Sample.

### Meta-Construct: Leadership

Compared to the Global sample, the Egyptian sample had a lower mean (Table 4). In addition, five of the eight Egyptian companies fell in the low percentile of the Global sample (Table 2), indicating weaknesses in their leadership capabilities. Breakdown of the constituent elements of the *Leadership Meta-Construct*, showed that those five companies fell in the low percentile in regards to 'our leadership team creates an environment that fosters innovation,' and 'our leaders ensure individuals can make a difference in this organization.' This could indicate that the leadership capabilities necessary to foster and encourage innovation is lacking.

### Meta-Construct: Managerial Levers

The Egyptian sample's Managerial Levers' aggregate mean was lower (2.955) than the Global sample mean (3.455) (Table 4). Furthermore, six of the eight Egyptian companies fell in the low percentile of the Global sample (Table 2). This combined with the analysis of the *Managerial Levers*' constituent elements indicates that Egyptian companies are unsure, whether or not, a vision for innovation exists, let alone communicated and, in turn, the support systems needed to capture and share ideas together with the reward systems that would motivate individuals to ideate and follow through with actions, are missing. Furthermore, those companies' organizational culture does not encourage innovativeness and risk-taking enough, rather it fosters submissiveness as indicated by seven of the eight Egyptian companies falling in the low percentile of the Global Sample in regards to the constituent element 'we hesitate to question others for fear of placing them on the defensive.' This could indicate that decision-making is centralized and bureaucratic to the extent that individuals hesitate to question others for fear of backlash, thus 'employees would not refer innovative personalities to their organization for employment.'



In addition, four of those companies also fell in the low percentile when it came to *'encouraging employees to take time away from their daily work to explore innovative possibilities.'* On the other hand, only two companies fell in the low percentile when it came to *'having an environment in which people feel that anything is possible'* which is in agreement with the low percentile attained in regards to *'our leadership team creates an environment that fosters innovation.'*

### **Meta-Construct: Innovation as a Process**

Six of the eight Egyptian companies fell in the low percentile of the Global sample (Table 2), that combined with a lower aggregate mean compared to the Global sample (Table 4), led to further analysis of the constituent elements.

Breakdown of this Meta-Construct showed that seven of the eight Egyptian companies do not rely on external sources for inspiration, thus reducing the number of epiphanies that could result, as indicated by their low percentiles. In alignment with a lack of vision for innovation, Egyptian companies are slow to anticipate and respond to shifts in consumer behavior which is further aggravated by a lack of innovation champions that would see projects through or the necessary measures to benchmark such innovations.

### **Meta-Construct: Innovation as an Outcome.**

The survey addressed three types of innovation outcomes: *Incremental Innovation*, *Breakthrough Innovation* and *Business Model Innovation*. Table 3 lists the Global Sample's descriptive statistics of those three types of outcomes.

*Incremental and breakthrough innovation.* In regards to *Incremental Innovation*, only one company fell in the low percentile, in addition, the mean of the Egyptian Sample was *greater* than that of the Global Sample (Table 2 and Table 4). As for *Breakthrough Innovation*, two companies fell in the low percentile of the Global Sample and its mean was less than the Global Sample's mean.

Further analysis of the Incremental and Breakthrough constituent elements indicated that Egyptian companies are certain that their product/service innovations are purely incremental and their likelihood of creating market disruptions is slim. Moreover, their view of whether or not, their competitors are agile in imitating their incremental innovations, is divided. This emphasizes that their incremental innovations are tactical rather than strategic and as a result does not necessarily disrupt the local competitive landscape.

The number of companies in the low and high percentiles of both samples indicated that the Global companies are more likely to introduce disruptive innovations that allow them to exploit opportunities and sustain their competitive advantage, while Egyptian companies are more prone to be blindsided by industry disruptions rather than take a proactive stance. Thus, it can be concluded that competitive rivalry does little, if anything, to enhance their capacity to innovate.

*Business model innovation.* Both Egyptian and Global Sample means were close with a difference of 0.069 (Table 4). Furthermore only two companies fell in the low percentile of the Global Sample (Table 2). Breakdown and analysis of the constituent elements indicated that Egyptian companies perceive themselves as more adept at defining new business models than competitors and consider those models as revolutionary within their industries. Yet they do not believe that competitors invest too much effort in gathering intelligence on their business models to be able to replicate them. The last two statements show some form of contradiction, indicating several possibilities: those companies may be unaware of the competitive dynamics around them, they misconstrue the value of their business models, or their business models are easy to replicate.

Furthermore, the results indicated that Egyptian companies do not put much weight on the capacity of their innovations to fundamentally change the way they run their business. Thus, their innovations are more customer-oriented rather than business process-oriented.

### **Innovation Dynamics**

The following sub-sections compare the Egyptian Sample's innovation measures, supports, and barriers to those of the Global Sample; based on ranking and means.

#### **Measures of successful innovation**

Using a Likert 5-point importance scale (1-Not Important, 5-Extremely Important), measures of successful innovation were ranked. Listed in Table 5 are those measures and their ranking (1- highest) for both samples, along with their means.

From Table 5, it can be noted that both samples ranked *customer satisfaction* as the most important measure of successful innovation, while *new products/services/processes produced* and *market share* occupied the second and third positions. While a comparison of means indicated that Egyptian companies put more weight on the importance of *market share*, *financial impact of ideas submitted by employees*, *innovations as percentage of revenues and profits*, and *spin-offs/new operations based on new products* as successful measures of innovation; than did the Global Sample.

*Spending on research and development* ranked fifth, while *intellectual property* (e.g., *number of patents*) ranked eighth for Egyptian companies. On the other hand, based on a comparison of means, *intellectual property* (e.g., *number of patents*) was less important to the Egyptian Sample as a measure of successful innovation compared to the Global Sample, yet *spending on research and development*, carried more weight for the Egyptian Sample than for the Global Sample.

#### **Supports for innovation**

Using a Likert 5-point importance scale (1-Not Important, 5-Extremely Important), supports for innovation were ranked. Listed in Table 6 are those supports and their ranking –1 highest rank– for both samples, along with their means.

Based on a comparison of means, *redefining the organization's values*, *establishing innovation/creativity goals* and *establishing new idea review processes* were found to have equal importance for both samples (Table 6). In addition, Egyptian companies put more importance than their counterparts on *providing training in creative thinking and problem-solving* and *creating new incentive programs* as support mechanisms for innovation. On the other hand, the Global Sample put more importance than their Egyptian counterpart on *redesigning organizational structure or work flow*, *increasing employee involvement*, *identifying/attracting more creative talent*, and *encouraging employees to learn about areas outside of their expertise* as support mechanisms for innovation (Table 6).

Even though *developing leadership capability to foster innovation* ranked first for the Global Sample and second for Egyptian companies, the data showed a notable difference in their means (0.468). A similar difference of 0.415 was also noted in regards to *developing an organizational strategy for innovation*. However, it ranked fourth for the Global Sample and eighth for the Egyptian Sample, in its importance as a support for innovation (Table 6).

#### **Barriers to innovation**

Using a Likert 5-point scale (1-Not A Barrier, 5-Extremely High), barriers to innovation were ranked. Listed in Table 7 are those barriers and their ranking –1 highest rank – for both samples, along with their means.

*Lack of leadership/management support* ranked number one as a barrier to innovation for Egyptian companies and number three for the Global Sample, with a notable difference of 0.653 in their means. In addition, the data indicated *risk-averse culture* as the number one barrier to innovation for the Global Sample but ranked sixth for the Egyptian Sample (Table 7).

On the other hand, *new ideas threaten existing product lines* ranked the least important barrier to innovation for both samples; nevertheless, based on a comparison of their means, Egyptian companies consider it more threatening – a difference of 0.426 – than the Global Sample.

### **Classification of Egyptian Sample' Innovation Strategies**

Employing a unique methodology, developed in Zona (2009), interviews were conducted to assess the gap between the companies' espoused and enacted innovation models. Based on this methodology, companies' innovation strategies were classified according to the 2x2 matrix in 1 and as a result, the eight companies were placed in the four quadrants.

Several conclusions can be made. First, the largest number of Egyptian companies had Symbolic innovation strategies, meaning that their understanding of what innovation is was better than what they were actually doing. An equal number of companies were in both Spontaneous and Sporadic quadrants thus either being spontaneously innovative or just randomly innovative. Only one company was practicing Sustainable innovation strategy. There was no an obvious connection between the industry and the type of innovation strategy. These results are not surprising given that innovation is a fashionable word and many tend to use it symbolically. Sporadic, or random, innovation is very much in line with the comparative results presented in previous sections. Increasing company awareness about the comprehensive model of innovation and the imperative of the consistency of the espoused and the enacted innovation strategies is just one of the benefits of these studies.

The results of this study were presented to the management of the Egyptian companies. Some of the suggestions included:

- Appointing a Chief Innovation Strategy Officer to drive the integration and adoption of innovation within the corporate strategy to sustain growth;
- Integrating innovation as a systematic business process within the company's processes to encourage and implement commercially viable ideas across company departments;
- Instilling innovation within HR Policy to facilitate the diffusion of innovation within the corporate culture;
- Moving towards a decentralized decision-making structure giving employees and leaders the freedom to improvise;
- Creating cross-functional teams to encourage ideation and brainstorming;
- Decreasing workload to space up for innovation and promoting Job Shadowing;
- Developing and utilizing crowd sourcing collaborative tools to accelerate innovation;
- Developing a reward system for innovation that is based on tangible and intangible recognition;
- Focusing more on breakthrough product innovations rather than incremental innovations to enrich the company's product portfolio;
- Encouraging front liners to tap into customer latent needs and offer solutions to satisfy these needs; and
- Decreasing reliance on third-party ideation and focusing more on internal ideation.

As a result, two of the three firms asked for a repeat of the audit project a year later in order to assess the improvements.

**Conclusion**

The results of the innovation audit have revealed that the Egyptian companies generally consistently lag (with a lower standard deviation between results) behind the Global sample. The main problems were the lack of an appropriate leadership style and a risk-averse, traditional organizational culture. Innovation was usually understood in its incremental sense, as a problem fixing and improvement rather than as a breakthrough innovation. Underestimating the role of patents and intellectual property protection is consistent with this result. Egyptian companies seem to be locked in a traditional organizational view with no room for free experimentation with management forms and processes. On the other hand, the Egyptians themselves do not seem to lack creativity or desire to innovate, it is the organizational forms and cultures that seem to be the impediment.

The results of this research have important managerial implications. In terms of innovation as a practice, the Egyptian leaders and managers have a lot to learn, from understanding what innovation is and its role in sustainable performance, to really embracing new models of leadership and changing organizational culture to a freer, risk-taking environment where employees are not afraid to experiment and even fail.

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**Espoused and enacted innovation strategies**

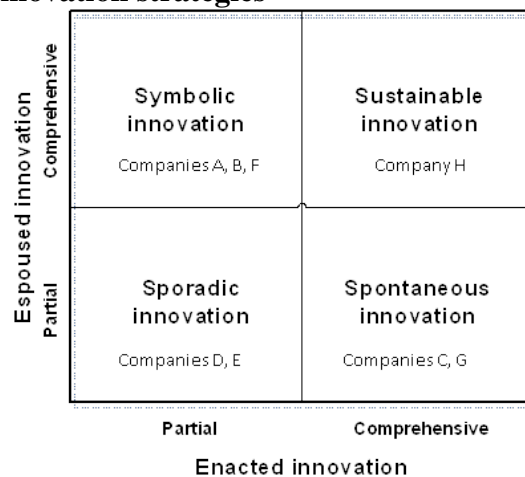


Figure 1

Table 1. The Egyptian sample

Industry	# Companies	Company	# Employees	# Surveys	# Interviews
Telecommunications	3	A	6,000	24	6
		B	2,500	26	5
		C	4,000	32	4
Information Technology	2	D	700	25	5
		E	500	22	2
Energy	1	F	10,000	16	5
FMCG	1	G	3,500	20	5
Packaging & Shipping	1	H	8,100	29	5

Table 2. Egyptian sample benchmarked against global sample

	Industry	Telecom			Information Technology		Energy	FMCG	Packaging & Shipping	Total Low
	Company	A	B	C	D	E	F	G	H	
Meta-Constructs	Leadership			L	L	L	L	L		5
	Managerial Levers		L	L	L	L	L	L	L	6
	Business Processes	L		L	L	L	L	L		6
Innovation Outcomes	Incremental Breakthrough Business Model		H		L	L	L			1
				L	L	L				2
Innovation Dynamics	Measures <sup>a</sup>				H		H			3
	Supports <sup>b</sup>	L				L		L		5
	Barriers <sup>c</sup>		L	L		L	L	L		

Note. L = Low Percentile (i.e. below 25<sup>th</sup> Percentile of Global Sample); H = High Percentile (i.e. above 75<sup>th</sup> Percentile of Global Sample); Empty Cells indicate within average zone. <sup>a</sup>Measures of successful innovation.

<sup>b</sup>Supports for innovation. <sup>c</sup>Barriers to innovation.

Table 3. Global sample descriptive statistics

n=68	Meta-Constructs			Innovation Outcomes			Innovation Dynamics		
	Leadership	Managerial Levers	Business Processes	Incremental	Breakthrough	Business Model	Measure <sup>s</sup> <sup>a</sup>	Support <sup>s</sup> <sup>b</sup>	Barrier <sup>s</sup> <sup>c</sup>
<i>M</i>	3.780	3.455	3.584	3.219	3.522	3.414	3.565	3.671	3.243
<i>SE</i>	0.067	0.052	0.060	0.077	0.072	0.071	0.040	0.042	0.074
<i>Mdn</i>	3.767	3.438	3.598	3.279	3.409	3.396	3.578	3.688	3.400
<i>Mode</i>	3.500	3.938	4.250	3.000	3.200	3.523	3.750	3.864	3.800
<i>SD</i>	0.551	0.428	0.498	0.638	0.597	0.587	0.328	0.346	0.610
<i>s</i> <sup>2</sup>	0.304	0.183	0.248	0.407	0.357	0.345	0.108	0.120	0.372
<i>Range</i>	2.444	1.985	2.393	3.020	2.644	2.595	1.598	2.129	2.958
<i>CL (95.0%)</i>	0.133	0.104	0.121	0.154	0.145	0.142	0.079	0.084	0.148
<i>Minimum</i>	2.556	2.515	2.607	1.424	2.231	2.155	2.694	2.871	1.200
<i>25<sup>th</sup> Percentile</i>	3.415	3.197	3.237	3.715	2.231	3.040	3.388	3.480	2.851
<i>75<sup>th</sup> Percentile</i>	4.216	3.712	3.929	2.923	3.854	3.784	3.776	3.864	3.667
<i>Maximum</i>	5.000	4.500	5.000	4.444	4.875	4.750	4.292	5.000	4.158

Note. <sup>a</sup>Measures of successful innovation. <sup>b</sup>Supports for innovation. <sup>c</sup>Barriers to innovation.

Table 4. Aggregate means of Egyptian and global samples

		Egyptian Sample		Global Sample	
		<i>M<sup>d</sup></i>	SD	<i>M</i>	SD
Meta-Constructs	Leadership	3.098	0.228	3.780	0.551
	Managerial Levers	2.955	0.269	3.455	0.428
	Business Processes	3.007	0.236	3.584	0.498
Innovation Outcomes	Incremental	<b>3.347</b>	0.260	3.219	0.638
	Breakthrough	3.360	0.321	3.522	0.597
	Business Model	3.344	0.392	3.414	0.587
Innovation Dynamics	Measures <sup>a</sup>	<b>3.659</b>	0.122	3.565	0.328
	Supports <sup>b</sup>	3.568	0.208	3.671	0.346
	Barriers <sup>c</sup>	<b>3.738</b>	0.167	3.243	0.610

Note. <sup>a</sup>Measures of successful innovation. <sup>b</sup>Supports for innovation. <sup>c</sup>Barriers to innovation. <sup>d</sup>Bold numbers represent Egyptian Sample means that are greater than that of the Global Sample.

Table 5. Measures of successful innovation

Measures	Egyptian Sample		Global Sample	
	Rank	Mean	Rank	Mean
Customer satisfaction	1	4.355	1	4.385
Market share	2	4.181	3	3.853
New products/services/processes produced	3	4.017	2	3.928
Financial impact of ideas submitted by employees	4	3.730	4	3.456
Innovations as percent of revenues and profits	6	3.465	5	3.381
<i>Spending on research and development</i>	5	3.505	6	3.324
Spin-offs/new operations based on new products	7	3.211	8	3.019
<i>Intellectual property (e.g., number of patents)</i>	8	2.643	7	3.197

Table 6. Supports for innovation

Supports	Egyptian Sample		Global Sample	
	Rank	Mean	Rank	Mean
Developing an organizational strategy for innovation	2	3.506	4	3.921
Redesigning organizational structure or work flow	11	3.254	8	3.567
Increasing employee involvement	3	3.627	3	3.983
Identifying/attracting more creative talent	1	3.827	2	4.075
Redefining the organization's values	10	3.327	9	3.353
Establishing innovation/creativity goals	4	3.600	5	3.683
Establishing new idea review processes	7	3.526	6	3.627
Encouraging employees to learn about areas outside of their expertise	9	3.397	7	3.602
Providing training in creative thinking and problem-solving	6	3.553	10	3.310
Creating new incentive programs	5	3.579	11	3.250
Developing leadership capability to foster innovation	2	3.684	1	4.152

Table 7. Barriers to innovation

Barriers	Egyptian Sample		Global Sample	
	Rank	Mean	Mean	Rank
Insufficient resources	7	3.500	3.287	4
No formal strategy for innovation	9	3.495	3.193	7
Lack of clear goals/priorities	2	3.835	3.253	5
<i>Lack of leadership/management support</i>	1	4.037	3.384	3
Short-term mind-set	4	3.614	3.610	2
Structure not geared toward innovation	3	3.700	3.217	6
Too much management control	8	3.498	3.028	9
<i>Risk-averse culture</i>	6	3.562	3.612	1
Lack of rewards for creative behaviors	5	3.614	3.137	8

## **COST EFFECTIVENESS ANALYSES MODELS IN THE DEFENCE SYSTEM IN BULGARIA**

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### **Abstract**

The thesis resulting from the research on the „costs - effects” relation is the principle of economic efficiency of defence capabilities. At first glance, the arguments in this direction are well-known and popular in crisis situations of various nature, including the current financial and economic crisis in the country, the question about the cost of public welfare - security and defence is debatable. This cost is manifested through the defence capabilities of a country. In the new security environment the compilation of a National Defence Strategy is a priority of the Defence Ministry, which has more and more limited resources. This means that they should be treated as an economic activity. An economic activity is considered "any purposeful activity, allocating and combining scarce resources among alternatives, making it possible to maximize the outcomes and minimize costs." The ratio between the costs and benefits of a given resource or combination of resources to achieve a pre -defined objective is pushed to the forefront and the rationalization of management decisions is based on it. This necessitates a cost effectiveness analysis hence the evaluation of the outcomes (benefits) is manifested in the „cost - effect (benefit)” analyses.

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**Keywords:** Analyses Models, Defence Systemq National Defence

### **Introduction**

The implementation of „costs-effects” analyses can be used as a „planning tool; decision-making tool and an environment for historical documentation of decisions”. Each of these „costs-effects” analysis directions has its place and advantages. Without neglecting any of them for the purposes of this paper the emphasis is put on the use of the „costs-effects” analysis as a tool for development and making decisions in response to the resource management question „what-if”.

A starting point of the „costs-effects” analyses is the research and grouping of defence costs. In theory and practice, there is a number of significant researches, projects and papers in this field. Therefore for the purposes of this paper the focus is on the management approach to accounting organization, analysis and control of defence costs as a manifestation of „costs – effects” interdependence analysis.

Costs- as an economic category, in its multidimensionality is associated with the amount of resources spent to obtain any benefit. In this respect they reflect „the value of resources in their alternative use... -value of opportunities”. They are always associated with a reduction of economic benefits when spent for any activity in public and economic life due to the reduction of assets (production factors) resulting from their incorporation in activity or taking out of the company or due to the increase in liabilities (obligations), resulting in reduction of the company capital, including state-run companies.

Depending on the characteristics of defence as a product, necessary to the public, and the costs associated with it, following the logic of the paper, account should be taken of the fact that „defence as an economic product is any commodity or service that can satisfy the needs associated with security.”

Defence as a product has the basic features of any commodity or service, i.e. it is designed for exchange, is useful and meets certain needs. But due to the fact that it meets very specific needs (preservation of the territorial integrity of the country and improving its national security), it is distinguished by certain features which may be summarized as follows:

- collectivity of production and consumption of defence as a product necessary to the public, is expressed by its consumption indivisibility
- lack of market valuation of the price of defence as a product upon its consumption (as a monetary expression of its value);
- the usefulness of defence as a product is reflected in its capacity to meet the system's needs for security and defence, which determines its conditional nature, expressed in reaching certain operational capabilities;
- the realization of defence as a product, unlike the products of civil legal entities is not subject to a clearly formulated outcome of activity, such as profit, which makes implementation of the principle of economic efficiency and profitability of minor importance for the Armed Forces.

Despite these characteristics, an essential feature of defence as a product, necessary to the public is that its production is the result of combining the factors of manufacturing (material, financial, human, information flows) and the ratio between them. These factors are determined by the existing defence wealth, expressed in the accumulated material and spiritual goods, ensuring the rational functioning of the security and defence system of the country. A special feature of defence wealth is that on the one hand, due to the limited resources it has certain limits. On the other- „the absence of an accurate valuation of defence resources, and thus of the actual defence wealth impede the economic and efficient management of the actual defence and economic process and worsens the quality of the economic supply of defence system“.

In the search for methods to overcome these limits of defence wealth and create defence products, comes the implementation of a management approach to reporting, analysis and monitoring of business processes in the field of security and defence. Such an approach allows an objective reflection of the size and structure changes of the factors of production of defence as a product, necessary to the public, within certain limits determined by the shortage of resources. It helps in bringing the security and defence resources management to the Euro-Atlantic standards.

The essence of the „costs - effects” analysis is expressed in the economic and efficient use of defence resources in the development of a National Defence Strategy of the Armed forces through the proper combination of the assets and the financial resources of the military institution at the proper time and place.

The initial thesis of the studies of the „expenses-effects” dependence is the principle of the economic effectiveness of the defense abilities. At first sight, the arguments in this direction are known and popular, but in the conditions of crisis situations of different character, including the financial economic recession in the country as well, the question about the price of the public security and defense remains subject to a discussion. The display of this price is through the defense abilities of a country. In the new security environment the foundation of the National Defense System (NDS) is a priority task of the military department, which has more and more limited resources. This means that they are to be approached as if they are an economic activity. As such is considered “every purposive



activity with which the limited resources are distributed and combined between alternatives where maximizing the effect and minimizing the expenses is possible” [1]. In the foreground comes out the correlation between the expenses and the uses of a certain resource or the combination of resources for achieving a certain, preliminarily defined goal and on that basis - the rationalization of the management solutions. This determines the necessity of an analysis of the effectiveness of the expenses and hence the assessment of the results (uses), which is displayed in the „expenses-effects” (uses) analysis [3].

The application of the „expenses-effects” analysis may be used as a „planning method; decision-making instrument and an environment for historic documentation of the decisions taken” [4]. Each of the mentioned directions of the expenses-effects analysis has its place and advantages. Without neglecting any of them, for the purposes of the present work, the stress falls on the use of the „expenses-effects” analysis as an instrument for the working out and taking of management decisions in response to the issue of the resource management „what-if”.

The initial basis of the „expenses-effects” analysis is the studying and grouping of the expenses for defense. In the theory and practice there are a number of significant studies, projects and developments in this area. Due to this, for the purposes of this work, the stress is on the managerial approach in the organization of accounting, analysis and control of the expenses for defense as a display of the analysis on the „expenses-effects” dependence.

The expenses- as an economic category, in their multiple-aspect character, are connected with the sum of the spent resources for the getting of a benefit. In this sense, they reflect „the value of the resources in their alternative use....- value of the possibilities” [5]. They are always connected with the decrease of the economic use for whatever activity of the public-economic life due to the decrease of the assets (production factors) as a result of their implementation in the activity or their taking out of the company, or due to the increase of the liabilities, which leads to a decrease of the own capital of the company, including the budget one. Depending on the peculiarities of the product required by the society- defense, and the expenses for its support, following the logic of the expose, attention should be paid to the circumstance that “a defense-economic product is every good or service which may satisfy the necessities, related to security” [6].

The defense product has the common characteristics of every good or service, i.e. it is intended for exchange, it has the quality of usefulness and satisfies certain needs. But, because it satisfies specific needs (protection of the territorial wholeness of the country and increasing its national security), it is distinguished by definite peculiarities, which may be summarized as follows:

- collectivity of the production and consumption of the society-required product- defense, which expression is the inseparability during its consumption;
- the lack of market assessment of the price of the defense product during its consumption (as a monetary expression of its value);
- the usefulness of the defense product is expressed in its ability to satisfy the needs of the system for security and defense, which predetermines its conditional character and which expression are the reached necessary operational abilities;
- the realization of the defense product, in contrast to the products of the civil economic subjects, is not subject to the clearly formulated purpose of their activity- the profit, which makes the application of the principle of the economic effectiveness and profitableness of secondary importance for the Armed Forces (AF).

Notwithstanding the above-mentioned peculiarities, an essential characteristic of the society-required product- defense- is that its creation is a result of the combination of the production factors (material, financial, human, informational flows) and the correlation between them. These factors are determined by the existing defense richness, expressed in the

accumulated material and spiritual goods, providing for the rational functioning of the security and defense system of the country. A distinguishing feature of the defense richness is that, on one side, due to the limitation of the resources, it has no definite borders. On the other side – “the absence of an exact value assessment of the defense means, and along with that, of the real defense richness, makes difficult the economic and effective management of the real defense-economic process and worsens the quality of the economic provision of the defense” [6].

In the search of ways for overcoming the mentioned restrictive characteristics of the defense richness and the creation of the defense product is the application of managerial approach in the accounting, analysis and control of the business processes in the security and defense sector. One such approach allows for the objective reflection of the modifications of the size and structure of the factors for production of society-required product- defense- in definite limits, determined by the resource deficit. It contributes to the nearing of the management of the security and defense resources to the Euro-Atlantic standards.

The essence of the „expenses-effects” analysis is shown in the economic and effective spending of the defense resources in the construction of NDS of the Armed Forces (AF) through the proper combination of the elements of the property and financial status of the military department at the required time and place.

The analytic indicators for effectiveness are applicable in the accountancy-analytical practice for the needs of the „expenses-effects” analysis. Such are the quotients of effectiveness of the expenses and the incomes. The quotient of the expenses effectiveness is the correlation of the incomes to the expenses, which shows how much income is received from expenses equaling 1 lev. The quotient of the incomes effectiveness is the correlation of the expenses to the incomes and shows how much expenses are made with incomes equaling 1 lev.

In accordance with the above-mentioned peculiarities of the defense products, the adaptation of the application of the effectiveness indicators is advisable and economically-grounded. In this sense, they are displayed in the determination of the effect, obtained with expenses of 1 lev for support of the defense and in how much expenses are done with one unit of effect. The application of the effectiveness indicators, apart from allowing the rationalization of the military solutions, is also grounds for revealing the factors leading to the ineffective spending of the resources, servicing the defense system of the country.

The application of the expenses-effect analysis is closely related to the determination of the actual price of the defense resources, known as a historic price. It is in the basis of their assessment and their reduction to a common indicator for commensuration and juxtaposing as is the value one. The calculation is in a direct dependence with the assessment of the expenses for the support of the defense product. It is in a mutual relation to the organization of the accountancy reporting of the expenses and their management, aiming at decreasing the indefiniteness of the actions (market and military ones). One such organization for accounting the expenses for support of the defense is based on the application of the principle of the „optimal analyticity” [7]. The application of this principle is conformed to the informational needs and possibilities for their provision, requiring the receiving of a maximum quantity of information, having the proper quality with minimum costs of public labour. It is in the interest of the efficiency and results of the financial-accounting analysis and the control of the process of creation of the defense product.

The effect of the application of the „optimal analyticity” principle in the resource management of the security and defense is shown in the creation and rational use of the NDS for the provision of stability and security of the economic growth of the country and increasing the value of the money. In its essence, this is the goal of the actions of the Armed

Forces and Bulgarian Army in peaceful times, which substitutes the profit as a final result from the functioning of the security and defense system.

The application of the analytical approach for management of the security and defense resources requires also the proper grouping of the expenses. In the theory and practice are known many criteria for grouping of the security and defense expenses (known also as military expenses). Every grouping is a reflection of the specifics in the structure of the defense expenses, which are one of the main elements of the state expenses, which consumption, at first sight, is unproductive. In this context, the financial theory and practice considers the security and defense expenses in accordance with their expression in the following three groups: direct, indirect and hidden [8].

The direct expenses for security and defense in their essence provide for: the support and preparation of the Armed Forces; their equipment with high-tech armaments and equipment as a direct consequence of the broad entering of the electronics and the new information technologies in the defense processes; the support of the personnel and the scientific research activity to the military programs.

For the needs of the budgeting of the expenses for the military department, the direct expenses for security and defense include the investment-, current-, professional and social adaptation expenses, the expenses for the information-communication technologies and the expenses for scientific-research and development activity. The tendency in the structure of the direct expenses in a world scale and in Bulgaria is towards increasing the investment expenses relating to the implementation of the high-tech systems. This is in response to the compatibility of the military staff with that of NATO and conforming to the “new face of the war”. To counterbalance that increase of the direct expenses, the expenses for support of the personnel (called also current expenses) are with a tendency towards decreasing. One should not approach this tendency simply. The unproductive character of the defense expenses and their relation to the monetary mass, the inflation, the debt and tax burden, reflect on the budget deficit, depending on which is also the level of the direct expenses.

This is only on the one side. The state consumption, being part of the Gross Domestic Product and the technology for the army, except for „tanks, airplanes, fuel...”, is expressed in technologies, which are open for civil use and bring money” [9]. The examples in the world practice in this relation are many: Global Positioning Service (GPS) the system, which as a military development is in favour to the civil economy; know-how in the aviation industry, used in the civil aviation and the air space control; in the pharmaceutical industry, etc. [9]. On this background of the modernization of the Armed Forces and the Bulgarian Army, the investment in western licenses provide a front for revival and infusing of fresh capital in the companies of the defense industry, having a potential in the area of the communications, radio-locations, bio-chemical protection. This approach, except for providing a perspective for the defense industry and the other branches of the national economy, has also influence on the increase of the employment, the attraction of foreign investments, the increase of the capital, the equipment of labour and the competitiveness of the companies. Hence the increase of the incomes, savings and the increase of the quality of life as factors and indicators of the economic growth, understood „in broad sense” [10]. The mentioned effects are a precondition for neutralizing the negatives from the increased budget deficits, as well as the other consequences from the allocation of the resources.

The indirect expenses for security and defense in their essence are such which are not directly related to the support of the military potential, but influence its formation. Such are the expenses for the state debts, the expenses for the humanitarian operations and restoration of the damages caused by war, the expenses for compensations for the killed in peace-keeping operations.

The unproductive character of these expenses is a precondition for the increasing of the unproductive state consumption. It is accompanied by a loss of effectiveness in the allocation of the budget resources, expressed in the real size of the proportions between the goals and the tasks and the deficit of the resources for their achievement. Not without importance are also the missed benefits for the business processes, which final result is the decrease of the possibilities for the economic growth, the decreased consumption, the worsened living standard.

The hidden expenses for security and defense are related to the programs of the civil organizations, having attitude to the security and defense programs; the expenses for infrastructural projects, originating from the challenges of the security environment and from the membership of the country in NATO; the deliveries for the army through the public procurement system. In their essence, these expenses, to a greater extent, are in the basis of the macro-economic development, confirmed by the circumstance that the war, for those who create its instruments, is a very good business. Still more, „the things that shoot and kill people are sought and sold as warm bread” [11].

The so-mentioned grouping of the security and defense expenses allows for the analysis of the effects from them. With such an analysis it is advisable to approach it from many sides. Notwithstanding the commonly-accepted thought of Milton Friedman for the military expenses as part of the state expenses, that „when somebody spends some else’s money on somebody else, he is neither concerned how much money is spent, nor the way it has been spent” [12], they in a direct, indirect or hidden way are reflected in the economic growth. This is a two aspect reflection, expressed through the positive and negative effects from them.

The grouping of the expenses according to the so-called “tree of expenses” is also known in the specialized literature [13]. It is about the grouping of the general expenses in expenses related to labour and related to capital, expenses with obligatory sizes and of recommended character, expenses for keeping a basic potential, for upgrading the potential, for realization of the potential, mutually related and mutually unrelated expenses, personnel expenses, operational expenses, capital expenses, direct and indirect expenses, etc.

Following the logic of the report, a starting point for the research in this direction is the analysis of the budget of the military office for the 2009/2013 period, as well as the level of achieved results (effects) of the performance of the defense programmes. The choice of the analytical period is in accordance with the defined common priorities, set out in the memorandum of the programme decisions for 2008÷2013 and the three-year budget estimate for the 2012÷2014 period [14]. These are the priorities envisaged in the midterm six-year plan for the development of the Ministry of Defense /MoD/ and AF and the Programme Guidelines 2010÷2015, the Defense Policy Guidelines of the Minister of Defense 2011÷2014, underlying the White paper on defense and the Armed Forces.

The analytical estimates are illustrated by graphs and diagrams, the causalities and dependences of the changes and results are derived, the measures for evaluation of the established priority abilities are motivated, both for our country and for the NATO member-states, together with their contribution to the collective defense and their actual participation in operations.

On this basis a mathematical model is developed, which is founded on the black box model and supports the ‘resources-abilities-effects’ model in an environment variable for security. This method is widely used in various fields of science where the solution to a problem is based on the specific situation. It is assumed that there is a functional relationship between the „input” and „output”, and the way the specific components operate within the system, is unknown or is the subject of research. It focuses on the factors and the random effects that have an impact on the object and these are usually hard to measure. What is

usually noticed is the effect of the factors when measuring the input values. Thus, on the basis of the model structure, through the possibility for interpolations, the value of the unknown variable of the function is determined in the array of experimental data. This is exactly the main advantage of the black box model which allows the processes to be modelled and optimised. The choice of this method for mathematical modelling is the result of all this, following the logic of our scientific searches and the model of transformation of the resources into defense abilities and also a result of searching for an answer in „what-if” situations. The applicability of this method for the purposes of our researches follows a specific logical scheme, defined by the conditions for functioning of the security and defense system, the linear prediction (trend) of the future expense, the application of the regression analysis (general, local, multidimensional), dispersion, hypothesis, correlation dependences, the synergic effect. The mathematical modelling is done with the help of the MATLAB application.

For this purpose an algorithm is used for determining certain characteristics of the dynamic time series by years of funding.

The military budget generates an end product of financial resources  $R_{fin}$ , defense abilities  $A_{cap}$  and final effects from them  $E_{ff}$ , which could be presented as a functional dependence as follows:

$$B_{mil} = f(R_{fin}, A_{cap}, E_{ff}) \quad (19).$$

The realization of the military budget in the given dependence (19) could be presented as an hierarchy as follows:

$$B_{mil} = (R_{fin} \rightarrow A_{cap} \rightarrow E_{ff}) \quad (20)$$

The military budgeting is usually characterised by structural description of each situation, forming the costs for defense  $C_{mil}^f$ , occurring in each subsequent year – space due to a change in the economic environment. Structurally,  $C_{mil}^f$  consists of defense policies  $D_{pol}$ , defense programmes  $D_{pro}$ , which could be presented functionally as follows:

$$C_{mil}^f = f(D_{pol}, D_{pro}) \quad (21)$$

The allocation of costs  $C_{mil}^f$  in (21) is done in an hierarchy of the type  $C_{mil}^f = (D_{pol} \Rightarrow D_{pro})$ . Thus presented, it provides a possibility for generating a multitude of solutions and a choice of the most acceptable among them, satisfying predefined conditions for functioning of the whole system  $M_{sys}$ , related to the defense of the state.

Therefore, the set of conditionally adopted formal objects  $B_{mil}$ ,  $R_{fin}$ ,  $C_{mil}^f$ ,  $A_{cap}$ ,  $E_{ff}$ ,  $D_{pol}$ ,  $D_{pro}$ , which structure, formalize and determine the functioning of the system for security and defense, suggests a model for analysis and forecasting, or  $M_{sys} = f(B_{mil}, R_{fin}, C_{mil}^f, A_{cap}, E_{ff}, D_{pol}, D_{pro})$  (22).

The interdependence of the objects in (22) suggests a description of the relationships between them through a pragmatic mathematical model, comprising a few steps for a certain period of funding.

**Step 1.** Determining the interrelation between the total defense spending of  $C_{mil}^f$  on the policies for the defense for a specific time period  $T_{mil}$  - start  $T_{pr}^{start}$  and end -  $T_{pr}^{end}$ . This is

realized through a regressive analysis of the dynamics of the total costs of defense policies in the form of an equation  $P(x)$  of the following type:

$$P(x) = a_0 + a_1x^1 + a_2x^2 + a_3x^3 \dots a_nx^m, \quad (23),$$

where:  $a$  - coefficients of the regression equation;  $n$  - serial number of the coefficients of the equation;  $m$  - exponent of the variables.

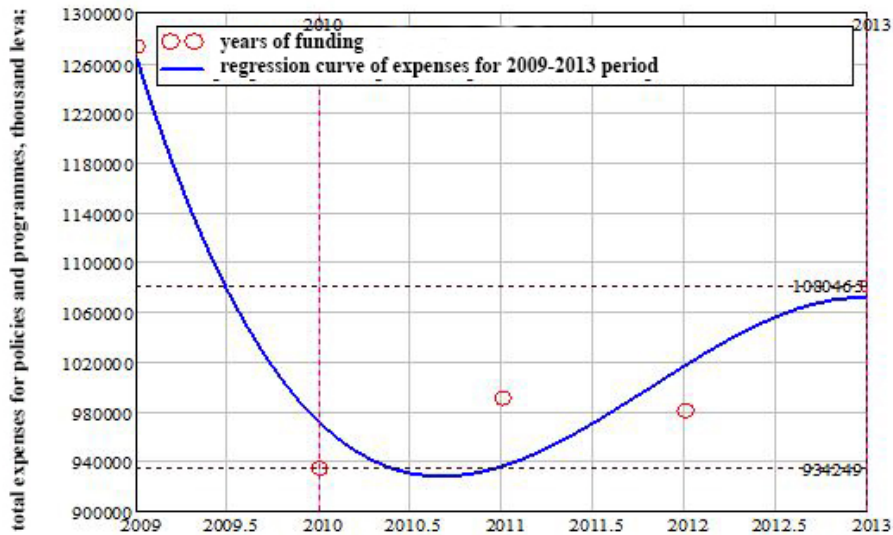


Fig. 1. Dynamics of military costs  $C_{mil}^f$  of policies and programmes for the 2009 - 2013 period

That dependence (23) allows to study the dynamics of the expenses during a specific period of funding,  $T_{mil}$  years. Determining the regularities of the changes  $C_{mil}^f$  according to (23) for the 2009 – 2013 period is given on Fig.1.

The changes in the costs  $C_{mil}^f$ , obtained through (23) show values for the period, used at  $T_{pr}^{start} = 2010$  and  $T_{pr}^{end} = 2013$  and is in sweep  $934249 \leq C_{mil}^f \leq 1080463$  leva or a variation of costs  $\Delta C_{mil}^f = 146216$  leva, shown on fig. 2.30. The changes to these data are shown in an equation of the following type with a variable:

$$hh(ss) := -289029828994.16681 \cdot ss + 143666490 \cdot ss^2 + -23803.833333 \cdot ss^3 + 193824403770485.69$$

$$hh(ss) = -289029828994.16681 \cdot ss + 143666490 \cdot ss^2 + -23803.833333 \cdot ss^3 + 1938244037770485.69$$

$$B_{mil}, R_{fin}, C_{mil}^f, A_{cap}, E_{ff}, D_{pol}, D_{pro}, P(x), T_{mil}, T_{pr}^f, M_{pos}, \pm \Delta C_{mil}^f \quad (24).$$

The analysis of (24) makes it possible to study the trends in  $C_{mil}^f$  formation of the military budget and the determining of the estimates for the subsequent time periods.

**Step 2.** Determining the magnitude of the estimated costs  $C_{mil}^f$  for a specific forecast period  $T_{pr}^f$ .

Determining the magnitude of variation of a forecast  $\pm \Delta C_{mil}^f$  in the forecast period  $T_{pr}^f$ , is realised through an analysis of the dynamics of the expenses during this period. In the general case the model of the forecast  $P_r^T$  includes a few components and is given as follows:

$$P_r^T = Y_T + Y_T^{mean} + \Delta K_{pr} + P_{dev}, \quad (25),$$

where:  $Y_T$  - the projected values of the time series of estimates for the expenses for specific

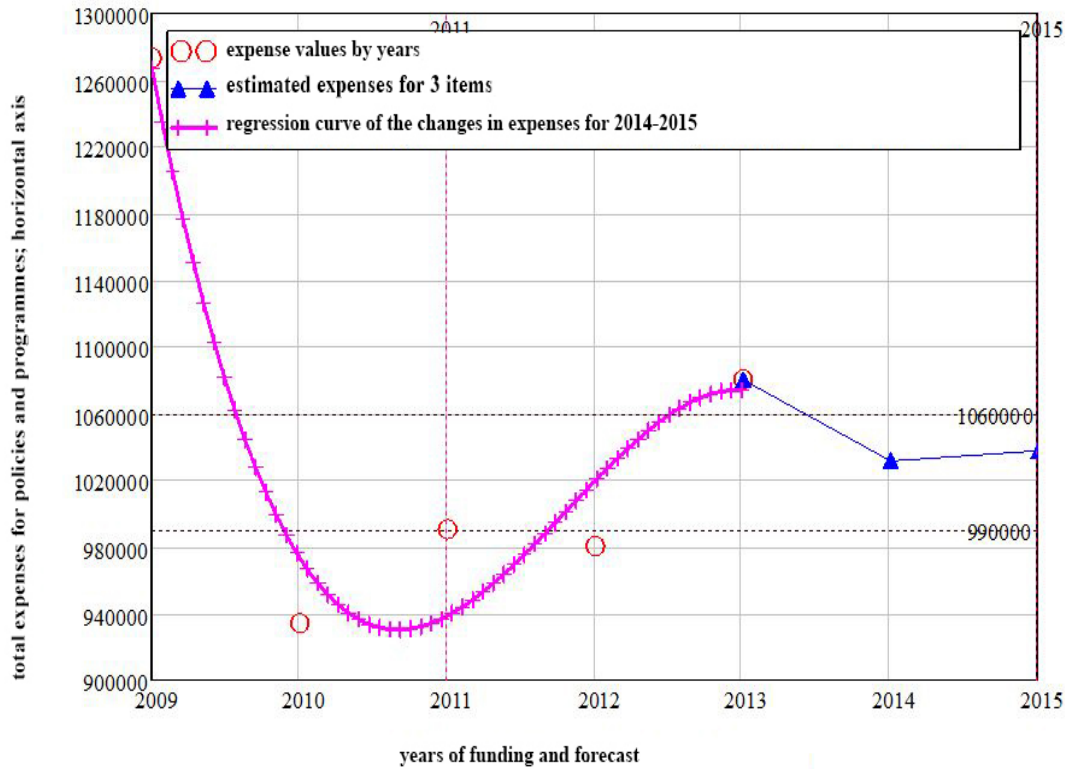


Fig. 2. Forecasting of the military costs  $C_{mil}^f$  of policies and programmes for the 2014 - 2015 period

years;  $Y_T^{mean}$  - average forecast (trend) for the expenses by years;  $\Delta K_{pr}$  - fluctuations of the estimates for the expenses (fluctuation wave) for the years of forecasting;  $P_{dev}$  - random variable of deviation of the forecast from the average.

In individual cases for forecasting of the expenses, 2-3 years for example, the number of the components in (25) could be only the first three. This condition makes it possible to determine approximately the corrections  $K_{pr}$  in the costs of specific policies or programmes within the forecast period. They could be determined from the following dependence:

$$K_{pr} = f(P_r) \pm \Delta C_{mil}^f \frac{1}{2} \quad (26).$$

The dependence (26) allows, through linear prediction (trend) of the future costs, to optimise that part of them which is a priority for the contracts and procurements that have already been signed. An option for realisation of the forecast based (26) on the expenditure values for three years for the 2014-2015 period is shown on Fig.2.

The confidence intervals for the conducted linear prediction for each three points in (26) allows the data for the expenses to be accepted as working values in implementation of the policies and programmes during the forecast years for funding with a higher degree of confidence.

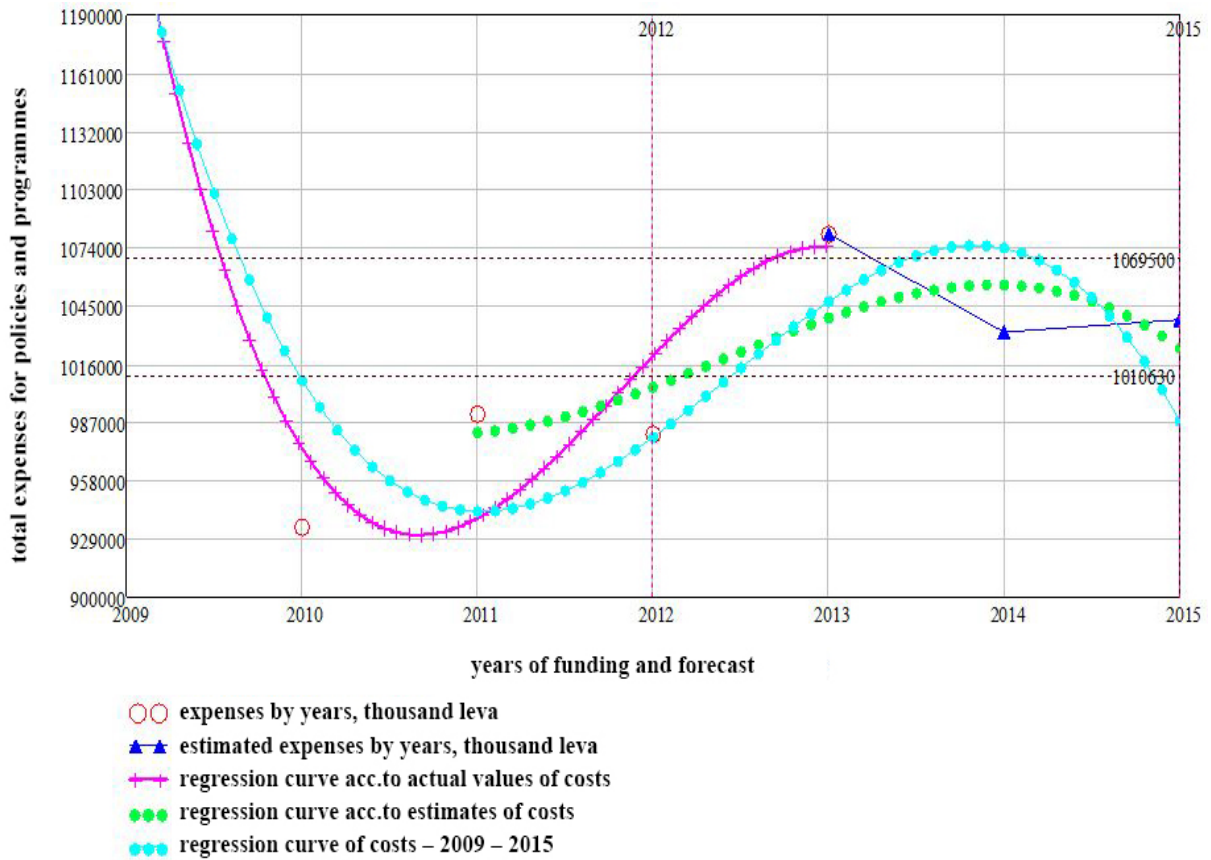


Fig.3. Forecasting of the military costs  $C_{mil}^f$  of policies and programmes for the 2014 – 2015 period through a general and local regression analysis

The projected values for the years and the costs are respectively  $T_{pr}^f = 2014, 2015$  years and  $C_{mil}^f = 990000, 1060000$  leva (Fig.2.).

When determining the random variable of deviation of the forecast  $P_{dev}$  (26), the average values of the costs by years could be used.

To reduce the statistical error from the linear prediction, iteration of the forecast is done. To achieve a greater accuracy of the estimated costs, the formalisation of the prediction problem includes a secondary regression analysis with the estimated values of the costs by years. Then the vector of the costs could be given as follows:

$$C_{mil}^f = C_{mil}^f 1, C_{mil}^f 2, C_{mil}^f 3..C_{mil}^f n + C_{mil}^f pr1, C_{mil}^f pr2...C_{mil}^f m \quad (27),$$

where:  $C_{mil}^f 1, C_{mil}^f 2, C_{mil}^f 3..C_{mil}^f n$  is a vector of the actual, given costs of policies and programmes by years;  $C_{mil}^f pr1, C_{mil}^f pr2...C_{mil}^f m$  is a vector of the estimated costs of time period of the forecast  $T_{pr}^f$ . Then the corrections  $K_{pr}$  of the costs of specific policies or programmes within the forecast period could be determined by:

$$Kor = f\left(\frac{pr1 + pr2}{2}\right) \pm \Delta C_{mil}^f \frac{1}{2} \quad (28).$$



Determining the corrections in connection with (28) is done by carrying out a regression analysis with estimating (27), for time  $T_{pr}^f$  which is shown on fig. 2.32.

**Fig.3.** Forecasting of the military costs  $C_{mil}^f$  of policies and programmes for the 2014- 2015 period through a general and local regression analysis

The estimated costs of policies and programmes for the period  $T_{pr}^f \Rightarrow 2014 - 2015$  are described by an equation of the type:

$$KN(nn) := -5.55520961285714 \text{ nn} + 2.7605006071429e7 \text{ nn}^2 + -4572.5 \text{ nn}^3 + 3.7264177260990023$$

where the values of the estimated costs for  $T_{pr}^f = 2014, 2015 \text{ years}$  are  $C_{mil}^f = 1012200, 1010800 \text{ leva}$ , (Fig. 3.).

The correction in the forecast of estimates for the costs for the years 2014, 2015 - linear and regression, are calculated (28) due to the statistical error, where:

$$Kor_{2014} = \left( \frac{1031600 + 1055200}{2} \right) \pm (1069500 - 1069500) \frac{1}{2} = 41135 \approx 50000 \text{ leva}$$

and by analogy for:

$$Kor_{2015} = 56935 \approx 60000 \text{ leva} \tag{29}$$

This methodology for a successive halving of the boundary intervals of the values of the estimated costs, calculated by linear and regression predictions, allows to sign contracts that have implementation periods exceeding one or more years. These values suggest reduction of the errors through improving the prediction by (2-4) years.

To improve the accuracy of the forecast still further for a specific period of time  $T_{pr}^f$ , a regression analysis is recommended at  $T_{pr}^{start}$  and  $T_{pr}^{end}$ , and reporting the results of the analyses of the estimates  $C_{mil}^f pr1, C_{mil}^f pr2 \dots C_{mil}^f m$ , taken as time series. The accuracy of the estimated results in the time series of values

$C_{mil}^f pr1, C_{mil}^f pr2 \dots C_{mil}^f m$  is determined by the mean values of the costs, obtained from: the costs, a result from the linear prediction  $C_{mil}^f Ln$ , the costs from the local prediction  $C_{mil}^f Lo$  and the values of the global prediction  $C_{mil}^f \Gamma$ . Then we can assume as appropriate the values of the costs  $C_{mil}^f W$ , used at the time of their planning:

$$C_{mil}^f W = \frac{C_{mil}^f Ln + C_{mil}^f Lo + C_{mil}^f \Gamma}{3} \tag{30}.$$

An option for such a forecast and determining the data from  $C_{mil}^f W$  is shown on Fig.3.

The accuracy of forecasting of the time series of costs using (30), fig. 2.33. increases by 18÷25% due to reduction in the errors, which occurs as a result of the averaging interval. As a sequence for identifying trends for the changes in the time series of expenses –

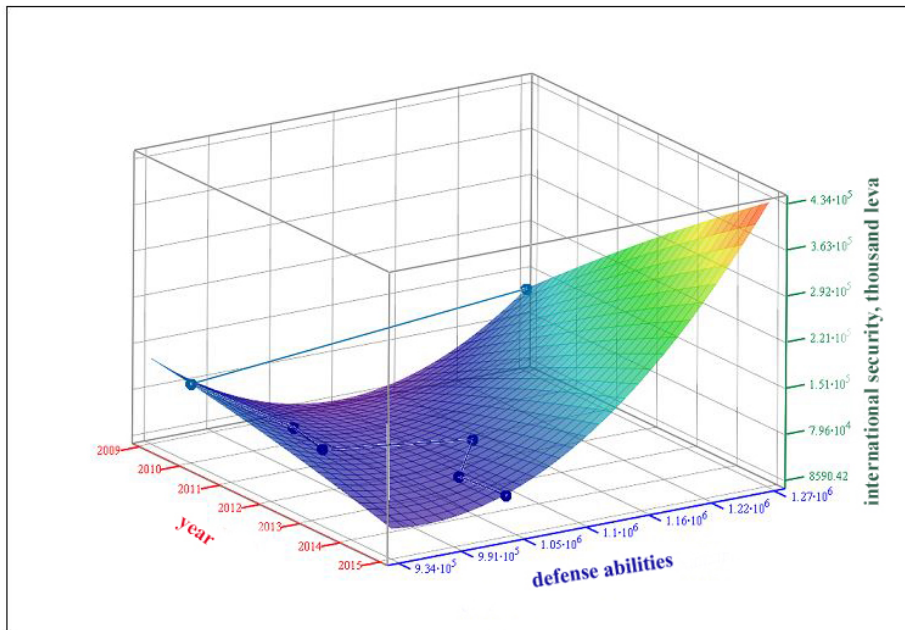


Fig.4. Mutual influence of the costs  $C_{mil}^f$  of policies and programmes for the 2009 – 2015 period

the existing and the estimated, the following algorithm is used where the values of the costs  $C_{mil}^f W$  are divided into two approximately equal time intervals: first -  $N_1$  and second -  $N_2$  for the total interval  $N_r = N_1 + N_2$  by years of forecasting. By assuming  $T_{pr}^{start} = t_n$  and  $T_{pr}^{end} = t_k$ , the average appropriate value of the costs is determined  $\overline{C_{mil}^f W_1}$  or  $\overline{C_{mil}^f W_1} = \frac{\sum_{t=t_n}^{t=t_k} C_{mil}^f W_t}{N_1}$

and the dispersion  $\sigma_1^2$  or  $\sigma_1^2 = \frac{\sum_{t=t_n}^{t=t_k} (C_{mil}^f W_t - \overline{C_{mil}^f W_1})^2}{N_1 - 1}$ .

By using the given dependences we check the hypothesis for absence of trend for reducing the deviations in the costs with the help of the t-criterion of Student. Thus, two areas of these time series are combined: the statistics of the volume of the sample by years and the depth, setting the forecast horizon.

**Step 3.** Determining the mutual influence of the policies and programmes on achieving the goals of the defense.

Generating aggregate defense possibilities  $M_{pos}$  through the complex impact of the policies and programmes is realised through a multidimensional regression analysis of input data, and these are the appropriate values of the costs  $C_{mil}^f W$ . The function is often of the following type:

$$P(x, y) = a_0 + a_1 x^1 + a_2 y^1 + a_3 x^1 y^1 + a_4 x^2 + a_5 y^2 \dots a_k x^n y^m \quad (31).$$

The function (31) allows to study the simultaneous mutual influence of the policies and programmes when generating defense abilities. An option for a mutual influence of policies ‘Defense abilities’ and ‘Federal and international security’ for the 2009 – 2015 period is graphically shown on Fig.4.

The interdependence between the policies by using (31) demonstrates reduced values at their realisation. For the policy „Defense abilities” (Oig.4.) they are within the range of 105000 thousand leva ÷ 115000 thousand leva, whereas for the policy ‘Federal and international security’ - 73 500 thousand leva ÷ 85 000 thousand leva. The mutual influence on them, regardless of the imbalance in the values of the costs  $C_{mil}^f W$ , suggests a greater influence on the defense abilities (fig.4) .

**Step 4.** Determining the mutual influence of the policies and programmes through the synergetic effect  $S_{ef}$  for generating defense abilities  $M_{pos}$  .

The synergetic effect  $S_{ef}$  means increasing the possibilities of a group of policies and programmes at the expense of their simultaneous influence. For this purpose the interconnection is determined by the weighted values of the coefficients for priority of the separate costs  $k_1, k_2, k_3, \dots, k_x$  changed every year. The connection  $S_{ef}$  could be presented with the following dependence:

$$S_{ef} = k_1 C_{mil}^f W \vee k_2 C_{mil}^f W \vee k_3 C_{mil}^f W \dots k_x C_{mil}^f W + \Delta S_{ef} \quad (32),$$

where:  $\Delta S_{ef}$  - effect of the interconnection of influence of the costs  $C_{mil}^f W$ , at the realisation of common programmes, etc.

To determine the effect of the interconnection  $\Delta S_{ef}$  it is necessary to identify the local minimums and maximums of the regression surface, setting the changes of the overall costs of policies and programmes. The surface is defined by (32) for the 2009-2015 period and  $\Delta S_{ef}$  is shown on Fig.5.

The reduction of costs of the policy „Defense abilities” and ‘Federal and international security’, fig. 6 generates a negative general effect where: the maximum value of the effect is:

$$\Delta S_{ef}^{max} = \left\{ \begin{array}{l} \text{'defense abilities' } 115000 \text{ leva} \\ \text{'federal and international security' } 85000 \text{ leva} \end{array} \right\},$$

And the minimum -

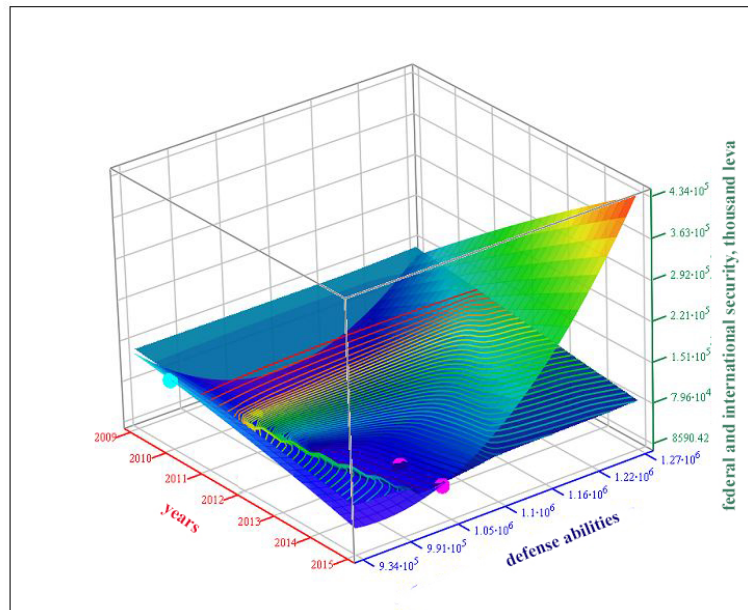


Fig. 5. Mutual influence of the costs  $C_{mil}^f W$  of policies and programmes for the 2009 – 2015 and the synergetic effect

$$\Delta S_{ef}^{\min} = \left\{ \begin{array}{l} \text{'defenseabilities' } 75000 \text{ leva} \\ \text{'federal and international security' } 73000 \text{ leva} \end{array} \right\}.$$

These values of the effect show a negative trend of organisation of activities, envisaged in the prospective plan for the development of a specific policy or programme

The given mathematical model for analysis and forecasting of the costs for defense is a manifestation of the model 'resources-abilities-effects'. Through the used mathematical and statistical instruments, the forecasting of the expenses as an expression of the resources for security and defense, is in support of their transformation into defense abilities necessary for the Purposes of the AF, consistent with the dynamic changes in the environment of security. The application of the scientific approach, based on the mathematical and statistical tools in the proposed model, is in support of the rationalisation of the managerial decisions for the development of AF and the creating of a possibility for optimisation of the transformation of the resources into defense abilities in real time while complying with the level of ambition and priorities of the Defense Ministry.

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## PECULIARITIES OF REGULATING CONSTRUCTION BUSINESS IN GEORGIA

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### Abstract

Since 2004 Georgia has been carrying out radical reforms to regulate the construction sector. After the cancellation of the Ministry of Architecture and Construction of Georgia the regulation of the field was delegated to the Spatial Planning and Construction Policy Department at the Ministry of Economy and Sustainable Development of Georgia. In the process of regulating construction business, one of the most significant places is attributed to the construction quality control which means either the state or the private customer should set strict supervision on the architectural-building business considering the essence and specificities of the construction production. Developed countries have obtained and possess the complex system of quality assurance and control in the sphere of construction along others. It covers three stages: supervision of the state, of local authority and of insurance companies.

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**Keywords:** Construction sector, building quality assurance, construction supervision, construction code of conduct, technical regulations of building

### Introduction

The development of construction as of a business in Georgia starts from the 90-ies. Since the announcement of the country's independence regulatory legal-normative database of construction business has been multiply changed. Even though several tenfold regulatory documents were issued, the efficient regulation of the construction sector still remains to be rather urgent. According to the Constitution of Georgia each citizen is empowered to live in the environment secure and safe for life. The latter directly indicates to the necessity of efficient regulation of the branch. On the other hand regulating building business is a complex and multisided process. Respectively, along with the direct branch regulatory legislative normative acts, construction activities are regulated by the other legal acts getting over the borders of building business spreading on the scales of the whole economy of the country. It is a fact that an incomplete legislative-normative database not only hinders the development of construction sector but creates meaningful problems for customers. The existence of national technical regulations in building is one of the significant documents regulating construction business in any developed country. Engineering-technical and technical-economic type decision making in building should be based on technical parameters elaborated and recognized prior. Therefore, insufficient number of national technical regulations for Georgian building sector importantly impedes the process of reaching high construction quality in the country.

Nowadays construction sector in Georgia is regulated by the following legislative-normative acts<sup>71</sup>: the Law of Georgia on “Spatial Arrangement and Municipal Construction”; “Product Security and Free Circulation Code of Conduct”; the Law of Georgia on “Construction Business”; the Law of Georgia on “Architectural Business”; orders of the President of Georgia; =45, 57, 261 resolutions of the Government of Georgia; orders of the minister of the Ministry of Economy and Sustainable Development of Georgia; General Administrative and Procedure Codes of Conduct; Administrative Code of Georgia; the Tax Code of Georgia; the Law of Entrepreneurs; Rule of Law Enforcement and Proceedings of Georgia, etc. As we see, the list of legislative-normative papers regulating construction business in Georgia is rather various and spacious. In most cases their contradictory nature and inner cause/effect complex links prevent the decent regulation of the field preventing the development. Thus, it is urgent to codify construction regulatory-legislative normative database in the so called construction code changing the specificity of the sector regulation enabling the efficiency of the administration process.

Building quality assurance and control takes an important place in regulating construction business which means either the state or the private customer should set strict supervision on the architectural-building business considering the essence and specificities of the construction production. Implementation of the supervision on architectural-building activities, as a rule, covers the control of each phase of the construction process. The control is imposed on technologies as well as materials, constructions, machines and mechanisms, qualification of the staff in order to exclude mistakes from the very outset, the value of which is often the human life.

Developed countries have obtained and possess the complex system of quality assurance and control in the sphere of construction along others. The process of construction quality control covers three stages: supervision of the state, of local authority and of insurance companies. It should be noted that the control of building quality is performed by different schemes in different countries. For instance: in Belgium and Czech Republic state supervision is held only during the construction of the sites of particular importance, in other cases local building control bodies apply to their competence. Besides, the construction quality is exclusively controlled and supervised by the customer directly. As a rule, the state supervision of the construction is financed from the government budget, while the customer supervision is up to their personal budget. In developed countries special attention is paid to insurance companies in the process of construction quality control performance since in most of them the construction production quality and the entire site construction are insured. Respectively, insurance companies are actively engaged in construction quality control. The mentioned supervision system is successfully practiced in the USA and Japan. In most European countries (Germany, Denmark, Norway, England) the construction quality control is supervised mainly by local construction inspection<sup>72</sup> (see chart #1).

<sup>71</sup> [www.economy.ge](http://www.economy.ge) - at the Ministry of Economy and Sustainable Development of Georgia

<sup>72</sup> **Building Regulations**, Explanatory Booklet. Office of the Deputy Prime Minister (ODPM) Publications PO Box 236. Wetherby, West Yorkshire 2005.

### Chart #1 Construction Regulator in Developed Countries<sup>73</sup>

Country	State Supervision Body
Poland	<ol style="list-style-type: none"> <li>1. Main Inspection of Construction Supervision at the Ministry of Planning and Construction (started in 2006 instead of the Ministry of Construction);</li> <li>2. Bodies of Architectural-Building Supervision of Administrative Units;</li> <li>3. Supervision Bodies of Particular Construction (perform supervision on defense, national security, water management, navy, transportation and mining construction sites)</li> </ol>
Lithuania	The Inspectorate of State Territorial Planning and Construction of the Ministry of Environmental Protection
Latvia	State Construction Inspection of the Ministry of Economy (until 2003 the inspection would be included in the Ministry of Environmental Protection and Regional Development)
Sweden	Housing, Construction and Planning National Council of the Ministry of Environmental Protection

Since 2004 Georgia has been carrying out radical reforms to regulate the construction sector. After the cancellation of the Ministry of Architecture and Construction of Georgia the regulation of the field was delegated to the Spatial Planning and Construction Policy Department at the Ministry of Economy and Sustainable Development of Georgia which became obliged to perform the following main functions: elaboration, implementation, administration and monitoring of the policy in spatial planning and construction activities sphere; initiation, organization, analysis, inculcation and performance monitoring of the regulatory legislative-normative documents in the sphere of spatial planning and construction activities; support of new technologies, promotion and introduction of construction materials considering contemporary requirements in the field of construction business; etc. Moreover, a legal entity “Agency of Technical and Construction Supervision<sup>4</sup>” has been operating in the system since September 24, 2012. Its functions include<sup>74</sup>: permit the construction of the sites of particular importance on the whole territory of Georgia; exploit construction complete sites; elaborate construction project norms, rules, technical regulations and standards within the scope of its competence; enforce the administrative responsibility on the construction law breakers, etc. Architectural services were formed on the levels of local municipalities entitled to manage architectural-urban construction processes on the territories stated by administrative borders of certain municipalities; also to handle the unified policy of coordination and regulation of building activities; to state the terms for utilizing the land for the construction according to the stated rule; to settle architectural-construction projects; to issue construction permit, etc. The resolution №57 of the government of Georgia about “Issuing Construction Regulations and Permit Conditions”, 2009, March 24 regulates the processes of permitting construction, execution of permit terms and recognition of the validity of buildings on the territory of Georgia. According to the processes in Georgia there exists the three-phase procedure of the construction permit<sup>75</sup> (see scheme #1).

<sup>73</sup> www.parliament.ge, materials of Parliament of Georgia.

<sup>74</sup> tacs.gov.ge - Agency of Technical and Construction Supervision

<sup>75</sup> Resolution №57 of the government of Georgia about “Issuing Construction Regulations and Permit Conditions”, 2009, March 24.

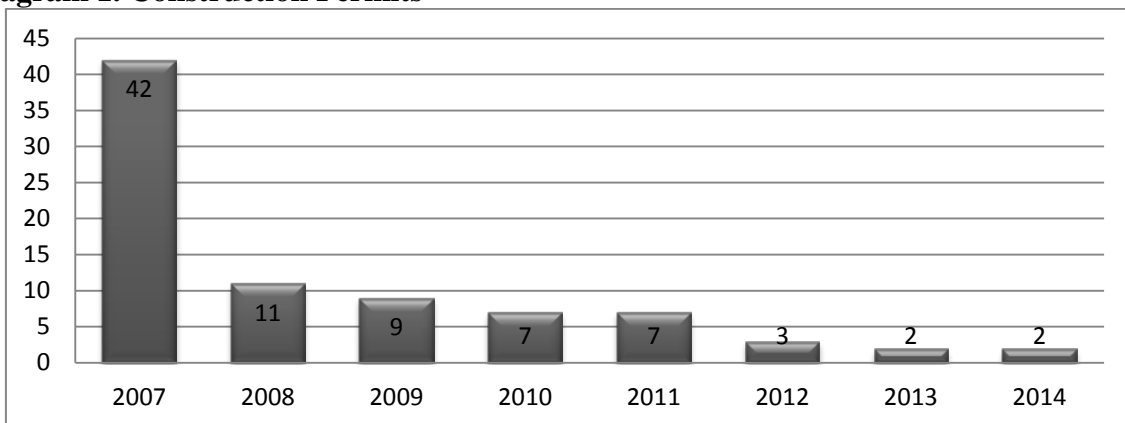


**Scheme 1. Procedures of Construction Permit in Georgia**



The procedure of getting construction permit in case of having all the essential documents lasts for 50 days: 30 days for the first stage and 10 days for the second and third for each. Additionally, the country is annually progressing in the easiness and availability of getting the construction permit. Referring to the joint annual research of the World Bank and International Finance Corporation “**Doing Business**” in the year 2014 out of 189 countries Georgia is taking the second position in terms of the easiness of getting the construction permit. In 2007 Georgia would possess the 40<sup>th</sup> place in the same rating. However, based on the carried out reforms the country’s position would promote yearly<sup>6</sup> (see diagram #1).

**Diagram 1. Construction Permits<sup>76</sup>**



The existence of national technical regulations in any developed country is a significant document regulating construction business. Engineering-technical and technical-economic type decision making in building should be based on technical parameters elaborated and recognized prior. This would happen always and everywhere in construction sphere, but in modern civilization conditions the mentioned parameters consider many factors. What is more important, decision making is regulated by regarding these factors. Currently, construction in Georgia is regulated by using Russian technical data (СНиП), since only the part of national regulations is practiced which is not surely sufficient. Obviously, Russian “SNIPS” disregard the influence of local natural conditions, geopolitical reality, territorial settlement and lifestyle on economic development, formation of healthy environment and security. Foreign experience, having different conceptual approach towards the issue, should be considered in this respect. In particular, the state does not work on all the standards of construction announcing it to be obligatory, it only states technical regulations

<sup>76</sup> <http://www.doingbusiness.org/reports/global-reports/doing-business-2014>

counting on the country's security, technical-economic progress, state and private interests. Definite standards can be set within the frames of the stated technical regulations by certain firms or different competent organizations or structures. The part of the stated standards can be for mandatory as well as for optional use thus providing their authors and owners with certain extra reviews since they become commercial bodies. Consequently, based on the international experience there are two different models of technical regulating of construction. The basis of technical regulation is the legislation and national development programs in the USA, Europe and civilized countries of Asia, while in Russia and CIS countries the same basis is the recommendations made on the background of collective contracts between those countries which in most cases do not consider national legislation and developing trends. Incomplete legal-normative database not only hinders the development of construction sector but creates meaningful problems for customers. Notwithstanding recent political-economic events of the country the construction sector is still being developed with more or less dynamics. Majority of the population able to pay is actively involved into the country's construction business; they have their financial means mainly invested in housing. In Georgia the rights of housing and construction customers are not preserved as customers in fact are not aware of their legal rights; construction sector is not provided by the necessary contemporary standards and technical regulations; there are no insurance mechanisms to protect customers' rights; contract relationships between the consumer and builder are not regulated, etc. We should note the particular urgency of the topic on the premis of signing European Union Association Agreement. The fact implies the protection of customers' rights on an appropriate level along other various requirements. The above-mentioned problem needs to be studied with the complex approach thus fostering the formation of united policy in the sphere of customers' rights enabling each consumer to stand for their legal rights better.

### **Conclusion**

Even though Georgia has many years of experience in developing construction business, the sector still needs to have perfect legislative-normative database adjusted to the national interests. Although, the country accepted a lot of legal-normative acts in recent years to improve construction regulation, the current reality does not indicate any improvement.

- It is a fact that the abundance of legislative-normative acts regulating construction in Georgia stipulates the difficulty of their use, because of which in 2004 the Parliament of Georgia issued the resolution on "Construction Code of Conduct of Georgia" but the resolution has not been fulfilled so far. The project of "Spatial Planning and Construction Business Code" having the mission of playing a significant role in the efficient regulation of the sector is still being under the reviews and discussion;
- Currently, construction in Georgia is regulated by using Russian technical data (СНИП), since only the part of national regulations is practiced which is not surely sufficient. Owing to the wrong methodology and incorrect approach towards technical regulation the latter formed as a problematic issue in Georgia;
- The Spatial Planning and Construction Policy Department at the Ministry of Economy and Sustainable Development of Georgia determines the policy of construction sector development while supervision activities are executed by the "Agency of Technical and Construction Supervision";
- On the scales of separate towns and regions for the regulation of construction processes the architectural local services are created within local urban bodies and their basic purpose is to provide fullscale management of architectural-construction processes in their administrative frames;

- Developed countries have obtained and possess the complex system of quality assurance and control in the sphere of construction covering three stages: supervision of the state, of local authority and of insurance companies;
- Referring to the foreign experience we should inculcate a new system of elaborating technical regulations and standards in construction approved by the state while definite standards can be set within the frames of the stated technical regulations by certain firms or different competent organizations or structures. Functioning and the utilization of standards will be either mandatory or optional;
- Georgia does not use the potential of insurance companies to control construction quality. There are no legal mechanisms and construction companies do not insure the building unless rare exceptions. The reality makes a customer particularly vulnerable having no guarantee proving construction quality or the guarantee of the construction to be completed.

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## COMMUNICATING ACROSS DISCIPLINES AND CONTEXTUAL DIVERSITY: THE EXAMPE OF RUSSIAN COMMUNICATION ASSOCIATION

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### Abstract

This paper presents a pilot study aimed at streamlining and systematizing information on the development of the communicative trends in Russia. To achieve this goal the authors utilize the results of the examination of the most significant long-term projects of the Russian Communication Association (RCA) in relation to their dynamics and quantitative indicators across disciplines and contextual diversity of its members' profiles, activities and partnerships with academic schools, other professional organizations, specialized departments, faculties and universities in Russia and worldwide. The data sources included the archives of documents and publications, including the archive on the RCA public website (russcomm.ru), journals, monographs and books collected during the implementation of the association's book project, and internet resources. In addition, the examination was supported by the results of the survey (open-ended questions) of a representative sample of the RCA members and participants of the RCA's social groups, and by the results of direct observations of the behavior of the participants of the scientific communication. These observations mostly focused on the behavior of the participants during preparatory and implementation stages of the RCA's most significant events and in events of interpersonal communication: e-mail correspondence, mailing lists, answers and comments to messages in social groups, etc. The results of the examination can provide insights for further development of studies in the domain of theory and practice of communication.

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**Keywords:** Russian Communication Association, contextual diversity, theory and practice of communication

### Introduction

Documenting any organization's history is an important element of its image and self-awareness; it can also promote the awareness of its members about the place of the organization they belong to in a bigger context or domain. Usually historical essays are initiated by the leadership for publication purposes or media coverage. This often coincides with some important event or anniversary. In this case the authors have set an urgent task to collect, compile and reflect on some basic facts that refer to the Russian Communication Association (RCA), relatively young professional association. Indeed, there is a quite established body of research on some aspects of the RCA's activities (Rozina, 2002; Rozina, 2003(a); Rozina, 2003(b); Rozina, 2003(c); Rozina, 2004; Rozina & Tuzlukova, 2007(a); Rozina & Tuzlukova, 2007(b); Rozina, 2009(a); Tuzlukova & Rozina, 2009; Rozina, 2009(b); Rozina, 2010; Leontovich, 2011, etc.). In addition, some positive evaluation of the RCA can be traced in the studies by such prominent scholars as Tolstikova-Mast and Caton, 2002; Wasylyk, 2004; Sharkov 2012; Rubin et al., 2010. Moreover, links to the RCA website

can be found on various popular international communication projects, official websites and in digital libraries (see: educational portal “Economy. Sociology. Management” [<http://ecsocman.hse.ru/text/16081934/>]; helpdesk of the Russian National Library [<http://www.vss.nlr.ru/>]; social network for academic collaboration [<http://www.academia.edu/>] for more information). The evaluation of any organization, including non-profit ones, can be determined by its content and contribution to the subject area (Trammell, 2008). In case of RCA, its content and contribution are determined by its impact on communication studies, or theory and practice of communication.

This paper is aimed at examining RCA’s most significant long-term projects in relation to their dynamics and quantitative indicators across disciplines and contextual diversity, participants’ profiles, partnerships with academic schools, other professional organizations, specialized departments, faculties and universities in Russia. These national level perspectives are added by international ones and include success stories based on RCA participation in global academic events e.g. international schools, conferences, and publications.

The examination was conducted as a pilot study to help streamline and systematize information on the development of the communicative trends in Russia available due to the efforts of RCA.

The data sources included archives of documents and publications, including the archive on the RCA public website ([russcomm.ru](http://russcomm.ru)), journals, monographs and books collected during the implementation of the association’s book project, and internet resources. In addition, the examination was supported by the results of the survey (open-ended questions) of a representative sample of the RCA members and participants of the RCA social groups and by the results of direct observations of the behavior of the participants of the scientific communication. These observations mostly focused on the behavior of the participants during preparatory and implementation stages of the RCA’s most significant events and in their interpersonal communication: e-mail correspondence, mailing lists, answers and comments to messages in social groups, etc.

### **History of Russian Communication Association**

The intense exploration of communication problems in the world, in Europe and partially in Russia started in the second half of the 20th century, for example, study of methods of formalizing posts in cybernetics and informatics in 1950s-1960s; investigation of psychological characteristics of communication, speech acts in 1960s-1970s; sociological, cultural and interdisciplinary studies in 1980s (Kadirov, 2011; Sharkov, 2002:9). Later at the end of the 20th century, some significant changes in the academic community formed the ground for creating a professional association that would unite specialists in a new for Russia interdisciplinary scientific field. Some of these events can be attributed to the formation of precursors of communication studies in the social sciences from virtually "zero", and, later, to the positioning of communication disciplines in humanities. To exemplify, in 1970s the researchers of the psycholinguistics and communication theory sector at the Institute of Linguistics of the Russian Academy of Science released collections of articles, which reflected the problems of intercultural communication. In 1996 “Linguistics and Intercultural Communication” appeared as a new specialty recognizing the importance of learning a foreign language in relation to culture, traditions and mentality of the people who speak this language (Ter-Minasova, 2000). This period also featured a number of textbooks, monographs and dissertations rooted in comparison and contrast of different languages and cultures; significant theoretical studies in the field of intercultural communication (see, for example, Klyukanov; Leontovich, Roth and Kopteltseva), and launching of a wide range of

journals on communication issues, e.g. "Linguistics and Intercultural Communication" series ("Vestnik of Moscow State University").

The end of the 20th and the beginning of the 21st centuries also witnessed a proliferation of the contacts amongst different cultures; the number of economic, political and informational links in the world also increased (Rot & Kopteltseva, 2001:7). The Russian scientists got access to textbooks and monographs on communication issues by foreign authors (mostly American and in English), to journals and articles, international conferences and projects, including those supported by exchange programs and foundations. Moreover, Russian professors and scholars started to develop communication courses, establish relations with foreign experts and work together to explore similar research problems and challenges. These included, for example, managing uncertainty, features of verbal and nonverbal communication, taxonomy of culture, communication research methods, etc. However, due to the huge backlog of the humanities in Russia from the world knowledge base in the field, especially in its applied aspects, sufficient knowledge of English was of pivotal importance, especially for presenting Russian schools' research achievements in publishing and in scientific communication. Therefore, as revealed in the studies by Rot and Kopteltseva (2001); Golub and Tikhonova (2006), the research focus was on the linguistic component of communication as well as issues of psycholinguistics, ethno-cultural specificity of language consciousness, discursive approach, and foreign language teaching and learning. This was followed by understanding of the need for teaching materials on intercultural communication and on communicative competence that was required in various areas of the national economy and society (e.g. politics, economics, public administration, education, international tourism, etc.). Many institutes, departments and university's faculties were renamed to fit the communication "trend" in higher education, e.g. Institute of Philology and Arts at Kazan Federal University was renamed in 2011 to the Department of Translation Studies and Intercultural communication (see: [[http://kpfu.ru/main\\_page?p\\_sub=6553](http://kpfu.ru/main_page?p_sub=6553)] for more information).

The Russian Communication Association was officially established in December, 2000. However, it was registered as an independent professional organization only two years later, on October 18, 2002 and received the registration number 102610004259. The association aimed at further promoting research in communication and communication studies in Russia, and developing practice of communication in the Russian society, which, according to the founders of the association, "particularly needs help from its communication scholars, since our numerous problems are often the result of communication incompetence or lack of desire to communicate constructively with others" (see: RCA website [[http://www.russcomm.ru/eng/rca\\_office/inf\\_letter.shtml](http://www.russcomm.ru/eng/rca_office/inf_letter.shtml)] for more information).

If there was anything special about RCA, it was definitely a proposed type of interaction, namely symbolic interaction (Voyskunsky, 2000:106) or computer-mediated communication (Wood and Smith, 2001). This type of interaction required communication skills and skills to manage interactions in virtual (internet-based) communities and to contribute to its functioning (Voyskunsky, 2000). The founders of RCA were scholars with international experience. Moreover, the association's first inspiring leader and the first president was Olga I. Matyash, Professor of Indiana University – Purdue University, Indianapolis, USA. The contemporary coordination committee of the association mostly consists of the members representing Russian scholars from different regions and cities of the country, namely Rostov-on-Don, Moscow, Voronezh, Volgograd, St. Petersburg, Krasnoyarsk. Nevertheless, one member is currently working in the Eastern Washington University, Cheney, WA (see more detailed information: [[http://russcomm.ru/eng/rca\\_office/sovet\\_eng.shtml](http://russcomm.ru/eng/rca_office/sovet_eng.shtml)] and [[http://russcomm.ru/rca\\_office/sovet.shtml](http://russcomm.ru/rca_office/sovet.shtml)]). As for the association' members they represent

multicultural and multilingual research community that is open to everybody. Leontovich (2010) observes that all members of RCA "... have grown out of different disciplines, such as Linguistics, Psychology, Sociology, Computer Science, and others". She further notes that they "are still torn between those fields" (see: [[http://www.icahdq.org/pubs/publicnewsletter/2008/9/SEP08\\_RUSSIA.asp](http://www.icahdq.org/pubs/publicnewsletter/2008/9/SEP08_RUSSIA.asp)] for more information). However, for most of them, RCA and communication studies have turned out to be their common territory and the territory of productive intersection of interests of different disciplines, languages and cultures, and further professional growth. Quite interestingly, some of the members of the association also represent international communication associations and organizations, e.g., ECANA (Eurasian Communication Association of North America, ECANA), ECREA (European Communication Research and Education Association).

RCA is, therefore, based on the community of interests, which members share common goals, values, research, professional, and sometimes personal interests, and are motivated by the need to share their research and to communicate them to the community and to the public. For communication purposes the members of the association use interactive computer-mediated tools that provide free, voluntary and spontaneous communication in space and time, worldwide accessibility, flexibility of time, place and projects using such applications as web-site, e-mail, mailing list, forum, discussion; stimulate interactions; connect researchers, who are increasingly distributed across countries and even continents; eliminate "time-outs"; contribute to rapid distribution of information, exchange of the results of research and practice; reduce travel costs and time spent away from home and classroom activities; support intra- and intercultural contacts with peers and support a wide range of autonomous contributions by the association members and diversity of its activities (Rozina & Tuzlukova, 2007b).

Since its inception the major activities of RCA have included but have not been limited to information exchange and research support and to integration of communication curricula in academic institutions. Other activities, involving a substantial number of the association's members included organizing of professional events, e.g. conferences, seminars and workshops, publishing, and enhancing cooperation with other communication associations worldwide, e.g., NCA, ICA, and ECREA. For example, in 2010 RCA member, professor of Wake Forest University Michael Hazen organized and presided over sponsored sessions of RCA on the ICA conference in Boston. Here it is worth noting that in 2006 American scholars, members of RCA, united into a separate professional association aimed at assisting it. At this time the Russian government adopted the law according to which the foreigners were banned to participate in the Russian NGOs' activities. Originally this organization got the name of North-American Russian Communication Association (NA RCA). Later in 2010 it was renamed as Eurasian Communication Association of North America (ECANA). The representatives of ECANA are not the members of the RCA Coordination Committee; meanwhile they help to organize the sponsored sections of RCA on the ICA and NCA conferences.

RCA's partnerships currently involve National Communication Association (USA), International Communication Association (USA), Communication Research and Education Organization (Europe), etc. These organizations have considerable professional experience, and actively support RCA and its projects, e.g. RCA library project. This project was initiated by Professor Nancy Jackson at Clemson University. The idea behind the project was to supply Russian educational centers with books and teaching materials on communication studies. The project resulted in a collection of 85 books on various types of communication for Volgograd universities (see: [[http://russcomm.ru/rca\\_projects/bookproj/index.shtml](http://russcomm.ru/rca_projects/bookproj/index.shtml)] for more information). Another project was aimed at encouraging scholarly and academic

publications on theory and practice of communication through organizing the biennial contest “The Best Book in Communication Studies and Education in Communication”. The contest is focused mainly on Russian authors and groups of authors; however submissions in other European languages are also welcome. The only requirement is that submissions should fit one of the following categories: practical manuals, teaching guides, scientific or theoretical monographs. Within ten years, there have already been six contests with more than three hundred participants in various thematic fields (categories) including such areas as: Communication Theory; Mass-Media Communication; Political Communication, Intercultural, Cross-Cultural, International Communication; Organizational, Professional, Business Communication, Public Relations; Computer-Mediated Communication; Human-Computer Interaction, Distance Education /E-Learning and others.

RCA has also launched several publications that provide forums for the communication scholars: Vestnik of RCA and Russian Journal of Communication. Russian Journal of Communication, peer-reviewed scientific journal, was a result of an agreement between RCA and Marquette Books LLC SPOKANE, WA USA ([www.MarquetteBooks.com](http://www.MarquetteBooks.com)) signed in 2008. The journal’s issues has welcomed “...the theoretical and empirical papers and essays and books reviews that advance an understanding of communication in, with and about Russia” (retrieved from the site: [http://www.russcomm.ru/eng/rca\\_projects/rjoc/](http://www.russcomm.ru/eng/rca_projects/rjoc/)), and has been very successful in providing a venue for open discussions in empirical, comparative and historical studies in the field of communication. Since January 2013 Russian Journal of Communication has been hosted by Routledge Publishing House (<http://www.tandfonline.com/toc/rrjc20/current>).

As for now, RCA is engaged in a number of research projects that cover recent trends and research programs on communication studies, namely Communication Theory; Mass-Media Communication; Political Communication; Intercultural, Cross-Cultural, International Communication; Organizational, Professional, Business Communication, Public Relations; Interpersonal Communication; Rhetoric, Speech Communication, Public Speaking; Communication and Culture, Language and Social Interactions; Computer-Mediated Communication, Human-Computer Interaction, Distance Education /E-Learning; Instructional Communication; Media Education; Communication problems in translation and interpretation. The research topics suggested for the future studies include some new intriguing areas of communication expansion: communication aspects in psychotherapy and communication competence. Internationalizing development of Theory and Practice of Communication as a discipline at tertiary level education in different countries might also be significant for RCA and for facilitating cooperation with researchers worldwide.

### **Conclusion**

The paper discussed the results of a pilot study that examined, streamlined and systematized the existing information about Russian Communication Association that has mirrored in its structure, content, activities, disciplinary and contextual diversity recent developments of the communicative trends in Russia. The results clearly demonstrated that the association significantly contributed to the “study of communication as a category of practice” (Klyukanov, 2008:6) through its publications, projects and publications by introducing “more and more Russian voices in the conversation of socio-cultural traditions as an important discursive resource in the study of communication” (Klyukanov, 2008:6).

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## DECREASE IN MARKET VALUE OF A MOTOR VEHICLE

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### Introduction

Whereas in previous years the repair of accidental damages used to be connected with a remainder of accident traces, nowadays it is possible to repair even complicated accidental damages virtually without any trace or at least without defects by using today's conventional repair methods. However, it has to be noted that a vehicle with a repaired accidental damage realizes an inferior value on the market compared to an undamaged comparable vehicle. This decrease in market value can basically be explained by a change in purchase behavior influenced by possible doubts about the professional and proper repair or the apprehension of possible consequences of the accident. This change in vehicle value is therefore not so much caused by technical reasons but can be seen as a result of the purchase behavior and a changed market situation of the vehicle.

Over the past few years a number of calculation methods have been introduced. As a rule, the calculation methods by Ruhkopf/Sahm, the Hamburg method, by Halbgewachs or by BVSK are common practice. In this connection it has to be noted that all calculation methods are subject to specific preconditions and lead only in certain cases to a realistic result. In general, it is necessary that the assessor evaluates the decrease in market value at his discretion as an expert. Knowledge of the market situation as well as a rough estimate of the decrease is, of course, a precondition.

Previously, it was assumed - in particular by jurisdiction - that a vehicle only up to certain age or kilometrage (a maximum of 5 years, a maximum of 100,000 km) is subject to a corresponding decrease in market value. With regard to the usual life of vehicles today (average age of today's fleet of cars in Germany is approx. 7-8 years) and with regard to the reachable kilometrage of the vehicles (kilometrage of 350,000 km and more are quite possible) such limitations are in principle subjected to a critical discussion.

The most important characteristic of a vehicle even if older than 8 years is nowadays always the lack of any accident history so that from the assessor's point of view a decrease in market value has always to be taken into consideration - also for vehicles with more than 100,000 km and older than 5 years.

The corresponding decrease in market value can be estimated by assessors at their discretion having regard to all factors that influence value, in particular the scope of repair and the repair solution. Accurate calculation methods can only be used in few cases.

### Legislative Bases

The claim for compensation of the decrease in value after an accident arises from the general bases of claim obliging compensation such as §§ 823 cont. BGB (German Civil Code), 7,18 StVG (Road Traffic Act) and not directly from §§ 249 cont. BGB (German Civil Code) which only determines the way and the scope of compensation.

According to the principle of restitution in kind the person obliged to pay compensation under § 249 para. 1 BGB (German Civil Code) has to restore the condition which would exist if the circumstance leading to the compensation would not have happened.

As far as the restoration is "not possible or inadequate for compensation" the compensation has to be made "in money" according to § 251 para. 1 BGB (German Civil Code).

The claim resulting from the decrease in market value is based in this respect on the partly impossibility or inadequateness of restitution in kind. The reduced market value according to legal classification has to be distinguished from the actual restitution in kind because the reduced market value exceeds restitution in kind and does not constitute a substitute of benefit (see § 252 BGB [German Civil Code]) or an immaterial compensation (see § 253 para. 1 BGB [German Civil Code]).

**Calculation Methods for Reduced Market Value**

None of the so far existing methods to determine the reduced market value tries to only determine the actual decrease in value on the second-hand car market; in this respect it is at best only a matter of approximate values. Depending on the method different assessment factors are incorporated in the calculation. Vital factors for determining the reduced market value are current replacement value, age, kilometrage and amount of repair costs. In addition, other factors (type, marketability, previous owner, condition, color, previous use etc.) play a role on the second-hand car market. The determination of approximate values corresponds to the desire to handle claim settlement in a practical way as an empiric determination of the actual loss cannot be accomplished for every single vehicle. In order to avoid damage due to a lower market value which will not be compensated the methods must be reviewed critically and on an individual basis and market research must be done for the vehicle, if need be.

**Calculation Method by Ruhkopf/Sahm**

The method according to Ruhkopf/Sahm dates from an essay written in 1962. The authors recommended an across-the-board compensation of the reduced value dependent on the sales value (current replacement value, repair costs and year of registration) in consideration of the market action at that time, which should apply for the primary types of passenger cars, motorcycles, multi-purpose vehicles and vans and are listed in the table below.

The decrease in market value according to Ruhkopf/Sahm is calculated from the repair costs and the current replacement value.

Calculation Factors	Abbreviation
Original price (MSRP)	NP
Current replacement value incl. kilometrage	WBW
Age of vehicle in months	M
Repair cost in total	RK
Repair cost ratio	K
Depreciation	W

Table 1: Calculation factors/abbreviation Ruhkopf/Sahm

For the calculation according to the method by Ruhkopf/Sahm it is necessary to calculate so-called ratios first. These are:

1. Value ratio =  $\frac{WBW}{NP} \times 100$
2. Cost ratio =  $\frac{RK}{NP} \times 100$
3. Effort ratio =  $\frac{RK}{WBW} \times 100$

If the ratio of the current replacement value with respect to the original price (NP) is below 40% the car is depreciated by age or used in such a way that a decrease in market value based on an accident is no longer justified.

$$W (\%) = \frac{WBW}{NP \text{ net}} * 100$$

Formula 1: Depreciation [W%] Ruhkopf/Sahm

$$W (\%) = < 40 \% = \text{no further depreciation}$$

Formula 2: Depreciation question Ruhkopf/Sahm

If the ratio of repair costs to current replacement value is below 10 % a minor damage occurred that does not justify any decrease in market value.

$$K \% < 10 \% = \text{minor damage}$$

Formula 3: Minor damage question Ruhkopf/Sahm

$$\text{Effort Ratio [K \%]} = \frac{RK \text{ net}}{WPW \text{ net}} * 100$$

Formula 4: Effort ratio [K%] Ruhkopf/Sahm

With the help of the table above a factor can be determined using the age of the vehicle (year of registration). The method by Ruhkopf/Sahm requires that the vehicle at the time of the accident was not older than 5 years and that the kilometrage did not exceed 100,000 km. Decrease in market value according to the method by Ruhkopf/Sahm is justified if the value ratio is higher than 40% and the cost ratio higher than 10%. In this case the decrease in market value is calculated according to the following equation:

$$\text{Decrease in value} = \frac{(WBW \text{ net} + \text{rep. cost net}) * \text{factor from table}}{100}$$

Formula 5: Decrease in market value [EUR] Ruhkopf/Sahm

Repair Cost Ratio (K%) to Current Replacement Value	10-30 %	30-60 %	60-90 %
1st year after registration	5	6	7
2nd year after registration	4	5	6
as of 3rd year after registration	3	4	5

Table 2: Repair cost ratio [K%] Ruhkopf/Sahm

Example of Calculation of the Decrease in Market Value according to the Method by Ruhkopf/Sahm

Calculation Factors	Values
Original price (MSRP)	= 30,000 EUR net
Current replacement value (WBW)	= 18,000 EUR gross
Age	= 26 months = 3rd year after registration
Repair costs	= 6,800 EUR net

Table 3: Example values for calculation according to Ruhkopf/Sahm

The determination of the decrease in market value according to the calculation model by Ruhkopf/Sahm is divided into 5 calculation steps:

$$\begin{aligned} \text{➤ Repair cost ratio [K \%]} &= \frac{\text{rep. cost net}}{WBW \text{ net}} * 100 \\ &= \frac{6,800}{18,000} * 100 = 37.8 \% \end{aligned}$$

$$\text{➤ } K \% < 10 \% \neq \text{minor damage}$$

$$\text{➤ } W (\%) = \frac{18,000}{30,000} * 100 = 60 \%$$

$$\text{➤ } W (\%) \neq < 40 \% = \text{no further depreciation}$$

$$\begin{aligned} \text{➤ Decrease in value [Wm]} &= \frac{(WBW \text{ net} + \text{rep. cost net}) * \text{factor from table}}{100} \\ &= \frac{(18,000 + 6,800) * 4}{100} = 992 \text{ EUR} \end{aligned}$$

= 1,000 EUR rounded

If the almost 50-year-old assessment method, in particular its limitations, is still up to the current situation on the second-hand car market may be questioned and rightly so. However, the essential factors - also on today's second-hand car market - are taken into consideration. Moreover, the method by Ruhkopf/Sahm is until now the only method designated as "useful assessment basis" by the German Federal Court of Justice (BGH).

Ruhkopf/Sahm explain their calculation method in more detail in the insurance law magazine VersR 1962, page 593 cont.

### Calculation Method Hamburg Model

The so-called "Swiss formula" is the basis of this calculation method, globally assuming 20% of the repairs costs (net) as decrease in market value. The courts of Hamburg and the Local Court of Bremen developed their own methods out of this, focusing either on kilometrage (Hamburg model) or age of vehicle (Bremen model). The Hamburg model excludes a decrease in market value for a kilometrage of more than 100,000 km.

Kilometrage	Decrease in Market Value in % of Gross Repair Costs
Up to 20,000 km	30 %
Up to 50,000 km	20 %
Up to 75,000 km	15 %
Up to 100,000 km	10 %
More than 100,000 km	0 %

Table 4: Table of correlation Hamburg model

Example of Calculation of the Decrease in Market Value according to the Hamburg Model

Calculation Factors	Values
Original price (MSRP)	= 30,000 EUR net
Current replacement value (WBW)	= 18,000 EUR gross
Age	= 26 months = 3rd year after registration
Repair costs	= 6,800 EUR net
Considerable repair costs	= 4,000 EUR gross
Kilometrage	= 45,000 km

Table 5: Example values for calculation according to Hamburg model

$$\text{Decrease in value [Wm]} = 20\% * \frac{4,000 \text{ EUR}}{100 \%} = 800 \text{ EUR}$$

### Calculation Method Bremen Model

The Bremen model relates the age of the vehicle at the time of the accident to the repair costs caused by the accident. Accordingly, the decrease in market value within the first 6 months amounts to 30 %.

Age of the Vehicle	Decrease in Market Value in Relation to the Repair Costs
Up to 6 months	30 %
Up to 12 months	25 %
Up to 24 months	20 %
Up to 36 months	15 %
Up to 60 months	10 %

Table 6: Table of correlation Bremen model

If a vehicle was older than 60 months then depreciation was no longer justified according to the perception at that time. Background of this perception was then inexistent

corrosion protection of vehicles so that a 5-year-old vehicle already had considerable corrosion damages which were not caused by any accidents.

### Calculation Method by Halbgewachs

The method by Halbgewachs to determine the upper assessment threshold of the decrease in market value dates from a brochure published by DEKRA in 1964 which was updated until 2003.

It relates the manufacturer's suggested retail price (MSRP) to the age of the vehicle and the repair costs, dividing the repair costs into wages and spare parts. Moreover, the total repair costs shall be corrected to an average local charge rate of working hours. Furthermore, previous damages and change of owners are taken into consideration.

For calculation according to Halbgewachs also so-called ratios need to be calculated but the effort ratio (compared to the method by Ruhkopf/Sahm) is defined differently.

1. Value ratios =  $\frac{WBW}{NP} \times 100$
2. Cost ratio =  $\frac{RK}{NP} \times 100$
3. Effort ratio =  $\frac{Wage\ costs}{Spare\ part\ costs} \times 100$

Decrease in market value according to the method by Halbgewachs is justified if the value ratio is higher than 40% and the cost ratio higher than 10%, calculated according to the following formula:

$$Decrease\ in\ value\ [Wm] = \frac{WBW + RK(net)}{100} * X$$

Formula 6: Decrease in market value according to Halbgewachs

#### Original Price (Manufacturer's Suggested Retail Price MSRP)

The original net price including extra equipment at the time of the first registration is used as calculation basis.

#### Current Replacement Value (WBW)

For the calculation the current replacement value on the day of the damage has to be determined and entered into the corresponding formula.

#### Age of the Vehicle

The age of the vehicle is indicated in full months. Consequently, already on the first day after the first registration one month has to be inserted into the calculation formula.

If the vehicle is older than 72 months only in special justified cases a decrease in market value should be calculated.

#### Costs of Repair, Wages and Spare Parts

All costs without statutory value-added tax are taken as basis for the calculation of the decrease in market value. Additionally, the costs for wages are corrected to an average local charge rate of working hours.

The decrease in market value should not depend on the level of the hourly wage. Otherwise it would lead to the strange result that a higher decrease in market value would be determined if the repair was carried out in an expensive "branded garage" which is regarded as being the better choice by the typical buyer of second-hand vehicles than in a "inexpensive" garage.

This objectively better repair will lower the reduced market value. Without correction the decrease in market value would be higher therefore the costs of wages have to be corrected to the average local charge rate of working hours.

## Ratios

### Value Ratio (W)

The value ratio corresponds to the ratio of the current replacement value (WBW) to the original price (NP) at that time in percent. This ratio sheds light on the fact if a decrease in market value is still justified. If the ratio is below 35% then the precondition for decrease in market value is missing. The vehicle is already depreciated to the extent that a proper repair does not have any additional negative effects.

$$W (\%) = \frac{WBW}{NP} * 100$$

Formula 7: Value ratio; Halbgewachs

### Cost Ratio (Value K or A)

K corresponds to the ratio of repair costs (RK) to the current replacement value (WBW) in percent. This ratio indicates if on the one hand a minor damage has occurred or on the other hand a total economic loss.

$$K (\%) = \frac{RK}{WBW} * 100$$

Formula 8: Cost ratio; Halbgewachs

In general, a minor damage has occurred if the repair costs amount up to approx. 750 € not leading to a claim for a decrease in market value.

A cost ratio < 10% signalizes to the assessor to look individually at the decrease in market value. It should not be ruled out categorically. The absolute amount of the repair costs have to be taken into consideration. If in case of a very high realization value a damage below  $K = 10\%$  has occurred it may still be a considerable damage to well-equipped vehicles and may result in a decrease in market value.

As a car can be repaired up to the threshold of total loss, meaning the ratio of the sum of repair costs (RK) and the decrease in market value (WM) to the current replacement value (WBW) is < 130%, then the reduced market value up to the total amount of damage has to be determined.

### Effort ratio (Value A or B)

The effort ratio (A) corresponds to the ratio of wage costs (LK) to the material costs (MK) in percent. This ratio indicates to which extent parts are changed and repairs have to be made. In case of a value of  $A < 40\%$  the share in material costs is high or the repair work carried out is low, therefore the risk of latent defects is also very low. In such a case it must be examined in detail if there is a claim for a decrease in market value.

1. Effort ratio =  $\frac{\text{Wage costs}}{\text{Spare part costs}} * 100$

Factor X in the Table

Factor X can either be read directly from the table via the cost ratio and the effort ratio.



A-Wert Kostenverhältnis	I 10-20 %					II 21-33 %					III 34-45 %					IV 46-65 %					V 66-90 %					
B-Wert Aufwandsverhältnis	a	b	c	d	e	a	b	c	d	e	a	b	c	d	e	a	b	c	d	e	a	b	c	d	e	
	130 ^	130-100 v	100-70 v	70-50 v	50-40 v	130 ^	130-100 v	100-70 v	70-50 v	50-40 v	130 ^	130-100 v	100-70 v	70-50 v	50-40 v	130 ^	130-100 v	100-70 v	70-50 v	50-40 v	130 ^	130-100 v	100-70 v	70-50 v	50-40 v	
Alter bis 2 Monate	5,0	4,5	4,0	3,5	3,0	5,25	4,75	4,25	3,75	3,25	5,5	5,0	4,5	4,0	3,5	5,75	5,25	4,75	4,25	3,75	6,0	5,5	5,0	4,5	4,0	4,0
Alter bis 6 Monate	4,5	4,0	3,5	3,0	2,5	4,75	4,25	3,75	3,25	2,75	5,0	4,5	4,0	3,5	3,0	5,25	4,75	4,25	3,75	3,25	5,5	5,0	4,5	4,0	3,5	3,5
Alter bis 12 Monate	4,0	3,5	3,0	2,5	2,0	4,25	3,75	3,25	2,75	2,25	4,5	4,0	3,5	3,0	2,5	4,75	4,25	3,75	3,25	2,75	5,0	4,5	4,0	3,5	3,0	3,0
Alter bis 24 Monate	3,5	3,0	2,5	2,0	1,5	3,75	3,25	2,75	2,25	1,75	4,0	3,5	3,0	2,5	2,0	4,25	3,75	3,25	2,75	2,25	4,5	4,0	3,5	3,0	2,5	2,5
Alter bis 36 Monate	3,0	2,5	2,0	1,5	1,0	3,25	2,75	2,25	1,75	1,25	3,5	3,0	2,5	2,0	1,5	3,75	3,25	2,75	2,25	1,75	4,0	3,5	3,0	2,5	2,0	2,0
Alter bis 48 Monate	2,5	2,0	1,5	1,0	0,5	2,75	2,25	1,75	1,25	0,75	3,0	2,5	2,0	1,5	1,0	3,25	2,75	2,25	1,75	1,25	3,5	3,0	2,5	2,0	1,5	1,5
Alter bis 60 Monate	2,0	1,5	1,0	0,5		2,25	1,75	1,25	0,75	0,25	2,5	2,0	1,5	1,0	0,5	2,75	2,25	1,75	1,25	0,75	3,0	2,5	2,0	1,5	1,0	1,0

The factor X can be calculated using the following formulas.

X is the sum of 3 values (X= Xm + Xk + Xa). The values represent the age of the vehicle (Xm), the ratio of the repair costs to the current replacement value (Xk) and the ratio of the wage costs to the material costs (Xa).

Calculation of the Individual X Factors

The factor Xm is calculated from the age of the vehicle. x is the age of the vehicle in months (formula for x = 0 to 72 months).

$$Xm = \frac{0.0008 * x^4 - 0.3 * x^3 + 25 * x^2}{10,000} - 0.1136 * x + 3.2$$

The factor Xk is calculated from cost ratio K.

$$Xk = \frac{-0.002 * K^3 - 0.4 * K^2 + 192 * K}{10,000} - 0.082$$

The factor Xa is calculated from the effort ratio A.

$$Xa = 1.5392 * Ln(A) - 5.5773$$

Factor X is the sum of all individual factors.

$$X = Xm + Xk + Xa$$

Examples of the Decrease in Market Value according to the Model by Halbgewachs

Calculation Factors	Values
Original price (MSRP)	= 30,000 EUR net
Current replacement value (WBW)	= 18,000 EUR gross
Age	= 26 months = 3rd year after registration
Repair costs	= 6,800 EUR net
Wage costs	= 2,800 EUR gross
Material costs	= 3,100 km

Table 7: Example values for calculation according to Halbgewachs model

$$W (\%) = \frac{WBW}{NP} * 100 = \frac{18.000 \text{ €}}{30.000 \text{ €}} * 100 = 60\% \rightarrow \text{O.K. as } > 35\%$$

$$K (\%) = \frac{RK}{WBW} * 100 = \frac{6.800 \text{ €}}{18.000 \text{ €}} * 100 = 37,8\% \rightarrow \text{O.K. as } > 10\% \text{ and } > 130\%$$

$$A = \frac{LK}{MK} * 100 = \frac{2.800 \text{ €}}{3.100 \text{ €}} * 100 = 90\% \rightarrow \text{O.K. as } > 40\%$$

Factor X in the Table = 2.5

$$WM = \frac{(WBW+RK(net))}{100} * X = \frac{(18.000 \text{ €}+6.800 \text{ €})}{100} * 2.5 = 620 \text{ €}$$

### Calculation Method by BVSK

Essential reference values for determining the decrease in market value are the current replacement value and the extent of repairs; these factors have a decisive influence over the purchase pattern. Regarding the other factors it is necessary to distinguish between factors

influencing the decrease in market value and factors with little or no influence on purchase behavior.

The amount of a decrease in market value is influenced by the following factors. These factors are taken into consideration due to the current replacement value of the vehicle at the time of the accident.

- Vehicle owner
- Kilometrage
- Number of owners
- Condition
- Marketability
- Special equipment.

These factors are consolidated in the classification of damages:

- Extent of the damage
- Repair solution
- Repair costs.

In classifying the extent of damage, influencing variables such as different charge rates, extra charges on spare part prices and transport costs are eliminated. The classification of damage only constitutes the factor including the actual damage of a vehicle. This factor is only to be determined by the assessor on the basis of the actual damage.

Therefore, the amount of a decrease in market value is essentially determined by the influencing variables of current of replacement value and classification.

To avoid double impact of the influencing variables of marketability already included in the current replacement value, a rule in form of a value M must be introduced. Without introduction of such a factor a higher reduced value would be the result for a marketable vehicle with the same claims rating category than for a vehicle with inferior marketability. For a vehicle that already has inferior marketability without previous accidental damage a higher reduced value has to be applied than for a vehicle with good marketability and previous accidental damage.

**Determination of the Claims Rating Categories (% - category)**

The damage (%-category) is classified according the following list:

Category	Description	% - values - category
1	Minor damages with replacement of attached parts (e.g. bumpers) and paintwork without straightening	0 to 0.5%
2	Minor damages with replacement of attached parts and screwed body parts without straightening	0.5 to 1.5%
3	Replacement of attached parts and screwed body parts and straightening of welded body parts	1.5 to 2.5%
4	Replacement of attached parts and screwed body parts, replacement of welded body parts and straightening of such parts, replacement of axle parts	2.5 to 3.5%
5	As category 4, but considerable straightening	3.5 to 4.5%
6	Replacement of attached parts, screwed and welded body parts, straightening of such parts as well as frame and floor pans, use of straightening bench, replacement of axle parts	4.5 to 6.0%
7	As 6, but additionally also use of frame parts and floor pans, use of straightening bench, damages front and rear	6.0 to 8.0%

Table 8: Claims rating category for calculation according to BVSK

**Determination of Value M**

Market dependency (factor M) is defined according to the list below:

Description	Value M
Good marketability	-0.5 %
Medium marketability	0.0 %
Inferior marketability	+1.0 %
Very long standstill periods, rare exotic vehicles	+2.0 %

Table 9: Value M for calculation according to BVSK

### Determination of Factor K

When determining the decrease in market value of light commercial vehicles their special market situation has to be taken into consideration using another correction factor K.

The approach of the correction factor K should likewise be examined regarding vehicles with an already repaired previous damage.

Factor K is a sensitive value to be evaluated at assessor's discretion. The following values are suggested for factor K:

Description	Factor K
Light commercial vehicles	0.8
Repaired previous damage exists	0.8-0,5

Table 10 Factor K for calculation according to BVSK

### BVSK Calculation Formulas

$$WM = WBW * \left( \frac{\% -category + value M}{100} \right) * \text{Factor K}$$

### Evaluation

As the explanation above shows there are several calculation models for determining the decrease in market value. In this connection it has to be noted that all calculation methods are subject to a specific precondition and lead only in certain cases to a realistic result. In general, it is necessary that the assessor evaluates the reduced market value at his discretion as an expert. Knowledge of the market situation as well as a rough estimate of the decrease is, of course, a precondition.

Previously, it was assumed, in particular by jurisdiction, that a vehicle only up to certain age or kilometrage is subject to a corresponding reduced market value.

Concerning the service life of vehicles (average age of today's passenger car fleet in Germany is approx. 8-9 years) and with regard to the possible kilometrage of vehicles (kilometrage of far more than 250,000 km) such limitations are in principle subjected to a critical discussion.

The most important characteristic even for vehicles older than 8 years is nowadays always the lack of an accident history. The corresponding decrease in market value can be estimated by assessors at their discretion having regard to all factors that influence value, in particular the scope of repair and the repair solution. More accurate calculation methods can only be used in a few cases.

# THE CHOICE OF FINANCIAL PERFORMANCE MEASURES AS ONE OF THE MOST CRITICAL CHALLENGES FACING CORPORATION

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## Abstract

The value-based measures are discussed by focusing on their measurement logic: The most important value-based measures are: economic value added (EVA), the cash flow return on investment (CFROI), the shareholder value added (SVA), the economic margin (EM) and the cash flow value added (CVA). The aim of this work is the collection and compilation materials about the Value Based Management (VBM) approach. Although an integral part of VBM-approach measures the value of the company, it fundamentally differs from traditional methods of the business evaluation, most of which give a "point" result and are isolated from management context and are snatched out of the ultimate goal and do not assume its monitoring.

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**Keywords:** Value Based Management (VBM), Economic value added (EVA) Cash flow return on investment (CFROI), Shareholder value added (SVA), Economic margin (EM), Cash flow value added (CVA)

## Introduction

The theory and practice of business valuation are widely used in the works of foreign scientists. Best known scientists were awarded the Nobel Prize (James Tobin (1981), Franco Modigliani (1985) and Robert Merton (1997)) for developing the performance measurement systems.

Fisher (1930) and Hirschleifer (1958) introduced the discounted cash flow techniques, such as Net Present Value (NPV) and the Internal Rate of Return (IRR). Miller and Modigliani (1958; 1961) suggested a more consistent determination of valuation. Gordon (1962) incorporated growth and the cost of capital in valuation models. In order to determine the cost of capital, Sharpe (1964), Lintner (1965), Mossin (1966), and Black (1972) developed the Capital Asset Pricing Model (CAPM). Solomons (1965) introduced the divisional performance and the adaptation of Residual Income (RI), while Tobin (1969) suggested the Tobin's Q as the proper valuation method. Stern (1974), motivated by Miller and Modigliani conclusions, worked on Free Cash Flows (FCF), and lastly Rappaport (1986) and Stewart (1991; 1999) developed a new concept known as the Shareholder Value (SHV) approach. Modern value-based performance measures gained their popularity since the late 1980s, and thereby, the Value Based Management (VBM) approach became increasingly popular both as a decision making tool and as an incentive compensation system (Knight, 1998).

Firms focused on the maximization of shareholder value need to ensure that all activities yield positive net present values. A number of value-based financial performance measures have been developed in an attempt to guide management actions towards achieving this objective.

The value-based measures are discussed by focusing on their measurement logic: The most important value-based measures are: economic value added (EVA), the cash flow return on investment (CFROI), the shareholder value added (SVA), the economic margin (EM) and the cash flow value added (CVA)<sup>77</sup>. This article will focus on calculation, examining the data, the advantages and disadvantages of these methods.

### **Total shareholder return (TSR)**

This is the change in a company's stock price for a given period plus its free cash flow over the same period, as a percentage of the beginning stock price. TSR can be measured only for publicly traded companies because it requires observable stock prices.

**Total shareholder return = (Stock price<sub>End of period</sub> – Stock price<sub>Start of period</sub> + Dividends paid) ÷ Stock price<sub>Start of period</sub>**

The Boston Consulting Group (BCG) mentions the total shareholder return (TSR) as the central metric of the entire corporate strategy process and underlines the following advantages of using this approach: 1) it incorporates the value of dividends and other cash pay-outs which can represent anywhere from 20 to 40% (or even more) of a company's TSR; 2) it integrates all the dimensions of the value creation system better than other accounting-based or cash-based metrics; 3) the minimum appropriate TSR goal is easy to establish: it will be set by either the company's cost of equity or the expected average TSR of its peer group (assuming that this average is higher than the cost of equity). Therefore, the firm can easily state how much higher it should reach depending on the aspirations of the senior team and on its competitive advantages and management capabilities.<sup>78</sup>

### **Market Value Added (MVA)**

Market Value Added (MVA) is the difference between the capital that has been invested and the market value of the capital. MVA is the assessment within the marketplace on what the net present value is for all investments made by the company.

MVA = Shareholder Value Added + Residual Value

1. MVA is also used as a way of benchmarking market performance between companies. In order to have a comparable MVA, a standardized MVA is calculated by dividing the change in MVA by the adjusted equity value at the beginning of the year.

### **Economic Value Added (EVA).**

EVA is an estimate of the economic profit generated by a firm<sup>79</sup> and is after tax (NOPAT) to the total cost of all its forms of capital (debt, as well as equity).<sup>80</sup> Maximization a firm's EVA should result an increase in shareholder value created.<sup>81</sup> Proponents of the measure report high levels of correlation with share returns.<sup>82</sup>

The EVA measure is expressed by the following formula:

<sup>77</sup>Lehn, K.L., & Makhija, A.K. (1996). EVA and MVA as performance measures and signals for strategic change. *Strategy and Leadership*, 24(3), 34-40.; Grant, 2003 Foundations of EVA TM for investment managers. *Journal of Portfolio Management*, 23(1), 41-48.; Stewart, G.B. (1991). *The Quest for value: The EVA TM management guide*. New York: HarperBusiness.)

<sup>78</sup>Boston Consulting Group (2008) Missing link—Focusing corporate strategy on value creation. *The 2008 Value Creators Report*.

<sup>79</sup>Stern, J. M., G. B. Stewart III and D. H. Chew, Jr. (1995), 'The EVA® Financial System', *Journal of Applied Corporate Finance*, 8(2).

<sup>80</sup>Grant, J.L. 2003. Foundations of EVA TM for investment managers. *Journal of Portfolio Management*, 23(1), 41-48.)

<sup>81</sup>Stewart, G.B. (1991). *The Quest for value: The EVA TM management guide*. New York: Harper Business.

<sup>82</sup>Worthington, T West Australian 2004..*Journal of Management* 29 (2), 201-223, 72.

EVA = Net Operating Profit After Tax – Weighted Average Cost Of Capital\*  
 Invested capital at the end of t-1 ,

EVA measure is implemented in firms mainly for two reasons: 1) its objective is to extend a firm's organizational knowledge and the understanding of its process's financial implications, which should improve the decision making process and thereby eventually increase a firm's value; 2) it can be easily understood.

### Shareholder Value Added (SVA).

The Basic Idea of one of the best known value-based performance measures: Shareholder Value is driven by Long-term Free Cash Flows. Shareholder Value is created when Long-term Returns > Cost of Capital and vice versa. This is the measure of the enterprise's value for shareholders. Net Operating Profit after Taxes minus the cost of the capital is the basis of estimating SVA:

$$SVA = \text{Net Operating Profit after Taxes} - \text{The Cost of Capital},$$

The main advantage of this metric: SVA holds that management should first and foremost consider the interests of shareholders in its business decisions. SVA offers a common approach which is not subject to the particular accounting policies that are adopted. It is therefore globally applicable and can be used across most sectors. The main disadvantage of this metric: The concentration on shareholder value does not take into account societal needs. Therefore, a management decision can maximize shareholder value while adversely affecting third parties, including other companies.

### Cash Flow Return on Investment (CFROI)

CFROI is a performance measurement ratio for managers who can influence and thus also take the responsibility for all financial aspects of their organizational unit, except investments and depreciation and except of the financing structure. It is a percentage rate of return valuation model that is essentially cash flow divided by market value of capital employed. The objective is to guide the manager so that he realizes high sales volume with low controllable costs and small investments in assets.

$$CFROI = \frac{\text{Gros Cash flow} - \text{Depreciati Economic}}{\text{Gross investments}}$$

Bennet Stewart mentions two types of disadvantages of CFROI: the accounting and financial disadvantages. Accounting distortions deal mostly with the different costing methods (LIFO, FIFO etc) while the financial distortions deal mostly with proportion of debt and equity. If the management's task is the particular ROE, the manager can accept the bad project which is financed by the debt, and reject the good one if it is financed by the equity.<sup>83</sup>

Thus, a firm's value will depend on the CFROI it earns on assets in place and both the abruptness and the speed with which this CFROI fades toward the cost of capital. Thus, a firm can therefore potentially increase its value by doing either of the following: 1. Increasing the CFROI from assets in place for a given gross investment; 2. Reducing the speed at which the CFROI fades toward the real cost of capital.

### Cash Value Added (CVA)

CVA as another value-based metric was developed by the Boston Consulting Group. In contrast to EVA it is derived from cashflow numbers. Cash Value Added (CVA) is the difference between the cash flows which should be generated by the company to cover the

<sup>83</sup>Stewart, G. B. (1991), *The Quest for Value: A Guide for Senior Managers*, First Ed., New York: Harper Business.

costs of capital and the cash flows which are generated at present. This is cash value added from the customers. One can introduce CVA the following example:

$$\text{CVA} = (\text{CFROI} - \text{THE COST CAPITAL}) * \text{INVESTMENT CASH}$$

Someone might think that EVA and CVA are similar. In theory they are, but not in reality. In theory, they are alike. As we know, in reality a few corrections and adjustments are carried out to calculate CVA or Residual Cash Flow (RCF),<sup>84</sup> they are therefore not similar in real life. The main disadvantage of this model is the complexity of the calculations and the difficulties associated with forecasting cash flows.

This traditional and apparently unchanged behavior in financial performance measurement seems to be confirmed by the empirical evidence that emerges from the most recent analysis about the most common financial metrics used in compensation plans, conducted in 2010 by the U.S. National Association of Corporate Directors (NACD) regarding about 1,300 individual from public company boardrooms across 24 industry sectors: profits and EPS (and similar ratios) weigh 97%, cash flow 36%, economic value measures like EVA and CFROI 16%, and stock price based measures 31% (multiple responses being allowed).<sup>85</sup>

## Conclusion

The value-based financial performance measures are proposed by certain research studies as improvements over the traditional financial measures. The value-based financial performance measures are proposed by certain research studies as improvements of the traditional financial measures. Each of the examined indicators has its limitations and disadvantages as well, because the area of value creation is a relatively new branch of knowledge. Some authors propose them combined in the assessment process of value creation. From our point of view, this approach is not optimal because VBM system efficiency can be achieved by submission of all significant common goals of management decisions. Therefore, in each case, the company's management must select the appropriate valuation figure for reasons of efficiency, the benefits and costs associated with obtaining the information needed to calculate it.

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<sup>84</sup>Weissenrieder, F. (1998). Value Based Management: Economic Value added or Cash Value Added?; *Gothenburg Studies in Financial Economics*. Study No 1997:3, 42.

<sup>85</sup>Daly K (2011) Corporate performance metrics to top board agendas. *Finan Exec* 27. 50–53.

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## BEHAVIORAL ECONOMICS AND CYBER CRIME

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### Abstract

This article deals with the problem of cybercrime. The main objective of this piece is to present a proposal of possible solutions to software piracy. To solve the problem, knowledge from the field of behavioral economics will be used, which will be presented in the second chapter of the article. The authors identify the causes of computer piracy and have subsequently concluded that in order to curb piracy, it is key that producers respect the social contract between them and the customers and that they act upon customer's moral consciousness, instead of threatening punishment.

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**Keywords:** Behavioral economics, Computer piracy, Cybercrime, Morale

### Introduction

This article deals with the problem of computer crime with a specific focus on computer piracy, including copyright infringement through illegal sharing and distribution of copyrighted content, with particular concentration on the analysis of the situation in the Czech Republic. At present, piracy is gaining in intensity (Tiganoaia2013, Nakashima and Peterson 2014) and presents severe losses to audiovisual and software industries. Its foundations date back to the past, when producers perpetrated mistakes in their practices toward customers, and thus enabled the development of software piracy in its present form.

The main objective of this paper is to present a proposal of possible solutions to software piracy. The main objective will be achieved through component goals. The first component aims to present behavioral economics, including its implications and subsequent application in solving computer piracy. The second component of this article is to identify the causes of software piracy. In the first chapter, the concept of Internet crime will be introduced, with a focus on computer piracy in both the Czech Republic and abroad. The second chapter introduces behavioral economics, which, among other things, deals with market and societal norms and errors in human decision making. For the purpose of this article it is important to present market and societal norms, including their conflict. Furthermore, the moral consciousness of a social contract as a specific form of social norms is analyzed. In the third chapter of the article are identified the causes of software piracy and, subsequently, possible solutions are suggested.

### I.

#### Cybercrime

Computer crime has accompanied modern technology since its inception. It is a fairly broad term that includes a wide range of criminal activities whose typical feature is the use of modern technology. This concept is difficult to define, it is a type of "terminus technicus" (Audal and Quincy2008, Carvajal2008, Tiganoaia 2013), similarly to economic crime, within which category belong most computer crimes. Cybercrime includes (Bell 2002) hacking into personal and corporate computers, the dissemination of viruses, theft of personal or

confidential information, the remote control of computers and their use for cyber attacks for the purpose of website termination, child pornography dissemination, or promotion and incitement of hate. In particular, this includes piracy involving violations of copyright law through illegal copying and distribution of programs, music, films and books. Illegal file sharing of copyright files causes owners considerable damage, as well as loss of tax returns.

The Council of Europe (2001) defined "Computer Related Crime" as illegal, immoral and unlawful practices, including the use of, or changes to, the data obtained through computer technology. The convention was subsequently adopted by the Parliament of the Czech Republic in 2013. The debate that took place in the Czech Republic in the nineties was inclined toward the view first published by Smejkal, Sokol, Vlcek (1995), that the term 'cyber crime' is to be understood as criminal activity in which a computer plays a particular role of aggregator of hardware and software, including data, or only some of its components, or else a larger quantity of either individual computers, or those connected to a network, as:

- The subject of this crime, with the exception of crime whose objective is movable assets;
- Or as an instrument of crime.

The term computer piracy has a very broad scope. Simply speaking, it subsumes copying, distribution and use of copyrighted software, movies, music or e-books, without permission of the owner. Currently, we speak of piracy mostly in connection with film and music and computer programs such as film, music and software piracy, while computer games also fall into the category of software piracy. This type of computer crime is gaining in importance. As stated by BSA (2014), in the year 2000 the rate of audiovisual piracy stood at 10%, and currently is climbing up to 65%. Since 1994, when the software piracy rate was 66%, the Czech Republic has managed to reduce its software piracy rate to 31%. In recent years, however, the rate of software piracy is being reduced only very slowly. In 2011, 35% of software was being used illegally in the Czech Republic. Compared to other post-communist countries, the Czech Republic has the lowest rate of software piracy. The situation is even better than in many Western European countries such as France (37%), Italy (47%) or Spain (44%). The average piracy rate in the EU is 33%, globally it is 42%. The lowest piracy rate in terms of the EU can be boasted by Luxembourg (20%), Austria (23%) and Belgium (24%). The lowest global rate of software piracy is then boasted by the United States (19%), Luxembourg (20%) and Japan (21%). According to a study by BSA and IDC, the Czech Republic is among 20 countries with the lowest rate of software piracy. It evinces the thirteenth lowest software piracy rate in the world.

### **Behavioral economics**

Although it may seem so at first, economics is not the science of numbers, charts and forecasts. It is the science of man, because behind every economic process is man. But what influences a man's actions? Is it sufficient for an authority to issue rules, regulations, and laws for man to simply follow them? The essence of human behavior is far more complex and cannot be encompassed within a collection of laws or pigeonholed into theories. Nevertheless, it is important to understand and predict human behavior to a certain extent. This is where behavioral economics lends a helping hand, as it sees behind every process man as he is, not as he should be. It admits that one may, with one's decisions, make mistakes and act irrationally, and it examines the causes of these errors and motives. It utilizes the knowledge of human psychology in its exploration of human behavior. Unlike mainstream economics, which describes fact, behavioral economics seeks to identify the causes and motives of human behavior (Heukelom 2014).

Behavioral economics is one of the economic discourses which calls into question the rationality of participants, and deals with the problem of errors in human decision-making and conflict of market and societal norms. In its essence it examines the kinds of mistakes

people make, how often and what leads them to make these decisions. Behavioral biases (Sussman 1997 Heukelom 2014) and the Dunning-Kruger effect (Dunning and Kruger 1999) devote themselves to these errors more specifically. The issue of mistakes in human decision making will not be discussed further in the article, since it is not relevant to it. The second, and for this article a substantial, issue is addressed which involves the role played by market and social norms in human behavior. Everyone lives in two worlds (Altman 2006). The first is the nice and pleasant world of social norms, where people treat each other well, where help is always available without the requirement of payment. The second world of market norms, on the other hand, is strict and cold. It is a world where one cannot expect anything for free, and where clear rules apply, whose breach is immediately sanctioned. But it has its positives.

The rules are clearly specified, so that the possibility of violation is much smaller. Market rules promote independence and competition that breeds innovation, thereby pushing us forward. A specific area of market norms are also legal standards, which take the form of contracts and laws. These standards interact with each other and sometimes come into conflict. Behavioral economics subsequently examines how this conflict takes place and which party wins in which situation.

### **Conflict of market and social norms**

Social norms have accompanied all forms of social life from the beginning of their formation (Hayek, 1979, Altman 2006). Each group has its own internal organization. This arrangement determines when and who will eat, who will keep watch, who will hunt and many other aspects that help maintain a group and survive. The violation of these norms on the part of an individual may, in some forms of higher-level creatures, lead to expulsion from the group. Social norms are a legacy that we carry with us from the past, and are an integral part of our being. They developed in unison with humans and are a powerful force that can change an entire order. Man attempts to gain these norms under his control with the help of market norms and their specific forms, legal norms. This, however, leads to conflict between them. In history we can find many examples where people, driven by general consensus about the correctness of their actions, overthrow political regimes based on legal standards. We are involved in a system of social norms throughout our lives which are determined by cultural identity and the environment within which we grow and develop. This creates within us a certain sense of the natural order of things, which determines how we act, and determines how we evaluate the actions of others. This sense, created during the course of life, is an integral part of human identity and moral awareness and an effort to go against this sense raises a number of market failures.

But what is this conflict between market and social norms? A distinguished economist working at MIT, Dan Ariely, took up this issue with his colleague James Heyman when they conducted an experiment on students of the university (Heyman and Ariely 2004) Their task was a simple activity. Within a time-frame of five minutes, they had to move a circle into a square displayed on a computer monitor with the help of a mouse. After each successful move the circle disappeared and appeared again at the original location. The task of the participants was to move as many circles as possible. The students were divided into three groups. The first group was rewarded for the activity with five dollars, the second group was given fifty cents as a reward and to the third group of participants, this activity was presented as a friendly request. The first two groups, therefore, were to act according to market norms, as this constituted a paid job. It turned out that both groups modified their efforts according to market rules. The financially better rated group held an average of 159 movements, while the second group, on average, made only 101 movements. Thus the third group was to move less than the others, as the reward was zero, i.e. the lowest of all. However, this group did not act according to market norms, but rather according to societal norms, and therefore did not

compare its performance with money. This group had an average of 168 movements! Social norms were thus revealed as better motivation for job performance than financial rewards.

The authors extended the original experiment further. Instead of financial rewards, they decided to offer gifts of the same value as the original financial award. So the first group was given a gift worth five dollars, specifically an expensive Swiss chocolate and the other group was given as a reward a candy bar from the vending machine for the amount of fifty cents. Participants in the third group were again asked to perform the task as a friendly favor. After evaluation, the first group reached an average of 169 movements, the second 162 and third 167 movements.

That was not all, as the authors carried out a third series of experiments, where the participants were told they would receive chocolates worth five dollars and a candy bar worth fifty cents. In this third series, the individual groups reached similar results as in the first case. What conclusion are we to come to? A small gift can have the same motivational ability as an expensive gift, as they are both interpreted in the context of social norms. Additionally, as the presents were assigned prices, the participants began thinking in terms of market norms and adapted their performance accordingly. So when it comes to motivation to perform, with the help of social norms, it is possible to achieve better performance for lower cost, but when money enters into consideration, people move from areas of social norms to market norms.

Social norms thus play an important role in human society and failure to reflect them may be the cause of various market failures. Although these rules are unwritten, based on an internal sense of the natural order of things, we anticipate what relationships between individuals, but also groups, should look like. At present, however, there is no distortion of the social norms and their replacement by market standards which, admittedly, do not have the ability to create a well-functioning system. No regulations or legal norms will be followed if they are not accepted by the people, if they are not taken as their own. Imagine that you tell a group of your friends that you have downloaded a new film. It is probable that they will ask what movie you downloaded and will download it as well. But if you boast to the same group of friends that you stole your old neighbor's cell phone and wallet, you will receive a negative response. Even though both cases involve an illegal activity, piracy is accepted by society and no one is socially excluded for downloading a film. The relevant authorities are obviously trying to fight against Internet piracy, but without rejection of this activity on the part of society, their efforts will come up empty.

Social norms can take the form of social contracts. These contracts take on an implied form based on an internal sense of the natural order of things. We will analyze one specific example. At present, the Czech Republic is fighting tax evasion. Politicians propose a variety of legislative solutions, which are the subject of inter-party disputes. Over the last twenty years, political parties have come up with many solutions; nevertheless none was particularly effective because it disrupted the social contract between the state and companies. In addition to legal norms, there is also a social contract between state and citizens. This contract can be characterized as follows:

A producer will conduct business according to the law to produce profitable goods, create jobs and pay a part of the profits in the form of taxes to the state. The state, in turn, will allow the producer to seamlessly conduct business and ensure his safety, and apply the money collected in taxes to the performance of its respective functions. This contract is not written, but we all suspect, on the basis of an internal sense of the natural order, that this is the way things should be. The state, unfortunately, does not fulfill its part of the social agreement. The high tax burden means bankruptcy for a number of businesses. Due to the bloated bureaucracy, the lack of transparency of the legal system and far too frequent amendments, the producers are constantly threatened by legal problems. Law enforcement is very poor, so honest businesses do not have sufficient protection. At the end, instead of being

used for the purposes of state functions, the money is siphoned from the system with the help of corruption under the conduct of groups who base their actions on mutual protection and violations of generally applicable principles (Valenčík, Buda et al 2011). Yet the state continues to require performance on the part of the producers/entrepreneurs, who feel a sense of injustice and who try to eliminate this injustice through tax optimization and tax evasion. The State responds by tightening sanctions and regulations which further perpetuates the feelings of injustice on the part of producers and creates additional barriers for smooth operation, which hampers economic growth and causes additional reductions in tax revenue. This is an unfortunate phenomenon of the modern day. Economic growth is achieved, in particular, through innovation, which causes an increase of the production capacity of production factors. Yet this constitutes a very serious situation, which unnecessarily reduces the level of potential output in the country and, in the future, may bring serious problems.

The state should respond as follows:

1. Reduce taxes so that savings from tax evasion become unappealing. People will always be willing to evade taxes if costs, understood as fines or term of imprisonment, are lower than the revenue from their activity.

2. Simplify the system, as for an honest entrepreneur, an unintelligible system signals hidden dangers, and the dishonest will use this complexity to its circumvention.

It is necessary to realize that there will always be those who will try to circumvent the system, even when penalties are greater than any revenue, but taking into account social norms will minimize this behavior.

### **Moral consciousness**

Computer piracy is not only illegal, but also immoral. It constitutes a theft of intellectual property, or of immaterial goods. It is the same as stealing material goods. Yet when sharing a movie or music, people do not feel they are doing something morally wrong. How this phenomenon developed is discussed in the third chapter, but if we want to change this fact, it is necessary to act upon the moral conscience of people. Moral consciousness determines the criteria by which people evaluate their actions. Human morality can be divided into three groups (Heidbring 1997):

1. Morale determined by punishment and obedience: This is the basic level of morality when an individual refrains from engaging in activities that will be punished. This kind of morality is not only particular to mankind, but it is also present in some animal species, such as wolves and primates. In their groups there exists such a thing as, for example, the order in which individual members eat, and if an individual wanted to eat outside this order, he would be punished by the rest of the group.
2. Morality based on hedonism: This is the second level of moral awareness when an individual is motivated in his behavior by reward. For example, obtaining a particular benefit, as well as recognition or praise.
3. Morale based on personal awareness: This is the highest level of morality that is inherent only in some people. An individual who has morale of such a level is able to assess based on his own awareness what is right or wrong, and to act on that basis, regardless of external pressures. This places high demands on intelligence and personal maturity of the individual, so this level cannot be reached by everyone.

To be able to better understand these various levels, we can analyze them through the use of the example of the Nuremberg Laws, which were the persecutory laws aimed against the Jewish minority in Germany and later also in the occupied territories, such as the Protectorate of Bohemia and Moravia. An individual with morality built on the basis of punishment and obedience acted in accordance with these laws, as violations created a threat of severe punishment. An individual with the morality of hedonism did not only comply with

these laws, but also facilitated their enforcement to gain an advantage, or to please the occupying power. This morality is associated particularly with collaborators. Those with the third level of morality violated the laws and hid members of the Jewish population, or helped otherwise, even though they risked punishment, or would receive considerable benefit for turning the Jews in. However, they would abide by other laws. Such people are able to determine for themselves what is right or wrong, and act accordingly. However, this determination must be based on their own moral consciousness, not from external dogma, such as religious rules.

Let us look at one more example. One of the 10 commandments states “you shall not commit adultery”. This rule can be upheld by all three kinds of morality, but the reasons will be different. An individual with the first level of morality will not commit adultery because the revelation of his act would bring him punishment in the form of divorce and moral condemnation from his peer group and in the form of the wrath of God. An individual with the second level of morality will not commit adultery in order to secure the favor of God and a better status in the afterlife. While those with the third level of morality will not commit adultery in order not to hurt his partner and family. As you can see, the same conduct may have different causes. It can be argued then that it makes no difference on what moral principle actions are based, but we must remember that punishment does not necessarily follow whenever we act unlawfully, as we have seen in the above example. Or if people act on the basis of rewards, changing the reward will also change behavior, which makes people more easily impressionable in a covert way. Examples include various charitable organizations, environmental movements, or other generally beneficial organizations, or even political movements. The great majority of its members are members primarily for hedonistic motives and real solutions to problems are suppressed by populist actions aiming to only receive gratitude, not provide solutions to problems. Sometimes there is a deliberate maintenance of problems.

### **Behavioral economics and computer piracy**

As described in the first chapter, piracy presents a significant problem and combating it is very difficult. Computer piracy causes damage on several levels. First of all, it causes harm to the copyright owners, who participated in the creation of the product and bore the costs associated with it. Furthermore, this includes a loss to the state, which loses tax revenue from the amount of unsold products. If piracy did not exist, the sale of multimedia entertainment would be more extensive, and the state could then expect significantly higher tax revenue from the sale of these goods. And lastly consumers themselves are harmed, as piracy reduces producers’ revenue, thereby limiting their production; as producers are less willing to venture into riskier projects, both the scope and quality of production is reduced. Although computer-piracy is fought by a number of organizations in addition to the state, such an example in the Czech Republic would be the Czech Anti-piracy Union or the Stop Piracy project, or international organizations such as Business Software Alliance (BSA), its share continues to grow.

Why is downloading a movie tolerated and accepted by society, but stealing a wallet or cell phone is not? If we find the cause of this phenomenon, we can provide an effective solution. The authors of this article believe that the cause can be found with the aid of behavioral economics. The primary cause can be found in the breach of the social contract between the producer and the customer, specifically on the part of the producers. The term producer encompasses the entire distribution chain. For the purposes of our investigation, it is not important to know which segment of the distribution chain has the greatest share of blame for this phenomenon. It is the perceptions on the part of the customer, not the assignment of

guilt within the distribution chain. The social contract that applies to all distributors and customers can be characterized as follows:

"The customer provides payment and receives in return a product of proportionate quality."

With regards to the sale of DVDs, CDs and computer games, this agreement was violated by the producers. Let us remember when, during the second half of the nineties, the first DVDs became available on the market, their price was unacceptably high. Nowadays movies in the Czech Republic are sold on average for 250 CZK, while at the beginning their price reached up to 1,500 CZK. Unlike videotapes, DVDs did not include Czech dubbing. Let us shy away from the debate whether a movie is better when dubbed, or in its original version; this can be decided by everyone individually. However, the customer should have a choice. The introduction of new technology always bears with it a cost, but even so the prices were vastly inflated, because the way was already paved by CD players. At present, producers think of ever-more crafty marketing practices, undermining the confidence of customers. For example, they first release a cinema-adapted version of a film that customers can buy, but in time they release a new, extended version of the film which the customer must then either re-buy at full price, or come to terms with the fact that he does not have the latest, best version of his favorite movie.

Foreign TV shows have been making their way to this country for several years now. For example, it took four years for the Game of Thrones to be broadcast on Czech television. Music CDs were also very expensive, and the customer had no choice but to buy the entire album, even though he only liked a few songs. As for computer games, customers also often receive poor-quality products. Games are often without localization, without availability of local language, certain collector versions are available only on certain markets and many fans must then suffer a range of difficulties to obtain them. As part of the fight against Internet piracy, further measures are introduced that make use difficult for paying customers, such as the need for a continuous Internet connection, or the requirement to register a product on the manufacturer's page. One can also find unfair marketing practices here. Some companies use their dominant position to push back the release date by several years, or dividing a game that was previously released in its entirety into several parts.

There is little wonder then that the customer feels a sense of injustice. The customer expects high quality products and service for his money. The absence of choice between dubbing and the original version, the inability to buy individual songs, having to wait for years for overseas TV shows to enter the European market, lack of localization of games. Furthermore, unfair marketing practices that the producers have the legal right to use, and do use as the customer does not have an option to substitute their products, gives the customer an understandable right to feel wronged. A breach of the social contract can occur in any industry, but the audio-visual and gaming industry is specific in two ways. First of all, it is specific in that the violation of the social contract occurred throughout the entire industry. In other sectors, the customer has the option to cross over to the competitor, or use a substitute, but in this case, the breach of the social contract, at least in the Czech Republic, concerned all parties. There was no one offering the latest movies at a reasonable price and in a Czech version, or individual songs for a few crowns. Music and movies are part of the socio-cultural life of the people and life without them now is hardly imaginable, that is why customers were willing to buy overpriced products. Secondly, the specificity is provided in the nature of the product, which is noncompetitive and can be, with minimal cost, reproduced and shared. Other goods cannot be so easily reproduced or copied. If a person likes a particular piece of clothing in a window display, he cannot search for it on the internet and download it within an hour from the comfort of home. Modern technology has given customers the opportunity to circumvent distributors who did not treat them according to expectation.

As such, at a time when producers had the dominant position, they created for themselves through their actions a number of dissatisfied customers and themselves laid the foundations for the expansion of computer piracy, which is perceived as the heroic fight of Robin Hood against this victimless crime. For the fight against computer piracy to be effective, it is necessary to restore the social contract between producers and customers. Producers should realize that they must respect the expectations of the customer, not just in terms of content, but also in terms of the method of distribution and provision of business conditions. The fact that the United States has the lowest share of piracy, where certain errors have been eliminated by the distributors, such as time delay, localization and failure of entry into the market, suffices as evidence. In order to restore the social contract, it is necessary to take several steps (the suggestions concern mainly the Czech Republic, however, in our view, they are also applicable elsewhere):

Firstly, and most importantly, it is essential to provide customers with a good quality product within a reasonable time for a reasonable price, so that the customer does not feel cheated, or worse, blackmailed. A common counter-argument is that the localization of games or the acquisition of dubbing is too costly for a small market. However, what is then striking is that what is claimed to be too costly for a multinational company with a turnover of billions of dollars is easily handled by an enthusiast himself, at home within a month. And when this localization is released for free use, thereby supporting the sale of a given game, legal action is taken against the perpetrator. Similarly, this is also the case with TV series, where fans only take a few hours after the airing of the show in the USA to provide subtitles and make the shows available on their servers. It is necessary to note that, over time, the behavior of distributors toward customers is improving, however, it is still not at the ideal stage allowed by modern technology. Distributors are still a step behind those engaging in piracy in the offer of services. For example, the perpetrators of piracy are able to offer shows for viewing within a few hours after they are aired in the USA, while via legal means, it takes years. Today's customer is not willing to wait so long, and thanks to technology he does not have to. The case is similar with movies, which the customer must go and buy at a store, even though pirates now allow its download from the comfort of home. Unless producers respond to this fact, they will never be able to compete with pirates. If it were possible to stream an episode of a TV series on the internet at the time when it is aired on television in the USA, in HD quality with Czech dubbing, customers would be willing to pay the appropriate price. Distributors can then make money on the monthly fees and money from advertising. As for computer games, it is relatively expensive to create localization, as every company provides this feature on its own, which carries significant costs. Currently, partial localization is employed by some companies, especially in games where it is important to understand a certain text, so we can conclude that the creation of localization is not causal for bankruptcy, and so companies only use this to increase their profit. Here, companies can take advantage of outsourcing, or the work of enthusiasts and the resulting localization labeled as unprofessional localization.

The second step is an appeal to the moral consciousness of customers (see Box 2.2) and attempts to establish an empathic connection through marketing campaigns. In the Czech Republic, such a campaign had taken place in the past. It was organized by the Czech Anti-piracy Union. Unfortunately it was ineffective, as violations of the social contract on the part of the distributors continued. Another problem was the form in which this campaign was presented. It had an adversarial character that could be labeled threatening. ("Stealing is illegal!", "Piracy is a crime!") People already know this, and yet piracy continues. This campaign was built to appeal to the first level of moral consciousness; the morale of punishment and obedience. For an appeal to this kind of morality to be effective, it is necessary for an imminent threat of punishment to exist, which in this case seems odd, as no



one will be punished for downloading movies; a jail would have to exist for the entire young generation. The campaign should be conducted in a calm, non-confrontational spirit, as if to act as an attempt at conciliation. Showing piracy not as illegal, but as wrong and immoral. Stop threatening with punishment, and instead show the consequences. Appeal to the morale of self consciousness. People have experience with the theft of material items, but do not come into close contact with the theft of intellectual property, and so they cannot imagine it. It is essential to point out the efforts of those who create movies and TV shows, or of those developing computer games, to point out that due to piracy, some projects are never realized and thus the customers are being cheated of the experience.

It is also important to create the feeling that the customer and producer are on the same side, against perpetrators of piracy. According to research by the Texas neuroscientist David Eagleman, employed at Baylor College of Medicine in Texas, the classification of individuals into groups increases empathy between members of the group and reduces empathy for members of counter-groups. People tend to perceive others in terms of "us" and "them." The assessment of the group "we" is associated with the use of the part of the brain responsible for empathy, while in the assessment of the group "they", this part of the brain is not used. Thus, the human brain is programmed to care for members of one's group, while being indifferent to members of other groups. This is enhanced when the other group stands in opposition. This phenomenon has been used in the past as propaganda, whose aim was to dehumanize a particular group. This explains how ordinary people can collectively commit very brutal crimes, such as the persecution of Jews during World War II, or the genocide in Rwanda. Another observation was brought made by Dr. Tania Singer in her article, where, based on her experiment, she found that the neural response can be influenced by a person's opinion of another. In the experiment, people play a simple game together, where the individual under observation encounters opponents who either cheat or play fair. When the opponents are then subjected to electric shocks, the emotional reaction of the individual under observation to the pain of others varies depending on whether the opponent cheated or played fair. This can be applied to the issue of software piracy. If people feel that they are not treated fairly by distributors, they feel less empathy with their losses due to piracy and are generally more willing to engage in computer piracy.

## **Conclusion**

This article dealt with the issue of cybercrime, with a focus on computer piracy especially in the Czech Republic, which is becoming a serious problem for copyright owners. The article presented the impact of software piracy and quantified its extent. Subsequently, the term behavioral economics was defined, and the conflict between market and social norms was discussed, including the experiment by Daniela Ariely and James Heyman, which proves the existence of social norms and their ability to motivate people to improved work performance, and the impact of the subsequent conflict with market norms. The notion of the social contract is then defined as a specific example of societal norms.

The aim of the first component, the introduction of behavioral economics, was achieved in the second chapter of the article. The achievement of this aim provided the theoretical foundation for the fulfillment of the main objective of this piece. The second component of the article was to identify the causes of computer piracy. The main cause is deemed to be a breach of the social contract by distributors, who abused their dominant position and created within the customers a sense of injustice, which subsequently led to a breach of the social contract on the part of customers and lowered their empathy with the distributors' losses, caused by computer piracy. Technological developments enabled the expansion of computer piracy, which took advantage of customer dissatisfaction, and helped them bypass distributors. This behavior, as a result, was not perceived by society as immoral,

which differentiates this kind of behavior from petty theft. These findings were then used to fulfill the main objective of the piece, the proposal of possible solutions to the problems of computer piracy. This solution was divided into two steps. The first proposed step is to restore the adherence with the social contract on the part of distributors by means of the delivery of quality products on time and at a reasonable price. The second step is an appeal to the moral awareness of customers through marketing campaigns, which should result in the renewal of the social contract on the part of customers. This campaign should take into account efforts to remedy the issue, therefore it must not be presented offensively; attempt to evoke a sense of empathy with the distributors' losses, as could be seen in the study by Dr. David Eagleman and Dr. Tania Singer. By examining the neuroscience behind responses of the human brain, they have shown that people feel more empathy with members of their own group and those persons acting fairly.

In conclusion, it must be mentioned that the proposed solution will not eradicate piracy altogether, as it is already too widespread and deeply embedded, but it will help reduce and mainly prevent further growth. If distributors follow the recommended procedures, it will lead to a rise in their profits and an improvement in customer service.

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## **LEADING, LAGGING, SYNCHRONIZED? BUSINESS CYCLES OF EU COUNTRIES BEYOND EUROZONE**

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### **Abstract**

The theory of optimum currency area is an important reference point in analyses of monetary integration processes. According to the optimum currency area theory one of the most important factors for countries planning to form a monetary union is business cycle synchronisation. The aim of the paper is to evaluate the level of business cycles' synchronisation of European countries beyond euro zone with the fluctuation observed in the euro area. There are a few methods which are applied: periodograms, concordance index and cross-correlation coefficients. The results show that, on the basis of chosen measures, analysed countries exhibit relatively good level of business cycle synchronisation. Slightly worse result are obtained for Romania, both in case of cycle's length and phase similarity.

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**Keywords:** Business cycle, optimum currency area theory, business cycle synchronisation

### **Introduction**

Undoubtedly, the optimum currency area theory (OCA) from the early 1960's still remains a benchmark for monetary unification analyses. OCA theory focuses on defining the main factors that are crucial from the point of view of the successful currency area formation. Throughout the decades many economists contributed widely to the theory development formulating a list of assumptions that allow to verify whether the currency area can be characterized as optimal. However, OCA theory is not free from some imperfections. That is why it came under a wave of criticism formulated recently by many economists (Mongelli, 2008 and 2002; Corsetti, 2008, Bien, 1988; Mayes and Suvanto, 2007). Those economists postulated that most of the assumptions of the OCA theory is quite difficult to verify empirically. Thus, most empirical investigations concerning OCA theory are predominantly based on the one of the measurable criteria - business cycle synchronisation. The existence of such synchronization is indispensable from the point of view of the effective common monetary policy, in particular, in the area of mitigating economic fluctuations. For this reason, we analyze business cycles of European Union countries, which are planning to join euro area. The main objective of this paper is to assess on the basis of chosen indices and statistical measures which of the analyzed countries has the most similar business cycle to the fluctuations observed in the euro area as a whole.

### **Optimum currency area theory**

The beginning of optimum currency area theory dates back to early 1960s. The origin of this theory is associated with the debate on the exchange rate regimes (Komarek, Cech, Horvath, 2003) and it became one of the foundations of monetary integration analyses. The OCA theory was pioneered by Mundel (1961) and then gradually developed by many prominent economist (McKinnon, 1963, Kenen 1970, Grubel, 1970). They significantly expanded the basic Mundel's theory formulating many new criteria, from which the most important to mention are: the mobility of production factors (geographical, sectoral and

occupational), openness of economies and their diversification, similarity of economic policies (especially in terms of low inflation), the low volatility of the exchange rate and synchronisation of business cycles (Biegun, 2004, De Grauwe, 2000; Krugman and Obstfeld, 2009; Lachowicz, 2008; Rose and Engel, 2002).

Mundel (1961) also presented first definition of optimum currency area, characterising this area as a region inside of which circulates one currency or a few currencies but with a fixed exchange rates. During the further developments of optimum currency areas theory Mundell's definition was modified and supplemented. Nowadays, the most popular definition of optimum currency area is based on the costs and benefits analysis of adopting common currency. This means that countries should form a currency area only when establishing fixed exchange rates leads to advantage of benefits (Grubel, 1970).

The early years of 1970's are treated as a beginning of, so called, new OCA theory. The higher emphasis is here put on the problems of financial integration, inflation rate convergence and low exchange rate variability (Wojnicka, 2002). Economists who developed the new OCA theory claim that of a high importance for a successful monetary integration is the fact that countries which want to form currency area have similar monetary and fiscal policy and synchronised business cycles.

### **Business cycle synchronisation – literature review**

The business cycle synchronization analysis may be conducted on the basis of the wide range of econometric and statistical methods. Skrzypczyński (2006) examines the synchronisation of Polish and euro area business cycles using the methodology based on the time series analysis which involves time and frequency domain analysis. Thus, the author can verify not only the synchronisation of the business cycle phases but also determine whether the size of their amplitude is similar. The results of this study shows that there is a high level of business cycle synchronization between fluctuations observed in euro area and business cycles of Germany, Austria, France, Belgium and the Netherlands, moderate similarity for Italy, rather weak in the case of Spain, Greece and Ireland, and very poor for Finland and Portugal.

Alternative research of the synchronisation of economic activity was presented by Bergman (2004). The analysis shows that business cycles of European countries exhibit quite a high degree of synchronisation. Moreover, the author concludes that during the last 10 years of the economic and monetary integration business cycles of EU countries have increased the degree of their synchronization, especially in the case of cycles' phases. However, Bergman reveals that the reverse process - increasing divergence, can be seen in terms of the fluctuations' amplitude. Bergman claims that this may be the evidence for the ineffectiveness of the common monetary policy, which may be too expansionary for some countries in the monetary union and at the same time too restrictive for others.

Interesting empirical study of business cycle synchronization between new members of the EU and the euro area as a whole was conducted by Wozniak and Paczyński (2007). Authors are using Kalman filters. This method enables to verify the strength of the synchronisation of business cycles depending on the length of the cycle. The results show that the synchronization of fluctuations between the new member states and the euro area as a whole is relatively weak for long cycles (lasting three years or longer). The highest level of synchronisation was observed for the cycles lasting from 4 to 7 quarters - a typical horizon of monetary policy.

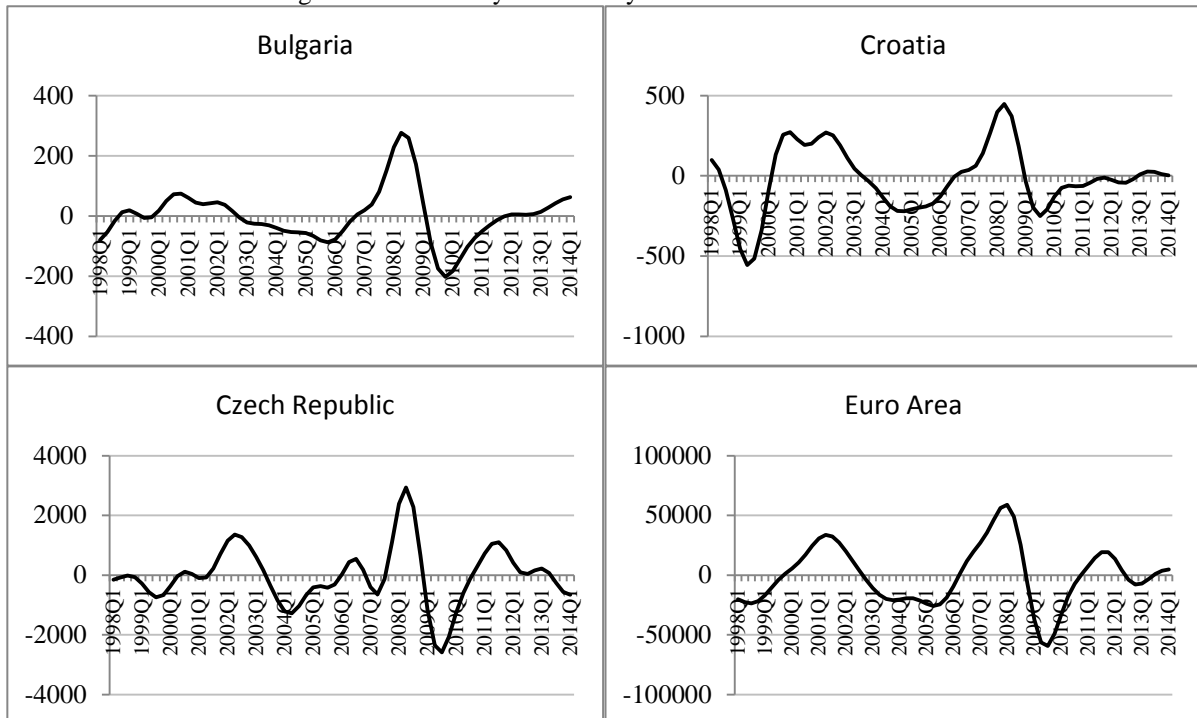
Results of the presented analyses cannot give the clear answer to the question about the level of the business cycle synchronisation of European Union countries. Many studies have confirmed the existence of a strong business cycle synchronization among the euro area countries. However, the diversity of methods and measures used in these analyses,

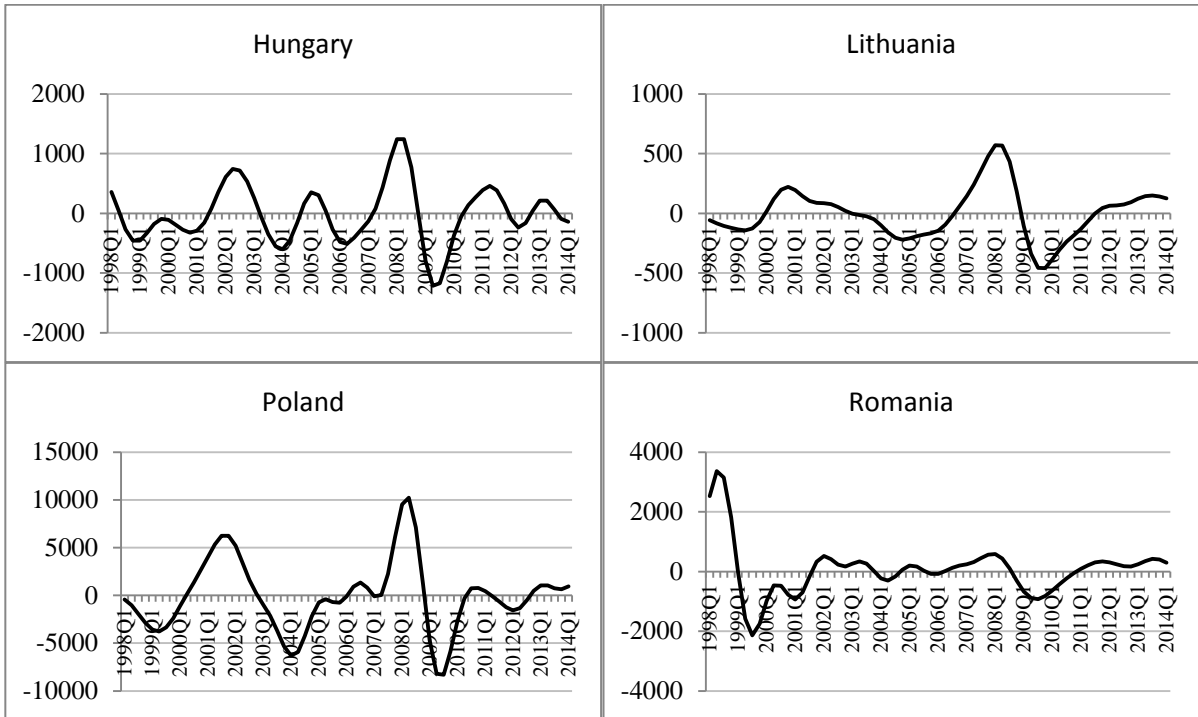
unfortunately makes it impossible to give any general conclusions. Another attempt of empirical investigation of the synchronisation of business cycles of the countries which plan to join euro area is provided by the following statistical study.

**Business cycles analysis - empirical results**

The empirical investigation concerning the business cycles of selected EU is based on quarterly data of gross domestic product (GDP) covering the period from 1998.1-2014.1. Data was taken from Eurostat database. The quarterly economic time series display a strong seasonal pattern that is why it is necessary to do seasonal adjustment. Here a TRAMO/SEATS method was applied. Next, in order to isolate from GDP series a cyclical component the time series were filtered - Christiano-Fitzgerald (1999) frequency filter (CF) is used. All time series were non-stationary I(1) that is why before using CF filter a drift had to be removed. Finally the fluctuations at a frequency between 6 and 32 quarters (1,5 year and 8 years) were extracted. Such fluctuation frequency was chosen according to Burns-Mitchel (1946) definition of business cycle. These authors define business cycle as quite regular, but not strictly periodic fluctuations in economic activity with a duration usually between one and ten years. Time series of GDP which were in such way transformed are treated as the representation of the co-movement and are presented in Figure 1. Analysing fluctuations in Figure 1 one can notice the existence of some similarities between business cycles of particular countries. However, in order to get to know which countries' business cycles are better synchronised with fluctuations observed in euro area it is necessary to apply additional measures.

Figure 1. Business cycles in analyzed countries and euro area

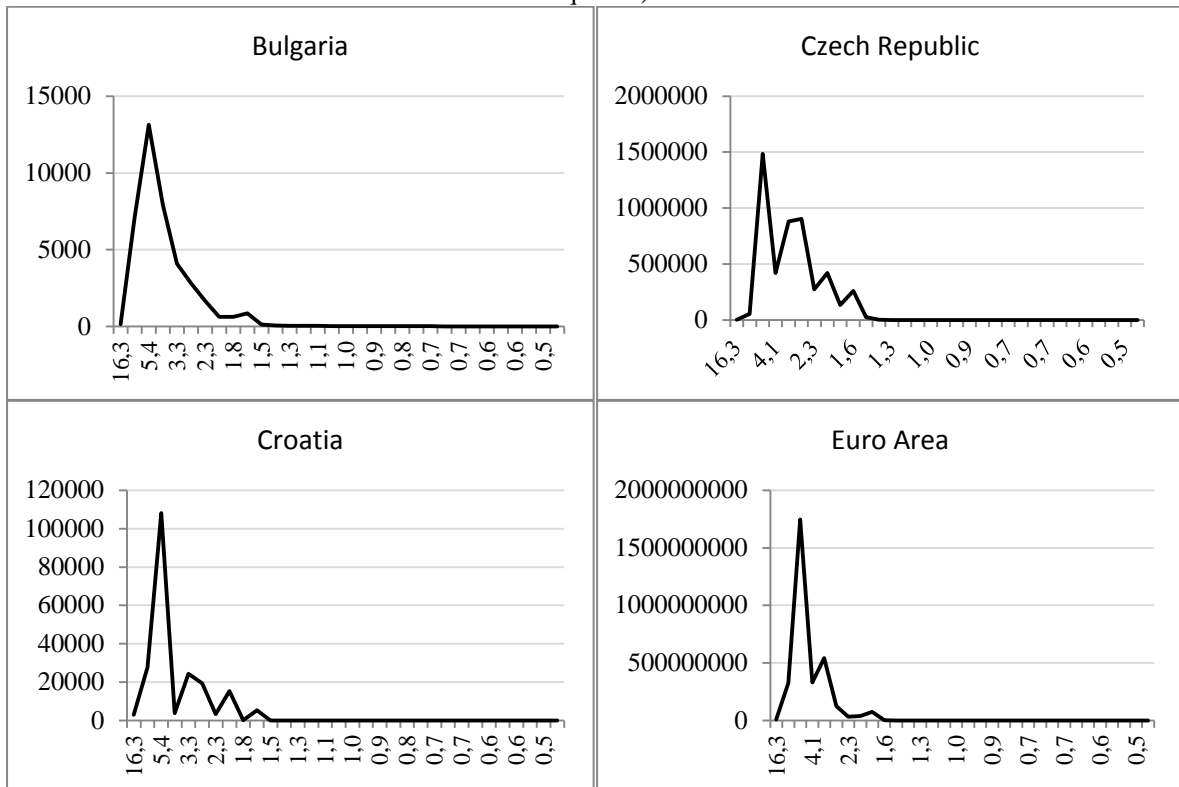


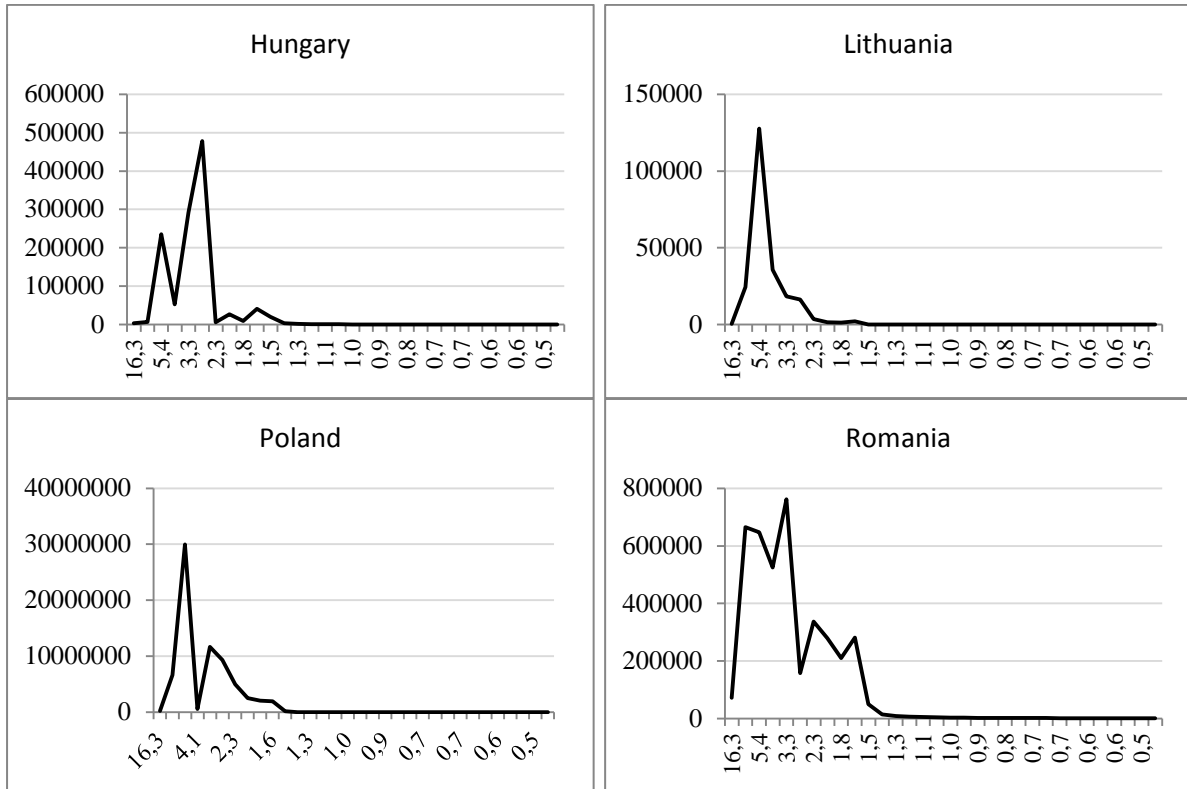


Source: own calculations based on Eurostat data.

In order to check which business cycle length is dominant in each country, periodograms are used (Figure 2). The analysis of the periodograms confirms that all countries with the exception of Romania have the dominating business cycle length of 5,4 quarter, what corresponds with the frequency of fluctuations in the euro area. While in Romania the most frequent business cycle length is 8,1 quarter which significantly departs from the results for other countries.

Figure 2. Periodograms of business cycles of analyzed countries and euro area (horizontal axis – number of quartes)





Source: own calculations based on Eurostat data.

Form the empirical point of view it is interesting to evaluate how often business cycles are in the same phase. It is possible to measure it using the concordance index, which was presented by Artisa, Marcelinno, Proietti (2002). It enables to determine the percentage of time in which business cycles are in the same phase. Concordance index has the following formula:

$$I_{ij} = \frac{1}{T} \sum_{t=1}^T [S_{it}S_{jt} + (1 - S_{it})(1 - S_{jt})],$$

where:

$S_{it}$ ,  $S_{jt}$  – binary series for business cycles representing its phase (1 for expansion and 0 for recession).

Table 1. Concordance indices for analyzed countries via euro area

Country	Concordance index (via Euro area)
Bulgaria	0,738
Czech Republic	0,692
Croatia	0,707
Hungary	0,584
Lithuania	0,800
Poland	0,784
Romania	0,600

Source: own calculations based on Eurostat data.

Table 1 presents the values of concordance indices for analyzed countries with respect to euro area. The highest values of the concordance indices are obtained for Lithuania and Poland. Business cycles of these countries are in the same phase as business cycle of euro area in, approximately, 80% of analyzed period of time. The lowest indices one can notice in case of Hungary (58%) and Romania (60%).



Last business cycle characteristic which seems to be interesting from the point of view of future monetary integration are the business cycles shifts. By the use of cross-correlations it is possible to find out if business cycles of particular countries are leading or lagging in relation to fluctuations in euro area. Cross correlation coefficients presented in Table 2 show that business cycles of most analyzed countries are one to two quarters lagged compared to euro area business cycle. The best business cycle timing according to calculated indicators one can find for Poland - the highest value of correlation coefficient is obtained for period  $t$  and  $t+1$ . The lowest values of indicators are computed for Romania. What's more, all of them are statistically insignificant.

Table 2. Cross correlations between particular country's business cycle and fluctuations in euro area

Country	t-4	t-3	t-2	t-1	t	t+1	t+2	t+3	t+4
Bulgaria	-0,28**	-0,06	0,21*	0,50***	0,73***	0,86***	0,86***	0,74***	0,55***
Czech Republic	-0,23*	-0,02	0,25**	0,52***	0,71***	0,77***	0,69***	0,51***	0,29***
Croatia	-0,20*	0,02	0,27**	0,50***	0,68***	0,77***	0,76***	0,67***	0,53***
Hungary	-0,28**	-0,03	0,24***	0,49***	0,64***	0,67***	0,57***	0,39***	0,18
Lithuania	-0,12	0,14	0,43***	0,68***	0,85***	0,91***	0,85***	0,69***	0,48***
Poland	-0,04	0,19	0,46***	0,69***	0,83***	0,83***	0,70***	0,49***	0,25**
Romania	-0,19	-0,14	-0,08	-0,01	0,04	0,10	0,15	0,16	0,12

Source: own calculations based on Eurostat data

\*, \*\*, \*\*\* - indicate 10%, 5% and 1% significance level respectively

## Conclusion

Nowadays, it is widely argued that the business cycle synchronization is indispensable for a successful monetary integration. Such homogeneity is desirable from the point of view of common monetary policy. If business cycles are more similar the common monetary policy is more effective.

The results of the empirical investigation show that business cycles of most of analyzed countries are relatively well synchronized with the fluctuations observed in euro area. Cycles have similar, dominant lengths and are only slightly lagging (about one to two quarters) in comparison with euro area business cycle. A little bit worse results are obtained in case of Romania. This country's business cycle is characterized by longer dominant length and is relatively moderately correlated with euro area fluctuations.

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# THE DEFINITION OF BUSINESS ENTERPRISE OVERVIEW OF LEGAL AND ECONOMIC APPROACHES

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## Abstract

The importance of establishing common legal definition of business enterprise is not merely a subject of legal theory. It raises the problem of the legal theory enterprise or, simply, who is the subject of corporate law, enterprise, entrepreneur or the society (company)?! A unified approach or common definition of business enterprise is not established. In general, legal writers agree on the basic, general outlines, but the diversity begins with every suggestion of more precision. The purpose of this article is to overview all the approaches to the concept of enterprise, discuss legislative and economic suggestions in this field and, in the end, to offer a unified definition of the enterprise.

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**Keywords:** The definition of business enterprise

## Introduction

The importance of establishing common legal definition of business enterprise is not merely a subject of legal theory. In order to establish a legal system on the basis of the concept of the enterprise one must first give that concept a **legal definition**, which seems to be quite difficult, as is shown by the diversity and lack of precision of the definitions advanced by legal writers or the legislature [17]. As discussed below, in general, legal writers agree that enterprise is formed by establishment of means of production with a permanent organization. There is an economic basis as well. The enterprise contains both, material and human components. As the unified approach is achieved with these general outlines, the diversity begins with diving deeper. The supporters of the legal theory of enterprise admit that the legal concept is only at an emergent stage. It is quite problematic to put the legal concept of enterprise together with the traditional concepts of business assets and the company [17].

It is very interesting that Austria implemented the theory of enterprise into legislation. For that purpose the thorough analysis of the Austrian reform of Commercial law is very important. Must be mentioned that Austria is almost the only country suggesting legislative detailed definition of enterprise.

The purpose of this article included overview of all the approaches to the concept of enterprise, discussion legislative and economic suggestions in this field and, in the end, to offer a unified definition of the enterprise.

The research is based on general scientific methodology. Abstractive-logical methodology is broadly used which includes analysis and synthesis, induction and deduction. Comparative legal methodology of research is also applied.

The article consists of the introduction, two main chapters and the conclusion. The first chapter overviews concept of business enterprise in legislation and economic theory. The second chapter defines approaches of the legal doctrine. The conclusion suggests the definition of business enterprise based on the conducted research.

## **Business Enterprise in Legislation and Economic Theory**

The process of defining legal definition of enterprise is highly important for the purpose of distinguishing between entrepreneurship and enterprise since the activity of enterprise is closely linked with the business activities or entrepreneurship. Also, it is important to differentiate the definition of entrepreneur from the enterprise. The concept is closely related with the problem of deciding whether the enterprise is the subject or the object of corporate law. Under the “law of entrepreneurs of Georgia” the question formally is solved, since the name of legal act offers entrepreneurs as a subject of corporate legislation, but the formal answer is not the clarification. In legal relationships the enterprise is the subject of law, since it participates in transactions on behalf of itself, independently, same way as it may be an object of law, since the transaction might be concluded on the enterprise. The “law of entrepreneurs of Georgia” does not offer the definition of enterprise, though before 2008, the law declared that enterprise was a subject of rights and obligations under this law.

In the light of all the above, it is clear that in the process of elaboration of the definition of enterprise the definitions of entrepreneur and business enterprise, company and business enterprise must be distinguished from each other.

The definition of business enterprise always has an economic flavor, since the enterprise is a subject of corporate law and the main player of macroeconomics. It is also believed that the classification of enterprise as a pecuniary complex starts from economic theory. For this reason, it is important that the definition of business enterprise was discussed in connection with economic definition.

Part of Georgian authors consider that enterprise is a universal form of organization of entrepreneurship. It is the subject and the object of corporate law [7]. This explanation is too vague though and does not suggest all the key elements.

As it comes to economic definition of enterprise, it is hard to come across to any unified description of Georgian authors. All the researchers suggest different classifications and diverse terminology [1, 3, 6, 8]. Georgian researches of economic theory do not normally use the term “enterprise”, instead, “business” or “firm” is commonly used. Those definitions are suggested as synonyms to enterprise. Some of them also represent “entrepreneurial enterprise” which must be rough translation of business enterprise [8]. The determinant “entrepreneurial” must serve as indicator of the purpose of receiving income from business activities. It is also important that the use of terminology mentioned above is quite contradictive. For example, I. Meskhia uses term “enterprise” and indicates term “firm” as a synonym while explaining that enterprise is a subject of economic relationships under the single capital and firm is a subject of economic relationships in the frame of different “autonomic” capitals [8].

All the referred authors classify enterprise by size, main activities, forms of property and organizational-legal forms that are in complete accordance with the Article 2 of the “Law on Entrepreneurs of Georgia.”

The main criteria suggested in the economic theory are as follows:

- Production of goods or services;
- Independence;
- Purpose of getting profits;
- Registration in accordance with legislation (additional requirement);
- Organization and autonomic governance;
- Presence of employees and working facilities.

If we return to legal definition of business enterprise, we shall figure out that some of the above classifications are agreed to be determinants of business enterprise for the legal doctrine or legislation.

In general, legal writers consider that an enterprise is formed by establishment of means of production with a permanent organization. As a basis, surely serves the economic concept of a unit of production, transformation or distribution. The enterprise contains both material and human components [16].

The definition of an enterprise normally is not suggested by the legislation and is discussed in doctrine or, rarely, submitted by case-law, though few exceptions still are found.

First of all the legislation of Italy must be mentioned. The Article 2082 of the Civil Code defines the person who runs an enterprise as someone who professionally carries on an economic activity devoted to the production or exchange of goods or service [16]. Clearly, this definition is close to economic point of view and, as we find below, the main elements of legal approach are omitted.

For the purposes of thorough research, must be mentioned that Russian Civil Code also suggests the definition of enterprise, but this description has so few in common with normal corporate law standards, that is of almost no assistance, but still, it might be interesting to indicate this concept as well. So, the Article 132 of CC of Russian Federation offers that enterprise, as an object of law, is a unification of property that is used for the purposes of entrepreneurial activities. The enterprise is a real estate, entirely or partly the object of the contract of sale, mortgage, loan or other agreements that rise property rights.

Russian doctrine offers that the enterprise, defined under the Article 132 of CC, is a particular type of property, in contrast to the enterprise subject of private law – legal person [10]. Apparently, this distinction suggests that the enterprise, as an object of law is property, while the enterprise as a subject of law is assimilated with the definition of legal person. The approach is not exactly precise, since the concept of legal person determines the legal capacity of society in private law, while the enterprise is wider and more complex institution, participating in wide range of private and public legal relationships [9].

While speaking of legal definition of the business enterprise, most attention should be paid to Business Enterprise Code of Austria as it suggest the most clear, detailed legislation definition of enterprise.

The history of codified Austrian commercial law is strongly linked to German commercial law. The 1861 General German Commercial Code (Allgemeines Deutsches Handelsgesetzbuch - “ADHGB”) of the German Federation (Deutscher Bund) was implemented in all of its member states, including Austria. After the establishment of the German Reich in 1871 (which did not include Austria), new codes were drafted. This led to the German Commercial Code of 1900 (Handelsgesetzbuch – “HGB”) which replaced the ADHGB in the German Reich but not in Austria. However, in 1938 the occupation of Austria by Nazi Germany led to the extension of the HGB to the Austrian territory. Since the HGB had not been part of Nazi ideology, it was not repealed after the Second World War. The German and Austrian Commercial Codes were, therefore, with very few exceptions, identical until 1998 [17].

In 1998, the German commercial Code was changed that also resulted in commercial reform in Austria. The amendments entered into force from August 1, 2007 and are supposed to be bolder than the German reform. It will not only change some details of the HGB, but will replace the term “merchant” (Kaufmann) with the term “business enterprise” (Unternehmen), and will thus rename the Commercial Code (Handelsgesetzbuch) the Business Enterprise Code (Unternehmensgesetzbuch - “UGB”). In the explanatory notes of the Austrian UGB, it is said that the regulatory shift from “merchants” to “business enterprises” is inspired by consumer protection rules which also address businesses dealing with consumers [17].

The objective of the reform was to modernize, simplify and deregulate Austrian commercial law and to eliminate existing inconsistencies between general civil law, commercial law and consumer protection law [15].

As the reform of corporate law in Austria receives not only compliments, but great deal of criticism from certain authors (see, for example, Mathias M. Siems [17]), all we need to discuss in this article, is the definition of business enterprise which is provided in the Article 1.(2) of the new UGB. A business enterprise is defined as an **enduring organization of independent economic activity, regardless of whether its purpose is the realization of profit or not.**

Thus, non-profit legal persons are also included in the definition of business enterprise. This approach is justified with the consideration that they possess the same level of professionalism and bargaining power as other businesses [15]. With regard to the liberal professions, such as lawyers, tax advisers and physicians, as well as with regard to agricultural and forestry enterprises, it is stated that they do not belong to these business enterprises (ss.2, 3 of the UGB). They have, however, the possibility of registering in the business register and, hence, of opting into the provisions of the UGB (s.4 of the UGB). Finally, business partnerships and companies are always deemed to be enterprises [15, 17].

After the comparison of Italian and Austrian approach, it is clear that both legal systems consider the economic activity as a characteristic of enterprise. “Economic activity” in this context includes all the measures in connection with governance of the enterprise, realization of profit or achieving the purposes of the legal entity. Austrian legislation goes further and offers more detailed determination of business enterprise. Independence is a very important characteristic that includes both independence of governance and independence of property. Also, the activity must be enduringly organized. The enterprise must have an organizational form and structure, system of decision making and option of making decisions independently.

In the process of evaluation of the reform in Austria, critics believe that new UGB offers more narrow approach than new Commercial Code of Germany, not taking into account globalization of international trading [17].

For that matter must be underlined that new UGB broadens the concept of enterprise in contrast with the German Commercial Code as it discarded the definition of “small business” or “small merchant” as offered previously.

The supporters of the Austrian reform state that the reform considers commercial law (Handelsrecht) to be a concept of a law which is tied to merchants or traders. It is argued that today there is no distinctive class of merchants, such as those who were to be found in the merchant guilds in medieval states. Furthermore, the terms “commercial law” and “merchant” are claimed to be too narrow and misleading. Since, literally, these words refer to trade only, other types of business activity, such as the supply of services, would not be included [17], but to be honest, when it comes to the German Commercial Code and UGB, the discussion is more about the terminology rather than the concept. It is also clear, that after the reform, Austria is a supporter of the “business enterprise theory” in contrast with, for example, France or Germany [16].

### **The Definition of Business Enterprise in Legal Doctrine**

As already mentioned above, the “Law on Entrepreneurs of Georgia” does not suggest the definition of enterprise, but the Article 2.3 states that Society of Solidary Responsibility, Commandite society, Limited Liability Company, Joint Stock Company and Cooperative are enterprises with legal personality. So, it seems that enterprise is associated with organizational-legal forms of entrepreneurship. The approach is completely opposite in doctrine.

As already stated, Society is not a synonym to enterprise, nor is the legal entity. Legal writers differentiate enterprise and subject of law carrying the enterprise. Enterprise does not inevitably include entrepreneurship, for that reason, full assimilation of the enterprise and the subject carrying the enterprise could not be achieved [2]. The enterprise enjoys all the characteristics of legal person in legal relationships, since the legal person is the subject carrying the enterprise. Society (company) also serves as a subject carrying the enterprise.

Part of Georgian legal researchers suggest that enterprise is organized-economic unity of persons and property [2]. The definition is not fully complete though. Below some additional details should be suggested.

First and significant element of enterprise is **organization**. The criterion includes organization of activities, organized structure, bodies of corporate governance defined by the charter of the society.

The next component is field of **economic activities**. The approach of Austrian law, that bring together commercial enterprises and non-profit legal persons under the definition of business organizations must be wrong. The concept of enterprise includes entrepreneurship that is the economic category and bears part of commercial activities, focused on realization of profit, while the non-profit organizations carry their social goals and do not necessarily need to be enterprises, so the element closely linked with economic activities is the **orientation on realization of profit**.

The **independence** of activities and of property is an element of enterprise. The independence of property in this context does not mean limitation of liability but having the independent property, assets and measures to carry the economic activities.

The part of conception of enterprise is as well existence of **employees and working facilities**. Though in case of small companies or individual entrepreneurs, employees under contract may not be present at all.

As the necessary element of enterprise are considered **obligations** under contract law. Under this criterion unify the claims with third parties, partners as well as obligations inside the company.

Last but not the least element is **brand name** which is discussed separately by some authors [9], though it comes under the definition of property.

The Austrian approach is interesting in the part of corporations as they always automatically are considered as business enterprises following their legal form itself. The reason is quite obvious in that case, the economic activity of Limited Liability Company or Joint Stock Company could not and must not be profit-oriented.

## Conclusion

To summarize all the above, the following unified legal definition of business enterprise must be suggested: **endurably organized independent economic-legal unity of persons, property, obligations and economic activities oriented on realization of profit**. The non-profit organizations must not be considered as business enterprise. They carry legal personality and have their mostly social goals but their economic activities are not oriented on realization of profit and this last criterion is the part of definition of business enterprise.

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# STRATEGIC ALIGNMENT MODEL BETWEEN BUSINESS PROCESSES AND ICT'S THROUGH ENTERPRISE ARCHITECTURES FOR SME'S

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## Abstract

Small and Medium manufacturing companies, as a result of globalization, have serious difficulties to compete in international markets, studies show that has been difficult for these businesses to adopt new methods of work organization, that does become more competitive and productive. In Mexico, SME's have successfully integrated the administrative processes into information and communication technology; moreover the processes of quality and production have less support by ICT's.

This research project proposes a model of strategic alignment between the key business processes of SME's and the ICT's, using enterprise architectures. The proposal was applied to a firm of a pilot sample, finding a complete support of management processes by ICT's. Partial support for production and quality processes, resulting an improvement proposal for the integration of the essential processes of manufacturing SME's into ICT's.

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**Keywords:** Strategic Alignment Model, Enterprise Architecture, SME's

## Introduction

Productivity and competitiveness of Small and Medium Enterprises (SME's) in the world, is of wider importance because they provide a high rate of employment among the population.

In Mexico, 7 of each 10 jobs are generating by SME's, which is important for the analysis and implementation of new methodologies that can provide them increases its production capacity and help them become more competitive.

SME's in Latin America have similar characteristics among which are

- Capital is provided by one or two people who establish a society, and are usually family business.
- The management processes are developed by the owners.
- Suppliers of a local or regional market.
- Fail for compete in international markets.
- Personnel unskilled or unprofessional.
- Little strategic vision and ability to plan long term.
- Lack of information about the environment and opportunities in the market.
- Lack of technological innovation.
- Lack of training policies.

By all of above, a model of strategic alignment that links the key business processes of SME's with Information and Communication Technologies (ICT's), which can provide

such companies some advantages that allow them to increase their competitiveness and productivity, is proposed.

The competitiveness of enterprises refers to the ability to produce goods and services efficiently at a reasonable price and high quality (declining costs and increasing quality), making their products attractive both inside and outside the country.

On the other hand the ICT's can provide them with a sustainable competitive advantage, basing its efforts in implementing it by enterprise architectures.

Forthius, Brinkkemper and Bos (2008) define Enterprise Architecture (EA) like "Set of views and prescriptions that guide a coherent design, processes implementation, structural organizational, and ICT's provider into an organization" ; on this concept, artifacts or elements were produced in the design or implementations of enterprise architecture.

Enterprise architectures can enable the firm initiatives to help achieve strategic business objectives in a flexible manner that facilitates the integration of processes and systems to produce a project that contains a design business components and a component of the ICT's.

This strategic model involves enterprise architectures, ICT's and the analysis of the key processes of the manufacturing SME's.

**I.**

Some of the troubles that these firms present are showed in the Figure 1, in form of a SWOT Matrix (Strengths, Weakness, Opportunities and Threats) previously identified, some of these are: Access to finance resources, qualified personnel, good relationship with clients in the row of strengths, the weakness identified are: Insufficient production infrastructure, lack of computer strategy, human resources processes, and innovation technology.

The characteristics detected by the SWOT matrix were considered for the design of the strategic alignment model.

Researches and studies in Europe indicate that the EA is a trigger for transformations in companies , Orantes, Gutierrez and Lopez mentioned that the company should be constantly evolving, redefining business processes to achieve business architecture which is the basis for subsequent architectures like applications and technology architectures.

The Figure 2 shows the main components of the proposal model, where three components are associated to form the strategic alignment model, these are: Key business processes, ICT's, and enterprises architectures like a driver where all components will be integrated.



Figure 1: SWOT Matrix

The first activity was to identify the key business processes of the company's study case. These were identified like :

- Distribution.
- Finance.
- Human Resources.
- Information Technology.
- Quality.
- Sales and Marketing.
- Production.
- Product Development.

Statistical information obtained from a pilot sample about ICT's on manufacturing SME's, provide interesting information related to the case:

- 85% to 95% of the companies have automatized their management processes with information systems in finance, clients, providers, billing, selling, and others that help firms in the management.
- 45% have software for Computer Aided Design-Computer Aided Manufacturing (CAD-CAM), giving support for the design of products or development of new.
- Only 9% of the companies have a plan for EA.

These findings provide a view about the needs in EA for the manufacturing SME's.

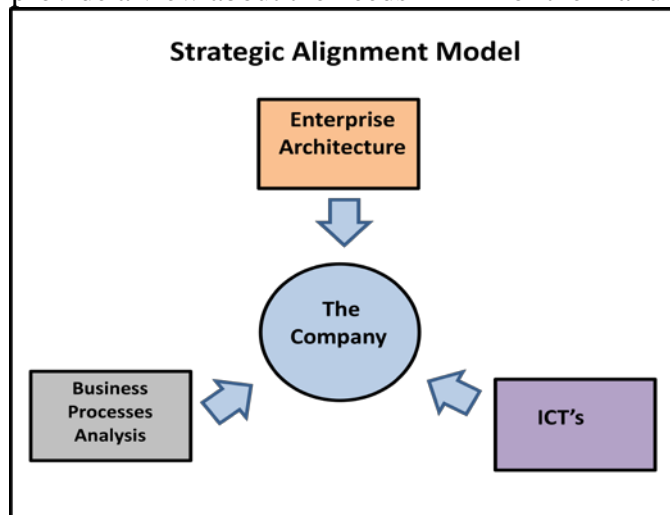


Figure 2: Strategic Aligement Model

With these premises, have been constructed the partial architectures that forming EA, the first is the Business Architecture (BA), the main goal is to define the business, documenting organizational structure, identifying and defining business functions and processes relying on strategic planning with their areas of interest. The BA involucre some elements of the company like mission, vision, objectives, goals, values and policies; business processes, procedures and functions; organizational structure, situational analysis, customers, markets, products and long, medium and short strategies.

As a result of BA, was redefined the Strategic Planning of the company with the definition of four strategic objectives related with production and quality processes, compete in international markets, human resources, and logistics processes.

Once the BA has been designed, the next step is related the business processes with computer applications, where has been found some processes that has not been supported by computer applications and technology.

These processes were: Human Resources, Logistics, Production, and Quality.

The three components of the model were linked through EA, involving ICT's and key business processes.

The results of the strategic alignment model are showed in Figure 3.

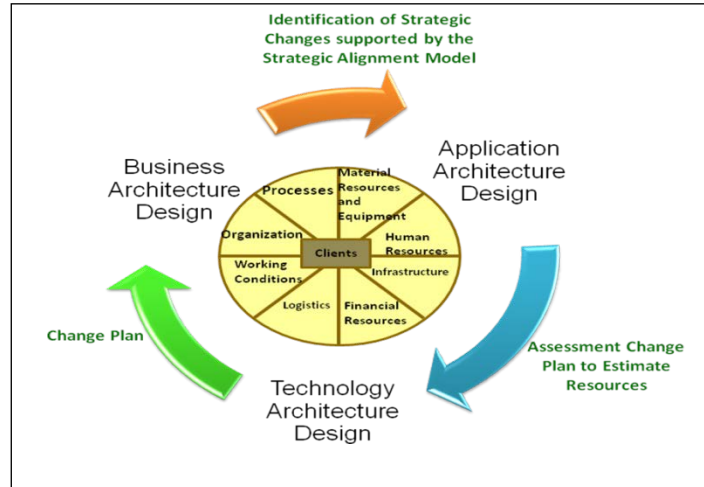


Figure 3: Strategic changes driven by the Strategic Alignment Model

As a result of the strategic changes two areas from the organizational structure were added: Human Resources and Logistics; the justification was that the firm does not have human resources area for the training of the employees, and logistics are required for the management of the resources from the beginning of the value chain to final assembly.

Other needs identified like the strengthening of the market position, the total quality culture, and the training of human resources to achieve improved organizational climate and consequently on the productivity of the entire company.

By the applications side, the basic web page of the company with information about production processes, history, clients, and contact was designed and implemented; achievieng an increase in sales of 7% monthly.

**Conclusion**

This project helped to meet the needs of SMEs companies to propose affordable solutions that make business management resources and technology to solve problems.

The strategic alignment model trough the Enterprise Architecture methodology applied in this medium business has detected the elements shown with a strong emphasis on the changes that are required for the purpose of aligning the processes with ICT's.

The application of the model has been successful in the mid-market as it has produced a series of changes within the company to achieve the integration of processes which has improved production rates and competitiveness.

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## THE CORPORATE MUSEUMS AND THEIR SOCIAL FUNCTION: SOME EVIDENCE FROM ITALY

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### Abstract

The Corporate Museum is a field of study that has been little explored and that occupies a particular position, at the intersection of the cultural realm of public museums and the world of business, and is characterized by a managerial vision. Corporate museums are physical structures in which the history and the memory of a company are told. The few works in this area look at these museums as a storehouse of organizational memory, as a tool for public relations and marketing, that is, for corporate communication. Although mainly framed in the context of corporate communication tools, studies conducted so far have neglected the potential of these structures as an expression of a social orientation of the firm, first demonstrated by attention to satisfying the legitimate expectations of the stakeholders (primarily, employees and local community). This paper intends to offer a contribution in this direction. We propose to strengthen studies that show a link between Corporate Museums and social oriented behaviors and to investigate the organizational conditions that could allow Corporate Museums to play a social role.

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**Keywords:** Corporate museum, social role, social responsibility, territorial identity

### Introduction

Despite their long pedigree, Corporate Museums (CMs) are a field of study that has been little explored. They are physical structures in which the history and the memory of a company are told. They manage collections owned by a company, are situated inside, and let visitors retrace both the past and the present of the business from different points of view, such as strategic, techno-productive, social.

The few works in this area focus on these museums as a store of organizational memory, as a projection of the corporate identity inside and outside the company, as a tool for public relations and marketing, that is, for corporate communication (Piatkowska, 2014).

Although mainly framed in the context of corporate communication tools, studies conducted so far have neglected the potential of these structures as a way of being for social responsibility, i.e. an expression of a social orientation of the firm, first demonstrated by attention to satisfying the legitimate expectations of the stakeholders, primarily organizational and societal stakeholders (Werther, Chandler, 2005).

While the research is still at an embryonic stage, this paper intends to offer a contribution in this direction. We propose to strengthen studies that show a link between CMs and corporate social behavior “in practice” and to investigate the organizational conditions that could allow CMs to play a social role.

Consistent with the research problem and considering the exploratory nature of the study, a qualitative approach was chosen, based on an in-depth case-study [Yin, 1984], in order to better describe and interpret the “how” and the “why” of choices made by these museums structures and to assess the “results” achieved.

This study consists of a comparative analysis of two CMs in Italy - the Ferrari and Ducati corporate museums -, whose common traits are the belonging to the same sector and the being the spearheads of the Motor Valley of Emilia Romagna. We chose Italy for two reasons: (1) the phenomenon is particularly relevant in Italy, where it has developed the largest number of CMs that exist today; (2) the CMs were founded mostly by companies that have a long tradition and that produce goods cult, often icons of Made in Italy in the world, but especially that are strongly rooted in the territory and have developed a strong identity with the local area in which they are located: many of these companies show a strong social awareness. The two museums are assumed detectors of possible common foundations.

This paper is structured as follows: in the next paragraphs, the theoretical background is identified and the research methodology is described; then the results of the case-analysis are presented. The contributions of the study and the future lines of research are discussed in the conclusion.

### **Theoretical background and conceptual framework**

Essentially, two strands of literature, centered upon CMs and Social ethics, respectively, constitute the theoretical framework underlying the present research.

Regarding the first strand, the theoretical contributions are still few from a numerical point of view and variegated in terms of approaches to study. The prevailing existing studies have yet to feature strongly in museology literature, in the form of articles in professional journals and magazines (Griffiths, 1999) or how-to guides for practitioners (Danilov, 1992; Amari, 2001; Negri, 2003; Nissley, Casey, 2002). Some investigations are carried out in the marketing and corporate branding literature (Kotler, 1999; Griffiths, 1999; Gilodi, 2002; Stigliani, Ravasi, 2007; Pastore, Vernuccio, 2006) or in the growing stream of research on industrial cultural heritage (Lane, 1993; Lalli, 2003; Montemaggi, Severino, 2007) and on industrial archaeology (Barbieri, Negri, 1989). Few studies have been carried out within the framework of organization studies and mainly in relation to the theme of organizational identity (Stigliani, Ravasi, 2007; Pratt, Rafaeli, 1997; Olins, 1989). As a whole, these studies have focused on the definition of the CM, its characteristics and the elements that distinguish it from traditional museums and the functions they perform (Bulegato, 2008). To the best of our knowledge, no studies address the social role of CMs with the exception of a work of Fanfani (2002).

With reference to the second strand, the contributions that focus on the content and on the scale of the concept of social responsibility (Carroll, 1991, 2000) are invoked and taken into consideration.

### **The Corporate Museums**

The rise of the CMs can be regarded as a contemporary phenomenon, despite the fact that such museums have been in existence for over a century, becoming, in recent years a favored destination for visitors (Griffiths, 1999). They are an advanced form of investment in culture made by the companies that generally invest in culture through other tools: production of goods which are objects d'art, art collecting, patronage and sponsorship.

We can define the CM as an exhibit-based facility, owned and operated by a company, which collects and displays objects (products, visuals, photographs, prototypes, and other material from the corporate archives) to illustrate the history of the company itself (its roots, milestones, achievements, leading figures, brand, products' development, etc.) and/or its operations to employees, guests, customers, or other visitors (Danilov, 1992; Nissley, Casey, 2002; Lehman, Byron, 2007; Stigliani, Ravasi, 2007).

The main features of CMs can be thus identified: they are generally located inside corporate facilities or near the company's headquarters or next to the factories where the

brand products are manufactured; they are usually run by the companies themselves and, sometimes, by foundations to which companies donate their collection to be displayed.

The origins of CMs date back to the early 20th century, due to the process of industrialization, but companies' desire to exhibit technical products and technological know-how goes back to the end of the 18th century (Stigliani, Ravasi, 2007). The world-wide development of CMs, however, only occurred in the second half of the 20th century: about half of such museums existing today were founded in the 1970s or '80s and they can be found in a variety of industries, ranging from automobiles to furniture, from cosmetics to food and beverages, and from fashion to home appliances (Danilov, 1992; Bulegato, 2008). In Italy, the first CM is dated 1906 (Museo del Merletto Jesurum), but even in the early '70s, many Italian companies - such as Pirelli, Martini, Richard Ginori, Alfa Romeo - began to establish corporate collections and archives (which evolved into CMs) inside their facilities to preserve a tangible record of the development of their industries and to illustrate the business or their entrepreneurial history. This phenomenon reached its peak during the 80s and 90s, when CMs became a concrete presence in the cultural field (Kartell, Piaggio, Ferrari, Ferragamo, Alinari, Barilla, Lungarotti, Pelino, Campari, Lagostina). In the 2000s, about half of all CMs were in Italy (Amari, 2001; Negri, 2003; Bulegato, 2008).

Some features can be considered common characteristics of Italian CMs: to be founded by companies with a long history, that are embedded in their territory, and that produce cult goods which emphasize their symbolic and aesthetic content, thus representing an emblematic example of the so-called "Made in Italy" image. In addition, we can call to mind not only the extreme industrial sector differentiation of CMs, but also their spatial diffusion, often far from urban areas. These characteristics of CMs, in particular their differentiation and not homogeneity, have led scholars to research more deeply the founding criteria so as to better be able to grasp the multifaceted nature of this phenomenon, within the different categories (Amari, 2001; Gilodi, 2002; Negri, 2003; Bulegato, 2008).

As far as the primary functions for CMs are concerned, they can be identified as follows: to preserve and convey the company's history; to develop employee pride and identification with the company (Stigliani, Ravasi, 2007); to inform guests and customers about the company, its product line and/or services; to influence public opinion about the company and/or controversial issues (Danilov, 1992; Piatkowska); to collect, document, preserve, interpret, show (Amari, 2001).

Leaving aside these distinctions, it is possible to note that at the beginning, CMs were seen as historical structures: they displayed documents, photographs and products of the past in order to tell an entrepreneurial history or remember, refer to and reconstruct the business history and to make organizational history and memory tangible (Kinni, 1999). In that sense, they have considered as a public relations tool. Afterwards, they changed their focus, becoming more strategy-oriented and shifting from being merely a passive collection of organizational artifacts to becoming an extension of the organization's marketing efforts (Danilov, 1992; Gilodi, 2002; Pastore, Vernuccio, 2006).

The managerial literature agrees that a company which has its own museum qualifies its image with respect to its competitors (Piatkowska, 2014). In addition, a company may use its museum in many other ways: as a "good lounge" (Fanfani, 2002), i.e. the initial introduction for those interacting or about to interact with the company for commercial or other points of view, as a means for reaffirming both inside and outside the company, the collective identity and the organizational core values; as a tool for inspiring designers and marketers in future product development; as a space in which to preserve brands acquired by business groups and multinational companies.

However, unlike the above-mentioned studies which focus in an almost exclusive way on the CM as a branding device or a marketing tool, we think that they can play another



important function, which would certainly not contrast with these, but, on the contrary, may further enrich and enhance them in a wider vision. We suggest that CMs can be viewed as a way to engage in social responsibility, thus becoming an expression of corporate involvement in the social field, a meeting point between company, territory and community.

In that sense, through its museum, a company may intercept territorial expectations related to intangible values, such as the promotion of culture and tourism, the dissemination of research on business history, the enhancement of creativity, innovation and memory, the education and training for the young generations in addition to what institutions could provide. The fact that CMs are considered a way for companies to be socially responsible, strengthens the idea that such structures can become a value for the territory, for local communities, public institutions or private associations and can achieve compatible goals related to marketing policies with a commitment to the communities in which the museums (and the companies) are situated.

### **Corporate Social Responsibility**

Corporate Social Responsibility (CSR) is gaining increasing importance: companies carry it out through various activities, they express it through a different relationship between company and clients, business and stakeholders and they are progressively more mindful of the deep and profitable link between enterprise and territory.

Companies, in fact, are not only in charge of goods and services production, but also play a fundamental social role, i.e. in the cultural promotion and preservation not only of the historical roots of its production process but also of the territory and the surrounding community with its own culture, customs, world view.

The term CSR takes on different meanings depending on the actors who use it, and their cultural and organizational contexts. The earliest contributions (Bowen, 1953) have been progressively enriched in the last 20 years and have developed a rich debates (Carroll, 1991, 2000) involving academics from diverse disciplines: business, economics, management, sociology, anthropology, philosophy. The theme is still relatively little explored in organizational disciplines.

Four groups of theories form the core of this literature [30], related to four different approaches: instrumental theories (Friedman, 1962); political theories (Davis, 1960), integrative theories (Garriga, Melé, 2004), a collection of ethical theories, that include the approach of stakeholder (Freeman, 1984, 1983) and the approaches of sustainable development (WCED, 1987). CSR recognizes the importance of the actions of an enterprise in four areas. The first area is the relationship between businesses and local communities in the context in which the company carries out its activities. It is a responsibility in terms of its contribution to the social and economic development of the territory: from guarantees for employment to respect for the culture and traditions of the place; from support of the industrial fabric of the territory to partnerships with local entrepreneurs and the development of relationships with local public institutions; and so on. The second area is in fact a specification of the first and considers the environmental impact of the business, therefore the assumption of responsibility with regard to the limitation of polluting emissions arising from production processes. The third area concerns the relationship between the company and the market, and in particular, current and potential customers. The fourth relates to the internal management of the company, and in particular, the relationship with its employees at all levels. In this case, the ethical and socially responsible behavior of the company is measured through: the emoluments; the recruitment and training policies; the working conditions (“physical” context); the forms of work organization; the evaluation and incentives system, etc. For the purpose of this work, we focus on the relationships between the company and the

environment, the market, local communities and organizational reflection can be involved in matters relating to arrangements for liaison with external actors.

### **Research methodology**

Given the exploratory nature of this work, the research design of this study relies on an inductive approach, based on typical case study methodologies (Yin, 1984), according to which several methods and empirical sources contribute to offer a holistic understanding of the phenomenon investigated (Eisenhardt, 1989). These cases represent a “special” ones, which allow us to gain a certain insight that would be difficult to find in other contexts (Siggelkow, 2007). To this end, we acquired the necessary information by combining multiple methods of data gathering: in-depth interviews, analysis of secondary sources and personal visits. First, the Heads of the two CMs were interviewed for a variable length of time, anywhere lasting from one to more than three hours each. The interviews were conducted by using a semi-structured questionnaire and according to the narration approach: the Heads of the two CMS are left free to reconstruct the origin, the purpose, the history of single CM in such a way as to give a most complete picture. This picture should include the organizational characteristics of CMs (type of structure, organizational location, number of employees and their competences, opening hours, types of visitors) and, especially, the initiatives organized and carried out, the nature and typology of existing relations with other actors in the territory. Then, in order to complete the data thus collected, we analyzed secondary sources (including official documents, web sites, press archives of local and national newspapers, previous studies, industry databases) some of which was done before and after the interviews. We also gathered further indications from direct visits to the museum facilities. In order to obtain more robust evidence (Jick, 1979), we checked for triangulation of different data sources

### **A brief history of Ferrari and Ducati corporate museums**

The Ferrari Museum are relatively recent as it was inaugurated in February 1990 and until 1995 was managed by the Municipality of Maranello, owner of the property where the museum is currently housed. Since 1995, it has come under the direct management of Ferrari S.p.A. The historical reasons for its founding are two-fold: the need for Ferrari to ease the growing pressure of visitors to its production plant on the one hand, and the town of Maranello’s desire to recognize and acknowledge the social role played by Ferrari, on the other hand. The evolution of the Museum has been linked to the commercial development, growth and consolidation of the legendary Ferrari image that the industry’s and the motor racing sport’s successes have helped to create. The Ferrari Museum was born as the true custodian of the Ferrari legend and of the history of its founder, Enzo Ferrari. It houses cars, images and trophies that have characterized the history of the brand and have been hugely successful on commercial markets and worldwide circuits. In the 1996, with the advent of Luca Cordero di Montezemolo as chairman of Ferrari S.p.A., the management of the Museum became highly integrated into that of the company and important changes were made to increase museum holdings. During the last decade, the number of visitors coming from all over the world has greatly expanded (almost 250,000 per year). Today, however, the Ferrari Museum has a different identity that can be fully understood only by widening the perspective of analysis and projecting the activities of the Museum onto the territory.

In fact, it is possible to think of this CM an expression of the expectations that come from many stakeholders, such as: *the company*, interested in highlighting the history of its founder and its evolutionary path, in enhancing its supportive role in the development of the sector and the technological progress of the entire country, in communicating and strengthening the underlying value of the business idea (the constant commitment to

innovation and the deep-rooted ties to traditions); *employees*, who may consolidate their pride in being members of the company and their identification with it through the activities of the Museum and the symbols, images, artifacts kept inside it; *owners and private collectors of Ferrari cars*, considered potential partners in the preparation of exhibits but also “guardians” of a historical heritage that has to be safeguarded in the collective interest; the whole community of *people passionately fond of Ferrari and of Ferrari fans*, who call for the development of leisure facilities around the cultural asset; *the general community*, for which Ferrari cars are “works of art”, an expression of the so called “Made in Italy” image and of Italian genius; *the town of Maranello*, the owner of the property and of the area where the Museum is located, and *the entire local community*.

The Ducati Museum, established in 1996 inside the factory in Borgo Panigale (Bologna), was inaugurated in 1998. Conceived as a “dream-like circuit”, its aim was to reconstruct the history of the company and to preserve Ducati’s industrial success and sports achievements. Another reason for setting up the museum was to revive the “legendary” Ducati brand: in that sense, it would be a sort of shrine for all Ducati fans and museum visitors. Finally, there was a growing awareness of the importance of preserving this heritage: it was considered a source of inspiration for designers. The Ducati Museum extends the range of its activities over a large territory, meeting the expectations of a plurality of stakeholders, internal and external to the company: the territory and the community of Borgo Panigale has developed a strong sense of identification with Ducati.

The Ducati Museum extends the range of its activities over a large territory, meeting the expectations of a plurality of stakeholders, internal and external to the company: *the local town and the local community* who see the Museum associated with Borgo Panigale and perceive the benefits from the intense tourist flow; *the national and international associations* that benefit from the awareness of the cultural value of the Museum; *brand clubs* (the tribe of the “Ducatisti”) that recognize in the Museum a cornerstone of the entertainment formula; *the owners and collectors* involved in partnerships with the Museum, who are interested in consolidating this relationship in order to preserve the historical heritage; *employees* that can strengthen their sense of belonging to the brand thanks to a wider knowledge of the history of the company; *the company and its owners* that consider the Museum part of the corporate competitive strategy and, in collaboration with the Ducati Foundation, part of the corporate social policy.

## Results and discussion

Beside the cultural value of the CMs, not only in terms of preservation and enhancement of the heritage and the historical memory of the company, but also for research, study and training, these structures can give substance to the social function of the company. In fact, you can think of these museums as collectors of complex interests and as a place in which a plurality of interests converge (economic, aesthetic, social, cultural, ethical), which are, in turn, an expression of the expectations of multiple stakeholders: the company, its employees, owners and private collectors of cars/motors, the whole community of Ferrari and Ducati fans, the local town and the local community, the national and international associations that benefit from the awareness of the cultural value of the museums.

In the case of Ferrari Museum, the social dimension can be considered as the projection of Ferrari’s activities on the surrounding area. All the territory in Maranello is identified with Ferrari which has, over the years, promoted development by encouraging the growth of highly specialized allied activities and recruiting most of the employees from the province. At the same time, the identification of the Ferrari with the territory is also very strong, not only for the origin of the staff and the location of many strategic suppliers: in Maranello there are the Ferrari factory, the Wind Tunnel, the monuments and the auditorium

dedicated to Enzo Ferrari and his home. The initiatives promoted by the “Culture, sport and entertainment Public Authority” of the town of Maranello see the Ferrari Museum involved in conducting cultural events and organizing rallies and other sports activities. The company contributed to the development of the municipality, until then largely agricultural, was also crucial due to the growth of an induced highly specialized and renowned. The Ferrari Museum contributes to weld this link with the territory by participating in the cultural events of the province, in the organization of meetings and other sports activities, in the initiatives undertaken by collectors, associations, public and private sponsors, so bringing to the entire population the economic benefits of tourism fueled by visits to the CM.

The passive role played by the Ferrari Museum in the early years has been replaced more recently by an active one. The Museum is the root node of a network of relationships with many other external actors: it coordinates many of the initiatives and selects the cultural content of events. It has also widened and intensified its contribution in the field of education by developing numerous initiatives with schools and technical institutes, in order to contribute to the development of professional skills coherent with the needs of the training sector. The Ferrari Museum funds and provides a teaching laboratory equipped with 12 touch screens, which can be used by pairs of students, for a total of 24, a plasma screen for the tutor, an “augmented reality” workstation, a totem with original audio and video contributions, as well as interactive exhibits. The aim is to enrich the quality of education and to facilitate the process of guiding children and teenagers through their compulsory education, by giving “good images” of the world of work, so as to help reduce the gap between the supply of and the demand for professionalism. The longevity of Ferrari, the pride of “ownership” that has always characterized its employees, the strong identification of suppliers with the core values of Ferrari, testify to a system of ethical values, whose origin is to be found not only in the Ferrari family but also in the territory.

Not very different is the case Ducati Museum: the territory and the community of Borgo Panigale has developed a strong sense of identification with Ducati. In this case too, the company recruits and selects its own employees in the area, fosters relationships with many local suppliers, establishes technological relations with other important partners in the area around Bologna. The Ducati fits inside of this network of relationships by taking a very active role within a territory that radiates from Borgo Panigale towards the surrounding areas, and by promoting a “cultural and social function” for the company and the brand. There is a continuous dialog with public institutions and there is very close cooperation with players in the field of culture, entertainment and sports. The initiatives undertaken in collaboration with public administrations or local associations are often promoted by the Museum: guided tours organized for schools, motorcycle rallies, numerous themed events, special exhibitions held outside the Museum, and so on. Finally, there are many tourists that visit the Museum (almost 60,000 a year), bringing undoubted economic benefits to the entire community.

Both museums have also chosen to join the “Motor Valley - Land of Motors” project. Begun as part of “Bologna 2000 - European city of culture”, this project gradually grew, becoming a touristic product and gaining regional interest initially, with the involvement of many players caught up in and revolving around the “mechanics” culture (Alberti, Giusti, 2014). The fact that museums were already a source of tourist attraction, albeit at a primary advantage of their respective companies, has fostered the participation in the project, the rise of many collaborations with local tourism stakeholders (the regional tourism agency - APT) and with other economic actors. Ducati and Ferrari Museums have contributed to the definition of touristic packages able to involve and leverage the potentiality of the heterogeneous resources of the project (company museums visits, guided tour to famous manufacturer, sport activities, participation to sports events and exhibitions and so on. Moreover, these two CMs have made available to the project and shared the network

relationships that these companies had developed over time with the ancillary companies (who worked for the majority of the brand) and with research centers (at the Universities of Bologna and Modena and other research centers), allowing the creation of a network between major firms in the motor industry, artisans, tourism organizations, sport facilities, institutions. The jointed and coordinated action of all these actors, then, has created a tangible and intangible cultural heritage that has nurtured tourism flow and fostered regional competitiveness.

Thanks to the collaboration with public actors (above all the Emilia Romagna Region), the development of training projects has also made possible (Bonti, 2013). On the one hand, the CMs have contributed to the training of museum guides who integrate their basic preparation (artistic and literary) with knowledge about the world of engines through meetings with mechanics, journalists and experts in the field. On the other hand, Ferrari and Ducati Museum have spoken on behalf of the need to preserve some important crafts and “professional figures” that are on the brink of extinction. This refers specifically to the training of professionals or master craftsmen in the field of restoration (repair and maintenance) of vintage cars and motors. This is an activity based on the culture of things made or done by hand and translates into an “artistic” craft. It is also an activity that creates a great number of collaborations and synergies in a greatly diversified sector (coachbuilders, auto-body repairers or panel beaters, sheet metal chassis-makers, paint-restorers, upholsterers, motor manufacturers, mechanical and electrical experts, etc.). Despite the potential offered by this sector from an employment point of view, the lack of skilled labor and schools suited to teaching these skills threatens to lead to the disappearance of a wealth of knowledge and know-how. The school of restoration for vintage Italian cars and motorcycles is an initiative that developed within the project Motor Valley - Land of Motors (with the collaboration of the Ducati Foundation and the Province of Bologna, along with the patronage of the Ministry of Productive Activities). The school’s goal is to rediscover, enhance and pass on the technical-professional heritage of the territory, as well as the tradition of hand-restoration of cars and motorcycles; moreover, it facilitates the coming together of fans and admirers of what could have become a lost art.

## **Conclusion**

The analysis of the two cases has highlighted the different roles played by corporate museums, not only in the field of preservation and enhancement of the heritage and the historical memory of the company, but also in the field of research, study and training, making clear the social function played by them.

Both working alone, either within a public-private network, the CMs have been promoting the enhancement and development of the local territory, helping to strengthen a responsible competitiveness of the regional territory. Both CMs that the public administration are aware of the benefits that their collaboration has made and will make to the territory and the local community, even if these benefits are not easily quantifiable.

The present research is still in the early stages and presents the typical limitations of a case study. Anyway, we believe that the exploratory analysis of the cases has revealed some interesting results, even if we need more information in order to have a chance of better framing CMs as a way of engaging in a social responsibility of the business and of the territory. We are aware that the analysis was based on interviews of only two CMs and, in addition, there is the possibility of biases due to the perception of the interviewed managers. It is necessary to delve more deeply into the reasons that have prompted companies to join the project; how the relations between the public institutions and businesses can develop in a circular way, producing benefits at different levels: the level of individual companies, of

systems of relationships that revolve around the single company, of the system of relationships generated by the Motor Valley – Land of Motors project.

Further steps of the research, in addition to trying to overcome some of the above mentioned limitations, will be aimed to investigate how to measure the value generated by CMs: we will examine the possibility of identifying evaluation tools able to better express the cultural, social, economic value produced by CMs, in relation to the different types of stakeholders.

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## DEVELOPMENT OF TORT LIABILITY FOR INJURY TO THE UNBORN

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### Abstract

Both the common law and the law of civilian jurisdictions recognize an unborn child as in *esse* for purposes of receiving certain civil rights. In most of the cases involving prenatal injuries, it has been advocated that the tort law, by analogy to criminal law and property law, should recognize an unborn child as a person in being. The courts formerly rejected this argument, saying that in order to protect social and property interests a "fiction" has arisen that an unborn child is in being but that this "fiction" should not be invoked to protect personal security. The recent cases have found the protection of an unborn child's personal security to be equally important as the protection of social and property interests, but have impliedly limited the protection to the personal interests of a viable child. The object and purpose of this article is to analyze and review development of tort liability for injury to the unborn - from the first precedential case till the newest era of liability for prenatal injuries, especially in those conditions, when Georgian Civil Legislation does not recognize this type of Tort Liability.

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**Keywords:** Tort, Liability, Maternal Liability, Fetus, Prenatal injuries

### Introduction

Until recent years, however, common law courts have refused to recognize a cause of action for a child for injuries incurred prenatally [10]. Civil law jurisdictions are somewhat at variance in approaching the problem. French law, like the common law, has shown unwillingness to recognize the rights of an unborn child in tort, the courts of Quebec and California have adopted a more liberal view – the Article 608 of Quebec Civil Code provides that persons are considered to be civilly in existence at the instant of conception if they are later born alive. The Articles 771 and 838, respectively provide that an unborn child may receive a gift *inter vivos* and may take a benefit under a will. The Supreme Court of Canada, on the basis of these articles concluded that a child *en ventre sa mere* is a separate being and applied this conclusion to actions in tort for physical injuries [7].

Actions for the recovery of damages resulting from prenatal injuries have arisen in two ways: Where a child after birth brought an action and where parents brought an action under the wrongful death statutes. Under the death statutes parents have no action unless a child could have maintained an action had he/she lived. Thus, the problem is basically the same in both: Can a child maintain an action to recover damages for prenatal injuries? Though the great weight of authority has denied a cause of action for prenatal injuries [2].

In most of the cases involving prenatal injuries, it has been advocated that the tort law, by analogy to criminal law and property law, should recognize an unborn child as a person in being. The courts formerly rejected this argument, saying that in order to protect social and property interests a "fiction" has arisen that an unborn child is in being but that this "fiction" should not be invoked to protect personal security. The recent cases have found the protection of an unborn child's personal security to be equally important as the protection of



social and property interests, but have impliedly limited the protection to the personal interests of a viable child [2].

### Historical Development

The history of the development of the concept that one may be liable for injury to the unborn is an often-told tale [6]; it forms such an integral part of the analysis that it is necessarily a part of any discussion of the concept.

The early common law recognized that the life of an unborn child was entitled to the legal protection of the criminal law from the time it stirred in its mother's womb. Blackstone, in his *Commentaries* stated: "Life is the immediate gift of God, a right inherent by nature in every individual; and it begins in contemplation of law as soon as an infant is able to stir in the mother's womb. For if a woman is quick with child, and by a potion, or otherwise, killed it in her womb; or if any one beat her, whereby the child died in her body, and she is delivered of a dead child; this, though not murder, was by the ancient law homicide or manslaughter. But the modern law do not look upon this offence in quite so atrocious a light, but merely as a very heinous misdemeanor" [6].

Any discussion of the history and background of the law of liability in tort for injury to the unborn usually begins with the case of *Dietrich v. Northampton* which appears to be the first reported case on this subject in a common law jurisdiction.

Massachusetts Supreme Court in *Dietrich* refused to extend the criminal and property law precedents to include a cause of action in tort. Apart from the lack of precedent, which in his view was a substantial reason for denying a cause of action, Justice Holmes had difficulty with the proposition that an infant dying before it was able to live separate from its mother could be said to have become a person recognized by the law as capable of having a *locus standi* in court, or being represented there by an administration [6].

Another influential early case was the Irish decision of *Walker P. Great Northern Railway of Ireland*. In sustaining a demurrer to a claim against a common carrier for injury to a child *en ventre sa Me're*, Chief Justice O'Brien reasoned that any duty to a child must flow from the contract of carriage, and, since the existence of a child was not known to the carrier, no duty could exist.

The next case to arise was *Allaire v. St. Luke's Hospital* which was decided by the Illinois Supreme Court in 1900. In that case, the plaintiff's mother, her pregnancy having gone its full term, had entered the defendant hospital for the purpose of delivering the plaintiff. According to the complaint, the unborn child was seriously and permanently disabled by a malfunctioning elevator in the hospital. In a *per curiam* opinion that merely concurred in the views of the appellate court which in turn had relied solely on *Dietrich* and *Walker*, the Illinois Supreme Court denied that a cause of action existed [6].

The denial of a right of recovery for prenatal injuries on the theory that "the unborn child was a part of the mother" may have been in accord with the state of medical knowledge. Standard medical works of the period recognized the separate biological existence of the fetus and an impressive body of medical knowledge concerning the effect of the prenatal environment on the unborn human fetus was accumulating.

On the early-stage fetus can be caused by a number of phenomena, including trauma, other diseases, drugs and even emotional distress. Since essentially all of the vital organs take form at a very early stage of fetal life, the most serious postnatal disabilities result from injuries occurring in the first trimester of pregnancy - long before viability. From a medical point of view, therefore, it makes little sense to condition recovery on the viability of the fetus at the time of injury. The question courts have had to resolve is whether the results of this increased medical knowledge can be translated into a suitable formulation of duty upon which tort liability can be predicated [3].

Most of the early cases rested on the theory that a fetus has no existence separate from its mother and thus no duty toward such a "nonexistent" being could arise, it was to be expected that the early decisions should find a duty most clearly in those cases in which the fetus was viable—that is, where it had reached the stage of development where life could be maintained outside the mother's womb.

In these cases, the "personhood" and separate existence of the child were most clearly apparent, and courts could most readily find a duty of care. Such a duty was found by courts deciding both the claims of surviving infants seeking damages for disabilities resulting from prenatal injuries ("injury" cases) and the wrongful death actions of survivors of infants born alive but subsequently dying as a result of prenatal injuries [6].

The legal - as opposed to the medical-infirmity of the Holmes position was pointed out dramatically in *Montreal Tramways v. Leveille*, in which Justice Phillips (Supreme Court of Canada) stated: "If a child after birth has no right of action for pre-natal injuries, we have a wrong inflicted for which there is no remedy, for, although the father may be entitled to compensation for the loss he has incurred and the mother for what she has suffered, yet there is a residuum of injury for which compensation cannot be had save at the suit of the child. If a right of action be denied to the child it will be compelled, without any fault on its part, to go through life carrying the seal of another's fault and bearing a very heavy burden of infirmity and inconvenience without any compensation therefore. To my mind it is but natural justice that a child, if born alive and viable, should be allowed to maintain an action in the Courts for injuries wrongfully committed upon its person while in the womb of its mother." [4].

Just as *Dietrich* case had received immediate and universal acceptance, so also did *Bonbrest v. Kotz*; courts have been almost unanimous in allowing a cause of action in at least some circumstances. The case of *Bonbrest* was one in which injuries to a viable fetus created a cause of action. Recent case have rejected the argument that "legislative action" is necessary for recovery and have allowed recovery without express statutory authorization [8]. The Court have extended viability so that child is considered a person from the time of its conception [9].

### **The Current Law and Maternal Liability for Prenatal Injuries**

According to the current case-law and legislation, a person is liable for injuries they cause to an unborn child; a fetus has legal rights that materialize when the child is born alive (Australia – *Watt v. Rama*; Canada - *Dobson v. Dobson*; United Kingdom – the Congenital Disabilities (Civil Liability) Act 1976 ).

In case *R.R. v. Poland* European Court of Justice replied that "the applicant (mother of the baby girl effected with the Turner Syndrome – caused by the negligence of medical professionals) experienced considerable anguish and suffering, having regard to her fears about the situation of her family and her apprehension as to how she would be able to cope with the challenge of educating another child who was likely to be affected with a lifelong medical condition and to ensure its welfare and happiness. Moreover, the applicant had been humiliated by doctors' lack of sensibility to her plight". The Court has found a breach of both Articles 3 and 8 of the Convention [11].

Although a number of hypothetical situations can be visualized in which a child could suffer damage from wrongful acts of another prior to its conception, there appear to be only three reported appellate cases in which this issue was raised. In *Jorgensen v. Meade Johnson Laboratories, Inc.*, the United States Court of Appeals for the Tenth Circuit, applying its interpretation of Oklahoma law, held that an allegation that birth control pills manufactured by the defendant caused chromosomal changes in a mother resulting in her giving birth to mongoloid twins stated a cause of action for the twins for retardation, deformity, and pain and suffering during their lifetimes. The Illinois Supreme Court held in *Renslow v. Mennonite*

*Hospital'* that an allegation that the negligent transfusing of a thirteen-year-old Rh-negative female with Rh-positive blood resulting in permanent disability to a child born to her nine years later stated a cause of action on behalf of the child. In *Bergstreser v. Mitchell*, the Eighth Circuit Court of Appeals held that, under Missouri law, a cause of action was stated on behalf of an infant who suffered harmful hypoxia or anoxia during an emergency premature Caesarian section caused by the defendant physicians' and hospital's negligence in performing a prior Caesarian section on the mother [6].

Nowadays, one of the most important questions is whether negligent acts of a pregnant women causing injury to her child “en ventre sa mere“ fall within the scope of the well-established principles of tort law.

The New South Wales Court of Appeal in *Lynch v. Lynch* replied that a mother owes a legally enforceable duty to care her unborn child that will be breached by negligent driving. The Decision of Supreme Court of Canada in *Dobson v. Dobson* established that while a fetus has certain rights against the third parties that materialize upon birth, a child cannot sue its mother for injuries caused prenatally by the mother's negligence. The majority in *Dobson* asked whether a mother should be found liable for failing to obtain from the activities – smoking, drinking, strenuous exercise, avoiding safety checks while pregnant. The Judgment implies that she should not. It was contended above that tort law provides a principal limit for prenatal negligence and it is contended further that these particular example fall within that limit and therefore should be prima facie actionable [9].

In *Stallman v. Youngquist* case, the United States position was that a mother was not liable for injuries caused to her unborn child by her negligent driving in order to preserve the mothers right to privacy and bodily integrity. Conversely, in other cases a child was found to have a cause of action against its mother for negligently failing to cross a road at a designated cross-walk, or for using drug during pregnancy causing discoloration of the child's teeth [9].

Thus, the case-law and legislation toward maternal liability is not uniform.

### “Wrongful Death”

It is very interesting whether parents have right to bring an action for the death of their unborn child. Under the death statutes parents have no action unless a child could have maintained an action had he/she lived. In Case *Cooper v. Blanck* in 1923 mother in the ninth month of pregnancy was struck by falling plaster from the ceiling of the defendant's house. A premature birth followed and the child lived only a few days. The suit was under the Article 2315 of the Civil Code which provides that parents have a right of action for the wrongful deaths of their children. The court of appeal of Luisiana discussed the codal articles that imply that a child en ventre sa mere is a living person and held that parents may sue for the wrongful death of a child even if the injury causing death was prenatal. Speaking of injuries received during the viable stages of gestation, Justice Westerfield said, “... if the child be killed at this period, before its birth, we see no reason why its parents cannot maintain an action for the death of the child.” In *Youman v. McConnell'* in 1927 mother in the seventh month of pregnancy was negligently injured; two months later the child was stillborn. The defense urged application of the Article 28 which provides that children born dead are considered as if they had never been born or conceived. The court applied the article literally and refused damages for the wrongful death [1].

In future cases the Louisiana courts might hold that a child conceived is a separate being and that any injury, whether it be to an embryo or to a foetus' would be grounds for recovery by the child. This position could be justified by the Article 29 of the Civil Code which provides that children in the mother's womb are considered, in whatever relates to themselves, as if they were already born [1].

The courts might, as a second possibility, recognize Blackstone's theory that a child is a person after it has once moved in the womb of its mother-the "quick" child. The third possibility for Louisiana courts is the adoption of the theory propounded by Justice Boggs, dissenting in *Allaire v. St. Luke's Hospital*, that a foetus is a separate entity after it reaches that stage of gestation at which it could live without its mother. The court said: "... we content ourselves with the observation that the civil law is still the basis of our jurisprudence" [1]. Those words imply that it was adhering to the general civil law principle that an unborn child is considered an individual for matters which may be to its advantage. However, in writing for the majority, Justice Westerfield further said that the court was concerned in that case with a fetus advanced to the final stages of gestation when all authorities, medical and legal, agree that the fetus is viable.

### "Wrongful Life"

The terms "wrongful life" and "wrongful birth" seem to have been used first in *Zepeda v. Zepeda*. Although courts and commentators have applied the terms to a wide variety of actions brought by parents or by infants for damages growing out of unexpected or unwanted birth, or out of birth under conditions of disability or disadvantage, it is helpful for purposes of analysis to break these cases down into three categories. The first American case in which the issue of "wrongful life" was presented to an appellate court was *Zepeda*. In that case, the infant-plaintiff sued his father for damages because he had been born an adulterine bastard; his father had induced his mother to have sexual intercourse by promising to marry her when in fact the father was already married. The damages sought were for deprivation of the right to be a legitimate child, have a normal home, have a legal father, inherit from his father and from his paternal ancestors, and for being stigmatized as a bastard. The trial court dismissed the complaint for failure to state a cause of action [6].

The second case to reach an appellate-level court was *Williams v. State*. That case presented the New York Court of Appeals with the same issue but in the different context. In *Williams* the defendant was the State of New York whose alleged negligent supervision of a state mental institution allowed a female patient, the plaintiffs mother, to be raped by another patient, resulting in the plaintiffs birth to a mentally defective mother. The New York Court of Appeals, like the Appellate Court of Illinois, held that the common law did not recognize as actionable the act of causing one to bear the "shame and sorrow" of illegitimate birth. New York Court of Appeals in *Williams v. State* replied "Being born under one set of circumstances rather than another or to one pair of parents rather than another is not a suable wrong that is cognizable in court." [6].

### Conclusion

In this article, we tried to overview the development of tort Liability for injury to the unborn. The law concerning tort liability for injuries to the unborn has evolved in several distinct but sometimes overlapping phases since the first case was posed for the American judiciary by *Dietrich* in 1884. In the first era there was uniformity of decision that recovery was not allowed for prenatal injuries. That phase came to an abrupt end in 1946 with the *Bonbrest* decision. The phase immediately following *Bonbrest* was one in which injuries to a *viable* fetus created a cause of action. The next phase, which is not marked by any clear initial boundary and continues to the present, is the era in which a cause of action is recognized for injuries received by the fetus prior to viability. The newest phase in the developing law of the unborn is introduced by actions seeking recovery for maternal negligence, wrongful life or wrongful birth.

However, despite the rapid development of tort Liability for injury to the Unborn, the best end of justice cannot be served until the courts and the legislatures have fully recognized

that an individual has a value simply for his status as a human being. The Courts and legislators should reconsider the legal status of the unborn fetus and the measure of damages in death actions or health injuries.

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## DIVORCE IMPOSED AND THE CHARTER OF FUNDAMENTAL RIGHTS OF THE EU

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### Abstract

The Court of Italian Cassation with the ordinance of June 6<sup>th</sup> 2013, n. 14323 put again to the Italian Constitutional Court the decision on the case of a couple of consorts whose transsexual husband had gotten the rectification of attribution of sex.

The controversial joint concerns the fate of the marriage tie following the change of sex of one the consorts.

Besides the annotation on the action of birth of the variation of the registry data there was the annotation related automatic cessation of marriage.

The Court of Italian Cassation admits that a form is created of "imposed divorce". To the light of this it is legitimate the doubt the vompabilities with the normative constitutional and with the contained prescriptions in the CEDU, in which he affirms the right of self-determination in the relative choices personal and sexual ball'identita of every individual.

The Court of Italian constitution, also recognizing importance to the homosexual unions, it exclusively interprets the marriage among heterosexual.

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**Keywords:** Divorce imposed, marriage, transsexual, unconstitutional

### Introduction

This article draws on a case that has created, in Italy, a heated debate by introducing a kind of "forced divorce" as a result of the change of sex by one of the spouses. This is due to the absence of legislation which, like other countries of the European Union, rules, unions between individuals of the same gender.

The couple, eager to maintain the married state, have turned to civil Court of Modena because here recognized their right to family life.

The question is then arrived at the Italian Court of Cassation decided that for the referral to the Constitutional Court, through, inter alia, the violation of various provisions of the Italian Constitution.

This ruling is an opportunity to examine the legislation and case law on the subject of European union and family.

### I.

The circumstances that give rise to the hypothesis imposed divorce starts from the automatic termination of the marriage bond as a result of the adjustment of sex allocation of one of the spouses-authorized by the Court of Bologna in Art.4 of Act 164 of 1982<sup>86</sup> and Art. 31 of d.l. n. 150/2011<sup>87</sup>. According to these rules, the judicial authority welcoming the request for rectification of gender requires the registrar of the municipality of registration of

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<sup>86</sup> Legge 14.4.1982, no. 164, "Norme in materia di rettificazione e attribuzione di sesso", *G.U.* 19.4.1982, no. 106.

<sup>87</sup> D.lgs. 1.9.2011 no. 150, "Disposizioni complementari al c.p.c. in materia di riduzione e semplificazione dei procedimenti civili di cognizione, ai sensi della legge 18.6.2009, n. 69", *G.U.* 21.9.2011, no. 220.

birth certificate, changing the relevant register; this adjustment results in the dissolution of marriage and the cessation of the civil effects-as dictated by Art. 4 of Law n. 164/1982 and Art. 31 of d.l. n. 150/2011- to note in the margin of the marriage (Presidential Decree no. 396/2000, Art. 69<sup>88</sup>).

The married couple has appealed to the Court of Modena requesting the correction of the act and obtaining a favorable ruling, but despite the acceptance of the request, the Italian Ministry of Interior denied the required correction believing that would lead to maintain "life in a relationship devoid of its essential premise of legitimacy, namely the sexual diversity of spouses".

The Court of Appeal of Bologna, to which the Italian Ministry of the Interior has proposed complaint, argues the legitimacy of the record made by the Registrar.

The courts of appeal, rule on the matter, have justified the decision by highlighting the complementarity between the update of master-name in the feminine-and updating the registers of civil status; with the mutation registry, according to the Court of Appeal of Bologna, would fail the assumption characterizing the marriage union identifiable in sexual diversity between spouses. Emerges from the judgment the "necessity" of a causal link between gender and the rectification of the record that the registrar completes about the cessation of the civil effects of marriage.

Spouses propose, therefore, appeal to the Italian Supreme Court which, by the order of 6 June 2013, n. 14329, suspends judgment of the same object and decides for the transmission of documents to the Constitutional Court. With sentence no. 170 on 11 June 2014<sup>89</sup>, the Italian Constitutional Court has expressed itself by stating that the divorce "imposed" the married couple, one of whom has obtained the correction of the attribution of sex, is unconstitutional. However, refer to the legislature the task of providing a legal framework, which currently does not exist. The note highlights the positive aspects and critical judgment, placing it within a lively academic debate started in Italy in recent years.

The Supreme Court of Italy repents in the judicial decision of the lower court a kind of "forced divorce" by the legislature for the following reasons: the institution of marriage is based on the consensus that must be used in all matters that concern them; the dissolution of marriage was not, in this case we are discussing, the subject of pronouncement by a judicial authority and therefore not the principles of public policy concerning the institution referred to in Law no. 898/1970; the constraint has arisen previously with respect to the choice of gender reassignment.

Self-determination is the basis of the choices belonging to the emotional and affective sphere of the person concerned, in this case, in addition to the deprivation of a fundamental right which is already-acquired-inevitably affects the spouse who is disturbed state<sup>90</sup>. In this case there is a cancellation of already acquired a status that can not be superimposed on the prohibition of marriage between same-sex spouses. In regard to the latter there is an unjustified equation of already married people who choose to change sex and homosexual persons wishing to contract marriage thus causing an assimilation between gender identity and sexual orientation, already clearly distinguished by the Constitutional Court<sup>91</sup>.

<sup>88</sup> D.P.R. 3.11.2000, no. 396, "Regolamento per la revisione e la semplificazione dell'ordinamento dello stato civile, a norma dell'art. 2, comma 12, dell'art. 54 della L. 15 maggio 1997, n. 127", *G.U.* 30.12.2000, no. 303.

<sup>89</sup> Constitutional Court of Italy, 11.06.2014 n. 170, [www.cortecostituzionale.it](http://www.cortecostituzionale.it)

<sup>90</sup> The Law no.164/1982, as pointed out in the judgment of the Constitutional Court no.161 of 1985, has accepted a precise definition of sexual identity by claiming that "for the purposes of such an identification is given more importance not only to the external genitalia, as established at the time of birth(..), but also to elements of psychological and social".

<sup>91</sup> Constitutional Court of Italy, 23 marzo 2010, n. 138, in *G.U.* 21 aprile 2010.

From these considerations reveal the doubts of compatibility between the provisions of Art. 4 of Law n. 164/1982 with the Constitution and with the principles contained in the European Convention on Human Rights and the Charter of Fundamental Rights of the EU.

The Supreme Court of Italy, in the grounds of the order, draws on several occasions human rights allegedly violated by the above mentioned article; the reference, in particular, is addressed in Articles. 6, 8, 12, and 14 of the ECHR and Articles. 7, 9, 20 and 21 of the Charter of Fundamental Rights of the EU.

Valuating the profiles of European Union law, however, it should be noted that in the present case are not applicable provisions of law of the EU, mainly for two reasons: firstly because the spouses Italian citizens no element boundaries; in addition, the EU, under the circumstances, has no specific expertise on the approval of binding acts in the field of family law. This "gap" has been filled by the various national legislatures that govern the relations of family traits with transnational through the rules of substantive law, the rules of private international law and procedural law.

The ECHR, that in the hierarchy of sources, ranks among the constitutional provisions and the common law rule which cd "intermediaries"<sup>92</sup> - as part of the catalog of rights includes two provisions expressly dedicated to the protection of the family is of Art. 8 and 12.

The European Charter of Fundamental Rights<sup>93</sup> - which is of the same legal value as the Treaties Art. 6 TEU<sup>94</sup> - recognizes the importance of family, social primary education, pledging to protect the right of establishment and preservation of family relationships. It should also be pointed out that, from an analysis of the holders of the rights recognized in the Charter, the family is not considered as such-as is the case for other social formations-but it is taken into account "in mediated pathway" as a collective projection rights that are still conceived as individual<sup>95</sup>.

Despite starting from the assumption that it is appropriate to point out that, in the catalog of the rights recognized by the Charter of Fundamental Rights of the EU, there are several provisions related-albeit indirectly-the protection of the family<sup>96</sup>. With reference to provisions of the Charter devoted to the family, there was the "fragmentation" of the design circuit, from which it emerges in full "the family as a community," losing that "connoted aggregating" that should be "the intimate bond between dispositions here instead are scattered between equality, freedom, solidarity"<sup>97</sup>.

<sup>92</sup>As established by the rulings of the Constitutional Court no. 348 of 24 October 2007 and n. 349 of 24 October 2007. Such pronouncements, called "judgments twins," governing the relationship between the ECHR and the Italian legal system by comparing the way to pose the relations between the EU regulations and the internal order, L. GAROFALO, *Obblighi internazionali e funzione legislativa*, Torino, 2009.

<sup>93</sup>Proclaimed for the first time, December 7th, 2000 by the European Parliament, Commission and Council in Nice; proclaimed for the second time in December 12, 2007 in Strasbourg. The Charter has not been included in the Treaty of Nice which was signed on 26 February 2001 entered into force on 1 February 2001, in *GUCE* C 80 of 10 March 2001.

<sup>94</sup>N. PARISI *Funzione e ruolo della Carta dei diritti fondamentali dell'Unione europea nel sistema delle fonti alla luce del Trattato di Lisbona*, in *Il diritto dell'Unione europea*, fasc. 3, 2009, p. 653; F. CAGGIA, *Famiglia e diritti fondamentali nel sistema dell'Unione europea*, Roma, 2005.

<sup>95</sup>Cfr. R. BIFULCO, M. CARTABIA, A. CELOTTO, *L'Europa dei diritti. Commento alla Carta dei diritti fondamentali dell'Unione europea*, Bologna, 2011, p. 15.

<sup>96</sup>In particular, observe that Article. 7, dedicated to respect for private and family life; Article. 9, which guarantees the right to marry and to found a family; Article. 14, which establishes the right of parents to choose the education and training of their children in conformity with their religious, philosophical and pedagogical skills; Article. 23, which affirms the right of equality between men and women; Article. 24 concerning the rights of the child; Article. 25, concerning the rights of the elderly; Article. 26 on the rights of people with disabilities; Article. 33, which establishes the general protection of the family shall enjoy legal, economic and social.

<sup>97</sup>F.D. BUSNELLI, *Importanza e limiti dei valori fondamentali della Carta europea*, in G. VETTORI (edited by), *Carta europea e diritti dei privati*, Padova, 2002, p. 133.



To have a clear regulatory framework for self-determination and the protection of family privacy, guaranteed by the European legislator, it is appropriate that a combined reading of Art. 8 and 12 of the ECHR by Art. 9 of the Charter of Fundamental Rights of the EU. At the time the text of the Convention was drafted, the expression "family life" in Art. 8 ECHR, it was probably related to the life within the family based on marriage between heterosexuals. The association, within that article, the privacy of family life, on the other hand, hinted on the basis of only textual data that art. 8 was designed specifically to protect the individual's right to respect for his family life.

Art. 8 notes at the end of the configuration of a right to family reunification as well as the protection of respect for family life, private life and correspondence<sup>98</sup>; Art. 2 addresses the protection of the right to marry and found a family, and as Art. 7 of the Charter of Fundamental Rights of the European Union, the right to respect for his family life is structured as a right of the individual<sup>99</sup>.

Taken as a whole, the provision in question is confined to enshrine respect for the right of the "family life", as well as the "private life", without committing itself to provide a definition of both expressions. In particular, wishing to proceed to the identification of the definition of family life, in order to assess how the union will fall even when one spouse chooses to change sex, can not pay due heed to the fact that the text of the agreement dedicate, with Art. 12, a specific provision of the right to marry and found a family.

To contextualize the dictates Art. 8 and Art. 12 of the ECHR is required reading combined with the art. 9 of the Charter of Fundamental Rights that affirmed the right of the individual to marriage and the establishment of a family, it offers protection to forms of union other than heterosexual. This systems from the postponement of some principles to the legislation of each Member in accordance with the awareness of the diversity of cultures that determine the structure of protection, in particular, of an ethical nature<sup>100</sup>.

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M. DE SALVIA, *Compendium della CEDU. Le linee guida della giurisprudenza relativa alla Convenzione europea dei diritti dell'uomo*, Napoli, 2000, p. 203 ss.; V. ZENO ZENIVICH, *Art. 8, Diritto al rispetto della vita privata e familiare*, in S. BARTOLE, B. CONFORTI, G. RAIMONDI, *Commentario alla Convenzione europea per la tutela dei diritti dell'uomo e delle libertà fondamentali*, Padova, 2001, p. 307 ss.; C. RUSSO, *art. 8 § 1*, in L.E. PETTITI, E. DECAUX, P.H. IMBERT, *La Convention Européenne des droits de l'homme, Commentaire article par article*, Parigi, 1995, p. 305 ss.; F. G. JACOBS, R.C.A. WHITE, *The European Convention on Human Rights*, Oxford, 2006, IV ed., p. 241 ss.; P. VAN DIJK, J.H. GODEFRIDUS HOOF, G.J.H. VAN HOOF, *Theory and practice of the European Convention on Human Rights*, The Hague, 1998; C. PRAVANI, *art. 8 Diritto al rispetto della vita privata e familiare*, in C. DEFILIPPI, D. BOSI, R. HARVEY (edited by), *La Convenzione Europea dei diritti dell'uomo e delle libertà fondamentali*, Napoli, 2006, p. 291 ss.; V. BERGER *Jurisprudence de la Cour Européenne des droits de l'homme*, XI ed., Parigi, 2009.

<sup>99</sup> Cfr. V. ZAGREBELSKY, *Famiglia e vita familiare nella Convenzione europea dei diritti umani*, in M.C. ANDRINI (edited by), *Un nuovo diritto di famiglia europeo*, Padova, 2007, p. 115 ss. The author points out the prospect that art. 8 is different from that expressed by art. 29 of the Italian Constitution, where the reference point of the rights recognized (though not expressed) is directly the family as a social formation and that, if anything, is the structure of art. 2 of the Constitution which is close to that art. 8 of the Convention. Does not, in fact, the text of an article similar to conventional art. 16, par. 3 of the Universal Declaration of Human Rights, according to which: "the family is the natural and fundamental unit of society and is entitled to protection by society and the State". G. OBERTO, *La tutela dei diritti fondamentali nelle Corti costituzionali, ovvero del difficile dialogo tra Carte e Corti*, in *Il diritto di famiglia e delle persone*, 2013, fasc. 1, p. 221.

<sup>100</sup> The consistency of the principle of national reserve was confirmed by the Constitutional Court in the *cit. No judgment. 138/2010* about same-sex marriage, which states: <<purposes of this decision it should be noted that Article 9 of the Charter, affirming the right to marry refers to the national laws governing the exercise>>. Same orientation follows the ECtHR, *Schalk and Kopf v. Austria*, June 24, 2010, application no. 30141/04, the case comes from the use of two Austrian citizens, whose marriage proposal was not accepted by the national authorities (pursuant to art. 44 of the Austrian Civil Code) and rejected by the Austrian Constitutional Court. The Strasbourg Court, in this case, denies that art. 12 of the Convention on the right to marry, could be extended to homosexual couples but recognizes an entitlement to the right to family life, protected in any case art. 8 of the Convention.

The interpretation of Art. 12 ECHR in "conjunction" with the Art. 9 of the Charter of Fundamental Rights of the EU, made by the Court of Human Rights, led to the conclusion that the legislature of the Charter has deliberately avoided reference to the men and women<sup>101</sup>. This presumption is confirmed by commentary on the paper which is made explicit in the broader Art. In relation to Articles 9, 12 of the Convention (even allowing for a margin of discretion to the member which is responsible for the regular forms of union).

In short, the right to marriage, in the light of the above, read together, including same-sex marriage.

The Court of Human Rights, on the occasion of the individual cases brought to its attention, took care to highlight the wide borders and to define the scope<sup>102</sup> of the notions of "private life" and "family life"<sup>103</sup> recognizing protection to a number of rights that, in hindsight, are not immediate correspondence in the wording of the provision, and that appear to be the result of a progressive path punctuated evolutionary interpretation of the treaty text.

The European Court of Human Rights has assigned to the concept of an independent value family life with a much broader scope of the relationship based solely on marriage. The existence of a marriage determines almost automatically, the affirmation of the existence of a "family life".

The jurisprudence of the Court has been particularly focused on the notion of "interference" and the provision of Art. 8 ECHR has given rise to an abundant case law that, by applying a plurality of their exegetical methods of the Convention, has a limited set of "european standards" for the protection of the family<sup>104</sup>. The analysis of the case law on Art. 8 of the ECHR, it is clear, first that, by using the theory of "positive obligations", the Strasbourg Court has added an outright prohibition of "interference" in the respect of private and family life enshrined in the wording of the provision required for States to adopt measures concerning the promotion and the protection of that sphere from attacks by private entities<sup>105</sup>.

The Strasbourg Court has ruled on several occasions<sup>106</sup> about the rights of transsexuals condemning those Contracting States which unjustifiably infringe the rights related to privacy of the individual. In its judgment *H. c. Finland*<sup>107</sup>, the ECHR considers not disproportionate imposition of the Finnish legislation against the applicant who requested that the full recognition the new sex, with the explicit assignment of a social security number of women, it was not conditional on the conversion of his marriage with a woman in a registered partnership. Therefore, it is not considered detrimental to Art. 8 ECHR, the "downgrading" of

<sup>101</sup> *v. Schalk e Kopf c. Austria, cit.*

<sup>102</sup> With particular reference to the notion of "family life" in doctrine has emphasized the challenges connected with a casuistic approach and often non-unitary adopted by the Strasbourg Court. L. DE GRAZIA, *Il diritto al rispetto della vita familiare nella giurisprudenza degli organi di Strasburgo: alcune considerazioni*, in *DPCE*, 2002, n. 3, p. 1069 ss.

<sup>103</sup> S. TONIOLO, *Le unioni civili nel diritto internazionale privato*, Milano, 2007, p. 35 ss.; G. FERRANDO, *Matrimonio e famiglia: la giurisprudenza della Corte europea dei diritti dell'uomo ed i suoi riflessi nel diritto interno*, in G. IUDICA, G. ALPA (edited by), *Costituzione europea e interpretazione della Costituzione italiana*, Napoli, 2006, p. 131 ss.; F. BIONDI, *L'unità familiare nella giurisprudenza della Corte costituzionale e delle Corti europee (in tema di ricongiungimento familiare e di espulsione degli stranieri extracomunitari)*, in N. ZANON (edited by), *Le Corti dell'integrazione europea e la Corte costituzionale italiana, Avvicinamenti, dialoghi, dissonanze*, Napoli, 2006, p. 63 ss.; S. PATTI, *La Famiglia*, in S. PANUZIO (edited by), *I diritti fondamentali e le Corti in Europa*, Napoli, 2005, p. 493 ss.

<sup>104</sup> European Court of Human Rights, 5.1.2010, *Jaremowicz c. Poland*, no. 24023/03, www.hudoch.echr.coe.int

<sup>105</sup> L. TOMASI, *Famiglia e standard internazionali di protezione dei diritti fondamentali, con particolare riguardo alla CEDU, in Diritto pubblico comparato ed europeo*, 2010, n. 2, p. 427 ss.

<sup>106</sup> European Court of Human Rights, *Grant c. United Kingdom*, 23.5.2006, no. 32570/03, www.hudoch.echr.coe.int.

<sup>107</sup> European Court of Human Rights, *H. c. Finland*, 13.11.2012, no. 37359/09, www.hudoch.echr.coe.int.

the condition double registered partnership or Art. 14 - in conjunction with Art. 8 ECHR - considering the condition of the applicant is not homologous to that of any other person wishing to obtain a social security number of women. The Court of Strasbourg believes that the persistence of differences between registered partnerships and marriage does not integrate any breach of conventional dictation, recognizing the states ample discretion to determine and adjust the status resulting from the two forms of union.

## Conclusion

And therefore can be noted that there remains a discrimination against citizens of States in which there is no possibility of seeing any form of legally recognized union other than the bed or access to which is limited to partners of the opposite sex, which is why the judge Strasbourg are called to rule. A line of evolutionary interpretation has also been chosen by the Court of Justice that already in the pronouncement *P. c. S. and Cornwall County Council*<sup>108</sup> applies an interpretation of Directive 76/207<sup>109</sup> that extends rights to transsexuals also governed, in this case on the working conditions, the right to change his sex to have an essential right of the he Court of Justice of U.E. back ruling on Social Security,<sup>110</sup> specifically the right to a survivor's pension for the surviving spouse of a heterosexual couple has become as a result of the sex of either spouse. The couple had decided to refer the matter to the Court of Appeal in Britain who chose to stay the action in reliance on the Court of Justice; the latter took the legislation of the United Kingdom, for the denial of the right to the surviving spouse, as opposed to Art. 141 EC and Directive 75/117/EC<sup>111</sup>.

In a preliminary *Richards c. Secretary of State for Work and Pensions*<sup>112</sup>, the Court of Justice interprets Art. 4, no. 1, of Directive 79/7<sup>113</sup> on the implementation of the principle of equal treatment between men and women extending even to the person who chose the female gender pension reserved for women. The judges then condemn the UK “derogate from the principle of equal treatment between men and women” considered that such treatment, according to the pension scheme, affects the rights of transsexuals.

From these judgments shows the detected evolutionary trend followed by the Court of Human Rights and the European Court of Justice with respect to the interpretation of those provisions of the ECHR and the Charter of Fundamental Rights of the E.U.. Reading extensively practiced by the two European courts, was shared and applied by the Supreme Court in the judgment in question, considering that Art.4of Act 164 of 1982 and Art. 31 of d.l. n. 150/2011 violate the rights of marriages where one spouse chooses to change gender; from that moment, the protection offered to heterosexual couples fails behaving, consequently, the deprivation of a status already acquired that personal conditions the family as a whole.

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<sup>108</sup>European Court of Justice, *P. c. S. e Cornwall County Council*, 30.4.1996, C-13/94, [www.eur-lex.europa.eu](http://www.eur-lex.europa.eu).

<sup>109</sup>Council Directive 76/207/EEC of 9 February 1976 on the implementation of the principle of equal treatment between men and women as regards access to employment, vocational training and promotion, and working conditions.

<sup>110</sup>European Court of Justice, *K.B. c. National Health Service Pensions Agency, Secretary of State for Health*, 7.1.2004, C-117/01, [www.eur-lex.europa.eu](http://www.eur-lex.europa.eu).

<sup>111</sup>Council Directive 75/117/EEC of 10 February 1975 on the approximation of the laws of Member States in implementing the principle of equal pay for male and female employees.

<sup>112</sup>European Court of Justice, *Richards c. Secretary of State for Work and Pensions*, 27.4.2006, C-423/04, [www.eur-lex.europa.eu](http://www.eur-lex.europa.eu).

<sup>113</sup>Council Directive 79/7/EEC of 19 December 1978 on the progressive implementation of the principle of equal treatment between men and women in matters of social security.

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## ILIA CHAVCHAVADZE'S VILLAGE STUDIES AND THE PRINCIPLE OF INDIVIDUALITY OF GEORGIAN SOCIETY

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### Abstract

We can consider the work of the Georgian thinker and writer Ilia Chavchavadze - "Life and the Law" as one of the first works in village studies. Ilia make deep comparative analysis. It is expressed in fundamental differentiation between Georgian and Russian mode of production. Thanks to Ilia Cavchavadze's essential analysis, it is ascertained that Georgian mode of production has in bases private property but Russian mode of production - communal ownership. According to Chavchavadze, village society in Russia is established on different base than in Georgia.

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**Keywords:** Village studies, Individuality, Ownership, Private property

### Introduction

The village as social microcosmos and peasant household are the object of deep research of sociologists, anthropologists and ethnographers. The village life style and type of economy includes many factors that presents itself as mental, cultural and economic components and forms one whole social cosmos. The latter is a condition of mental rhythm for country life style. This mental rhythm provides an understanding of private property, freedom and individuality which express themselves in national cultures, and in some way give rise to the relationship model for the whole world. Therefore, the interest in village is caused by the fact that the style of village economy is the major condition for the essential reproduction of human life and culture. This interest is conditioned by set of interests; special attention is paid to particularity of coexistence of village life (living together). From this set of reasons particular mode of production takes special place that is conditioned by work on the land. The peculiar form of organization of work - household economy also belongs to these reasons.<sup>114</sup> From this perspective, the work of the famous Georgian thinker and writer Ilia Chavchavadze - "Life and the Law" is flagged under our attention. We can consider this writing as one of the first works in village studies. This work in its essence is many-sided but we want to pay attention to the problem of individuality and commonality.

Despite the fact that Ilia Chavchavadze did not develop general theory of village sociology, in any way his work forms classical criteria of village studies; insofar as he considers: 1. Social structure of village population; 2. common style of peasant production; 3. Life style of village population; 4. The work in - agriculture, style of labor organizing and management of production; 5. The level of life village population and principle of household economy. We will also mention the fact that when Ilia Chavchavadze worked on this work, not only village studies but also sociology was at birth. Moreover, Ilia Chavchavadze bases his point of view on reflection of leading European economists and sociologists such as John Stuart Mill, Adam Smith, John Ramsey McCulloch, Émile Louis Victor de Laveleye and so

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<sup>114</sup> Thomas W., Znaniecki F. The Polish Peasant in Europe and America: A Classic Work in Immigration History. Urbana: University of Illinois Press, 1927. Turner D. Peasant Economy as Social Category // Great Stranger/ Ed. T. Shanin. Moscow: Progress, 1992.

on.<sup>115</sup> Worthwhile to mention that classical works in village sociology is based on experience and generalization of particular national communities village's style of life.<sup>116</sup> Ilia pays attention to informal social-economic structure of village and essentially describes social life style of Georgian village. It should be noted that Ilia Chavchavadze based the study object on the structure of everyday life of Georgian villages. For this reason Ilia Chavchavadze's research is methodologically rigorous and presents many worthwhile social facts of village life.<sup>117</sup>

Unchanged model for describing the traditional society has always been a village community. We meet it in different civilizations which are often regarded as proof of a universal model of social development of the world. But we cannot unite lifestyle of peasant communities of different societies in one form. For explaining the way of life of peasant communities, Ilia uses the comparativistic methodology. The lifestyle of peasant communities of different European cultures such as Scotland, France, Italy, Russia and Georgia is taken as the object of analysis. In all cases the lifestyle of the peasant communities is determined as community. Moreover, essential parameters of that lifestyle of peasant communities do not coincide. So, we have three different social institutions which cannot be placed in a common definition. According to Ilya Chavchavadze, both in Europe as well as in Georgia's economy peasant communities were based on the principle of individualism. But in Russia, it was based on the collectivist tradition. This form of the peasant economy was based on the implementation of collectivist economic activity and all the efforts of its dissolution were unsuccessful and were always reconstructed in a new form. The principle of equalization (from the Russian word *uravnilovka*) was unknown to both - European and Georgian peasant economy. This phenomenon was characteristic only to Russian peasant economy. This phenomenon implied periodic exchange of the land between peasant communities.<sup>118</sup>

Hence, Ilia Chavchavadze makes very interesting conclusions that concern individualistic and collectivistic mode of production. His research was related to the question of land purchase which was very urgent after abolishing of serfdom in Russian Empire. This problem was also related to the legislation that was established by Russian Empire. Properly, this legislation demanded from peasants guarantee from community at the time of purchasing land. According to Ilia Chavchavadze, this legislation was in contradiction with Georgian peasant traditional mode of production. "It is in contradiction with Georgian peasants' style of thrift, economical condition and structure. In Russia, it has its own justification. In Russia, there is common ownership of the land (in Russian - *Мирское*) and hence, they have common obligation. We can say neither good nor bad about common ownership, but we will say only one thing - common guarantee does not have place where common ownership does not exist".<sup>119</sup> Hence, if in Russian peasant wished to buy land, the whole community should

<sup>115</sup> Ilia Chavchavadze. *Life and Law. Selected Works in 5 volumes. Vol. IV.* Tbilisi, 198, pp. 305, 309.

<sup>116</sup> For instance, research of the Chinese researcher Fei Syatun. Syatun F. *Chinese Village from the Ethnographer's Point of View.* Moscow, 1989.

<sup>117</sup> Modern researcher, Theodor Shanin, who works on informal structure of village society, called his research method reflexive peasant studies. Our reference is conditioned by the fact that Ilia's effort generally coincides with the problem of sociology of village. Shanin Th. *Reflexive Peasant Studies and Russian Village.* // *Reflexive Peasant Studies.* Moscow, 2002.

<sup>118</sup> Even at the beginning of XX century exchange of the land between community peasants was widely spread. It is known that Stolypin's reform for dissolution collectivistic mode of production between community peasants was unsuccessful. Despite the state support collectivist mode of production of community peasant be turned into private ownership of the economy, only a small number of peasants left the community. Most of them are back in the economic "world" of the peasant community. Later, collectivistic mode of production created in agricultural sector in the Soviet Union essentially was reconstruction of the traditional form of Russian peasant community.

<sup>119</sup> Ilia Chavchavadze. *Life and Law. Selected Works in 5 volumes. Vol. IV.* Tbilisi, 198, p. 319.

be in guarantee.

Ilia bases his point of view on the analysis of the well known Belgian economist Émile Louis Victor de Laveleye and mentions that common guarantee is possible only in case when it follows from common ownership. While Georgian mode of production or land ownership and structure of economy was based on household economy or family economy, its essence was family ownership and not common ownership. For this reason, a general guarantee in Georgia was only the status of the obligation and the rights that had Russian peasants but not Georgian peasants.<sup>120</sup>

Ilia makes deep comparative analysis. It is expressed in fundamental differentiation between Georgian and Russian mode of production. Thanks to Ilia Chavchavadze's essential analysis, it is ascertained that Georgian mode of production has in bases private property, but Russian mode of production - communal ownership. According to Chavchavadze, village society in Russia is established on different base than in Georgia. In Russia, peasants do not own land by hereditary. Land in common ownership in Russia means that nobody has it in permanent ownership. For this reason Russia has two kinds of ownership: in one side peasants possess land in common ownership and on the other side aristocracy possess land in private property.<sup>121</sup> But in Georgia, ownership of the land was only private property and there was no difference between peasants and aristocracy. In Georgia, despite ranking (peasants and aristocracy), ownership of private property was hereditary and in permanent Ownership.<sup>122</sup> With all ensuing consequences Ilia makes essential conclusions. Insofar as Georgian mode of production was based on private property and individualistic style of life, it had homogeneous attitude to the institution of ownership and private property. In Georgian legislative tradition, relationship with private property institution does not focus on rank differentiation. The rank division in case of ownership came from Russia. The rank division principle essentially complicated development of the self-government at village level as in whole Georgia. By Russian imperial legislation, aristocracy and peasantry were divided and they participated in self-government structure with different status. Insofar as traditionally all rank had homogeneous principle to the private property and land ownership in Georgian society, this principle was equalizing their Rights status. Thus, it was not understandable why different ranks will participate in self government institutions by different status. According to Ilia, in Georgian language there was no word having the exactly same meaning as Russian word -“сословие”- rank. If the nation does not have the term signifying rank division, it means that they do not have such practice. By Georgian tradition, despite rank, every person was responsible in front of King and all of them were equal in this responsibility.<sup>123</sup>

## Conclusion

The analysis made by Ilia Chavchavadze begins with the analysis of village structure and ends with consideration of political freedom of personality. Ilia's effort is directed to show fundamental difference between Russian and Georgian style of life and to show Georgian anthropological meaning and understanding roots of freedom in Georgian society in this light. In this context, Ilia considers freedom in the political aspect of the present which illuminates legal policy areas directly related to freedom of the individual (e.g. change in position of an individual in the space of state-political and legal relations, the changing nature of state influence on personality formation of the legal activity of an individual as a prerequisite for the implementation of its freedom; proclamation value of an individual, his/her rights and freedoms, and others) and indirectly affecting the freedom of an individual

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<sup>120</sup> *ibid*

<sup>121</sup> *ibid*, p. 335.

<sup>122</sup> *ibid*, p. 337.

<sup>123</sup> *Ibid*, p. 338.

(e.g. the formation of the rule of law, the formation of civil society, improving the law and its application to individual liberty, etc.).

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## FEMALE CRIME IN FAR EAST OF RUSSIA

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### Abstract

Most national and international research in the area of violent crime directed at the study of men. However, crime committed by women, is recognized as a serious criminological and social problem in Russia. Usually women are associated with a special volume in the society; they gave great influence to family and children. That is why female crime (especially violent) remains a matter of surprise, suspicion and is considered as abnormal behavior.

In this paper, based on empirical research we want to show some tendencies of female crime. Official statistic of the Federal Penal Service was analyzed and also we use the results of empirical study conducted in the penal colony of Vladivostok. The survey had place in March 2013. Total 212 women from 18 to 64 years old were attended.

**Keywords:** Female crime, Violent, Russian Far East

### Introduction

Crimes committed by women leads to disorganization of the socio- psychological climate in society. As Ballinger pointed, women commit far fewer crimes than men, but breaking the law, women are not only committing a crime, but also violate social norms and attitudes regarding the role of women and the expected behavior (Ballinger, 2000). Female criminality is growing not only in Russia but also in other countries, like Canada, the USA, and the UK. For example, according to official sources in Canada (Statistics Canada, 2008), the level of serious violent crime committed by women increased from 25 to 46 since 1986. The same statistics data come from the UK, where the number of women convicted of murder and other violent crimes increased (Slack, 2009).

### Dynamics of female crime

Nowadays scientist speaks about “crime surprise” in Russia: according to statistic the level of crime is decrease. In Russia, unregistered crime is widespread. As a result of criminological research, it has been established that latent crime exceeds registered crime many times over.

Table 1. Dynamics of most common registered and actual crimes conducted by women in Russian Federation (Inshakov, 2011)

	Coefficient latency in 2009 year.	Increase in the number of official registered crimes in 2009 r.compare to 2002 year, %	Increase in the number of actual crimes in 2009 r.compare to in 2009 to 2002 year, %
The murder of a newborn baby by mother	2,0	-39,7	-3,8
infliction of bodily harm	13,1	146,2	14,8
Beating	12,5	207,7	16,7
Torture	2,5	76,7	23,0
Grievous bodily harm	8,5*	26,4	26,5
Affront	14,0	168,3	29,9

Dereliction of duty on the education of the minor	11,0	112,8	25,0
Theft	10,1	28,2	-1,6
Fraudulence	7,4	172,1	21,7
Drug-related crime	6,0	129,4*	25,0*

The data show high rates of latent crimes in the structure of female crime. Especially it considers such types of crime like abuse, intentional infliction of bodily harm, assault, dereliction of duty on the education of the minor, as well as crime committed against property like theft, fraud.

At the same time the number of women in prisons has increased. According to official data the Federal Penitentiary Service of Russia in 2001 prisons for adult contained 7.7 thousand women. By 2010, this figure grew up to 11.2 thousand. Since 2005 to 2010, the proportion of women who have received actual incarceration increased from 28.3 to 35.5%. Obviously that prison sentences for men and women do not have a significant gap, as it was earlier.

Far East is one of most criminalized area in Russia. As for female crime, in Primorsky region (colony K-10) in 2000 there was 898 women, 2001 - 896, 2002 - 671, 2003 - 690, 2004 - 699, 2005 - 834, 2006 - 1176, 2007 - 1002, 2008 - 1491, 2009 - 1648, 2010 - 1355, 2011 - 1288 (fig 1).

Figure 1. Women in prison in Primorsky region f Russia.



Data makes clear that the number of women in prison increase. It happened because more women were arrested for sale, distribution and possession of drugs, with an increase to 72%. For comparison, at the same time the number of women serving sentences for murder and grievous bodily harm during increased by 30%

### Demographical characteristics

In Russia, crimes committed by adults are registered from the age of sixteen; for certain serious crimes, from the age of fourteen. The percentage of teenage girls among all crime committed by minors (14–17 years) has increased slightly in recent years (Gilinskiy, 2014). In 2004, it was 7.9%; in 2005, 8.6%; in 2006, 9.3%; in 2007, 9.7%; in 2008, 10.3%; in 2009, 10.9%; in 2010, 11.0%; in 2011, 11.8%. (Zabriansky, 2013) According to certain sources, the “peak” (maximum) of female crime is between 35 and 40 years old.

In our research we found that ages of women in prison are: up to 30 years - 39.5%, from 30 to 40 years - 51.9% and more than 50 years - 8.5%. So, traditionally, the dominant group among women offenders is women over 30 years old. However, there is a trend to younger ages. Another trend is that teenage girls are committing not only "traditional" crime for this age, such as theft, fraud, but they are increasingly involved in serious crimes against the life.

In Primorsky region only 3.9% woman in prison have a higher education, 2.6% have no education, and other have school and special education. It is a surprise, because in Russia we have trend that shows increasing criminal activity among women with high education.

In Primorsky region most women in prison were not married and do not have a stable family relationship (79%). This data are the same as in Russia whole.

## Crime

Most of the women in prison committed violent crime (40.7%) and crimes related to drugs (41.1%). A growth in the percentage of women who committed crimes connected with drugs between 1990 and 1995 (11–12%) and 2000 and 2005 (17%), with a small decrease in 2006–2007 (15–16%) (Gilinskiy, 2013).

About 18.2% of women committed economic crimes. There is a large percentage of women among those who committed appropriation and embezzlement (42–43% on average from 1995 to 2007).

Analyze of official statistics in the Russian Federation in the field of economic crime, especially in the area of illegal transactions and fraud with housing, revealed the growth of this type of crime is 2 times in the past 10 years. In the Russian Far East the number of fraudulent attacks increased more than 4 times from 2004 to 2010 years.

There is an increasing number of reports about women who head criminal organizations in Russia engaged in bank fraud, drug trafficking and murder (Gilinskiy, 2014).

Among all the perpetrators of the murder, women accounted for 12-13%. Overall, violent crime women are more likely than men to commit on the basis of domestic conflict, family problems, intimate experiences. Thus, the results of our studies shows that about 2/3 of the crimes committed women against life and health, are related to the family. They are usually preceded by prolonged conflict relationship, and as a provoking moment man (partner) often acted immoral or illegal behavior, who are constantly drunk, beat their wives and children. According to studies of women prisoners, more than a third of them killed her husband (spouse), about 20% - children of their own women.

However, not always violent behavior of women relations is a situational defensive. Increasingly, women are active participants, and sometimes they initiate acute conflict confrontation, so just case determines who becomes a victim and who is the perpetrator. In our study, about one third of women initiated the attack, and in 15% cases only women committed violence against a partner. In the commission of the crime women are mostly used edged weapon, a third of cases - various household items (pan, iron, etc.)

There is a trend of growing a torture. Its share in the structure of female criminality has increased from 0.1% in 1997 to 0.2% in 2012. The number of females among the identified perpetrators of this crime has increased over the period from 5% to 7%, which indicates an increase of level of aggression and violence. Recently there has also been an increase in the number of women who have committed "non-traditional" crimes: murder for hooliganism (especially for juvenile offenders) and misappropriation of another's property. Also here are new types of criminal violence used by women: highlight professional murder, acts of terrorism, hostage-taking, etc.

The murder of a newborn baby by mother is common in countryside (unlike other types of kills). Typically, such acts are committed by young women who have no family,

sufficient material status. In some cases, there is the figure of a man, with the influence to her or with the acquiescence. Usually he is intimate partner. There is an anomalous trend of contemporary female crime. It is intensive growing of attacks against children. Growing child murder committed not only to newborns, but even more often to older children, including adolescence. Basically murder of a child is accomplished of attacking, poisoning, suffocation, drowning, dropping from a height and other ways.

### **Factors**

Empirical studies as well as data Federal Penal Service of Russia allowed us to identify the main factors that affect the female crime in the Primorsky region. These include:

1. Migration. A more detailed study socio-demographic status of women offenders indicates an increase in the number of crimes committed by women workers residing in the Primorye region.

2. Alcoholism and drug addiction. According to our research, about two-thirds of the offenders at the time of commission of the act were alcohol or drugs addicted, which leads to the conclusion about the impact of alcohol abuse and drug addiction to the escalating violence and crime.

3. Psychological characteristics of women: Borderline, sadistic and explosive personality disorder and behaviors in a family conflict in particular against the background of the adoption of alcoholic beverages, the deformation of morality and legal culture, legal nihilism, the desire of women to meet their needs at the expense of the interests of other persons.

4. Socio-economic conditions: the gap between the size of the property and income of various groups of the population; gender differences in employment and earnings. Unemployment is a dangerous phenomenon in many ways. Lack of earnings does not satisfy the basic human needs of food, clothing, etc. However, the material status is not the only problem faced by the unemployed. Loss of a job is stress. According to research the share of unemployment among female offenders is 58.7%. Among women who have committed crimes drag related crime the proportion is even higher (78.9%) (Demina,2010).

### **Conclusion**

Women crime is a serious problem for several reasons. First, female crime leads to deterioration of the already unfavorable socio- demographic situation in the country by reducing the birth rate among women. Second, is the socio- psychological climate in society. Usually women can have a positive impact on men, keeping them from committing crimes and misbehavior. Moreover, women still have a central role in the education of the younger generation, are a kind of value- and a moral compass for them.

Another problem - is a matter of re-socialization of women prisoners. After the arrest of the woman, her family is stigmatized, it hurts children especially. This imposition requires additional intensive rehabilitation in order to motivate people to change their behavior. Modern criminal tendency toward increased penalties, increased prison terms and the number of prisoners is in the wrong direction. Prisoners were motivated by the possibility of parole at the appropriate cooperation and behavior change. As emphasized by Braman (2004, P. 224): "The question ... is not merely how to punish and deter offenders, but how to encourage and strengthen the bonds that make families possible, give life to community, and ultimately determine the character of our society as a whole".

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## INTERNATIONAL ADOPTION: REALITY AND CHALLENGES

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### Abstract

The presented work is about one of the important issues of child adoption institute - international adoption. The main objective of the article is to discuss specific issues related to international adoption and to promote the role of Georgia in protection of children's rights. With the help of the research methods of comparative and logical analysis, the Georgian legislation "On Adoption and Foster Care" as well as different legal acts and statistical database of international adoption existing in Georgia nowadays will be realized.

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**Keywords:** Child, International Adoption, Convention

### Introduction

*"Adoption is about finding families for children, not finding children for families".*

*Dr. Joyce Maguire Pavao*

Almost every country of the world as well as Georgia suffers from the problem of childlessness. Many couples struggle with infertility and seek help to become parents by using any chance existed inside or outside the country. They all have one and the same dream: adopting a child, bringing him/her up and creating a perfect family. That is why conventions on the rights of a child are oriented towards their most important interest - a child should be grown and brought up in the atmosphere of love and understanding where the family conditions and parents' care will determine their well-being.

International adoption is considered to be an essential part of the adoption institute. This is an alternative form of adoption which is very important for different people of the world, although the matter of international adoption has always been the basis for great debates among protectors of human rights and children's rights.

It is also worth mentioning that only few documents can be found to regulate the institute of adoption and those that can be found are directed towards the protection of children from potential violence rather than making the process of international adoption easier.

"Private International Law" of Georgia is related to transnational adoption. The abovementioned law includes the principles of collision law for adoption. According to this law, the Article 52 of chapter VII establishes that the adoption process is regulated by the law of the country where adoptive parents are citizens, but adoption by one or both parents depends on the law of the country which is used for the general results of marriage.

According to this, if a Latvian citizen wants to adopt Georgian citizen living in Georgia, he/she cannot use the law of Georgia to regulate the process, but he/she has to use the law of Latvia. If an adoptive parent is a citizen of Georgia, then he/she must use the law of Georgia. Interests of children must be primary concern in making decisions about adoption. That is why the legislator takes into consideration the fact that the consent to adoption must be regulated by the same law for a child and for a person being in family-law relation to him/her. Also, to declare as a father or to give the name to a child in addition

depends on the law of the country where a child was born. But “if it is necessary for a child’s interest” – legislator permits to use the law of Georgia.

If we discuss this matter logically, we will see that in case of adoption, they must use the law of the country where an adoptive parent is a citizen, but the matters related to adoption is also regulated by the law of the country where a child is a citizen, and if a child’s interests demand, the Georgian law can be used.

From the period when Georgian Republic adopted the Law “On Adoption and Foster Care”, they do their best to achieve harmonization between standards of UN “Children’s Rights” Convention of 1989 and "Hague Convention" of 1993 “On protection of Children and Co-operation in Respect of Intercountry Adoption”, who are oriented towards protecting the interests of children.

The Georgian legislation “On Adoption and Foster Care” regulates international adoption which concerns two cases: The first one is when a Georgian citizen adopts a child from foreign country and the second one is when a citizen of the foreign country adopts a child from Georgia. According to the Article 19 of the same law establishes that a child can be adopted from Georgia only in case when it is impossible to return him/her to biological family or to be adopted by a Georgian citizen or by a person living in Georgia legally but is not a citizen of Georgia. As for citizens of the foreign countries, they can adopt a child who has not been adopted by a Georgian citizen during 8 months since registration. In fact, the agency studies the case and writes the conclusion in which the principal reasons are mentioned, why a child cannot be adopted in Georgia. On the basis of the study, the agency takes the interests of a child into consideration and begins the procedures of adoption in the foreign country. Hereby it’s necessary to do the expertise and make a conclusion on the health conditions of a child.

In case of international adoption in Georgia, the competent organ is the Agency (Service Centre within the system of Ministry of Labour, Health and Social Affairs, which is the central body of custody and care on the territory of Georgia), by which a citizen of foreign country must represent the following documentations in order to adopt a child:

1. Statement on the adoption of a child;
2. Wife’s or husband’s consent, in case one of them wants to adopt a child;
3. Identification document (ID card, passport, resident cart) copy;
4. Marriage certificate (if it exists);
5. Health certificate;
6. Medical – drug testing certificate;
7. Criminal record certificate;
8. Study of adoptive family conducted by the competent authority dealing with the problems of adoption in a foreign country;
9. Adoption permission given by the competent authority dealing with the problems of adoption in a foreign country;
10. Other documents (required by the agency).

An adoptive parent must include the age, sex and the following things about a child in the statement:

1. Health condition;
2. Origin of a child;
3. Religion;
4. Others.

It is also worth mentioning that all the above mentioned documents must be certified for legal purposes; they should be translated into Georgian language and notarized. But if a foreign adopter does not give a written consent to adopt a child in certain time, the child would be suggested to another adopter/adopters<sup>5</sup>.

In case of international adoption, the Agency must contact with the same kind of services of other countries according to demands of Hague Convention “On Protection of Children and Co-operation in Respect of Intercountry Adoption” as well as “demands of UN Convention “On Children’s Rights” and Georgian legislation “On Adoption and Foster Care”.

A citizen of foreign country can adopt a child from Georgia if an adoptive parent satisfies the demands of the law of the country and is registered legally.

According to the Article 5 of Georgian legislation "On Adoption and Foster Care", an adopter can be any capable person of the full legal age, except those who:

- a) was deprived of parental rights or adopted a child earlier, but their relationship was cancelled because of improper performance of duty;
- b) has limited parental rights according to the established law of Georgia;
- c) is not able to deal with the parental duty because of health conditions (according to the list confirmed by the Ministry);
- d) was recognized guilty by the court for grave or especially grave crime and the conviction is not removed according to the law of Georgia;
- e) was convicted for the crime established in XXIV chapter of Criminal Code of Georgia, and the conviction is not removed yet.

The Agency informs the Ministry of Internal Affairs of Georgia about the fact that the citizen of foreign country wants to adopt a child from Georgia.

In case of international adoption, the conclusion made by the Agency is represented to the corresponding Regional (City) Court in 1 week’s time. The interests of a child are protected by the authorized person from the agency in the court.

If the court recognizes that interests of an adoptive parent corresponds to the interests of a child, and all these will be done for his/her well-being, the decision on the adoption of a child is made, but it will not be publicized at the request of the applicant.

The court itself has to inform the Civil Acts Registration Organ about the decision in 5 days’ time after its entry into force. Adoption is real only after the day when the decision of the court comes to the force.

According to the statistics of international adoption in Georgia: 56 children were adopted abroad from Georgia in 2001; 122 – in 2002 ( 99% through direct adoption); 150 – in 2003 (99% through direct adoption); 39 children – in 2004 (most of them had health problems, 3 of them through kinship adoption); 17 – in 2005 (one of them was kinship adoption); 9 – in 2006 ( 3 of them were kinship adoptions); 5 – in 2007; 7 – in 2008; 1 – in 2009 ( in New Zealand); 3 – in 2010 (one of them in Italy and others in the USA); 1 – in 2011 (Sweden); none – in 2012; 4 – in 2013 (the USA).

It is obvious that from 2001 to 2013, the statistics of international adoption differs in Georgia. If there are considerable amount of data of international adoption from 2001 to 2009, only 9 children were adopted abroad from Georgia since 2009 until 2013 and according to statistics, they were children with disabilities.

This is due to the fact that the Ministry of Labour, Health and Social Affairs in Georgia took over the adoption cases and began to work in this field in 2009, since then a healthy child has no longer been adopted abroad from Georgia. This can be said to be positively significant fact.

But if we take into consideration that including the 1<sup>st</sup> of August of 2013, 178 children, having the fostered status are represented on registration (35 of the children are disabled, 41 healthy (20 from them refuse to be adopted) and 102 having the health problems (mostly serious) are among them). We consider that the condition of each child adopted abroad is as important as the condition of children adopted inside the country.



It is true that Georgian legislation “On Adoption and Foster Care” provides further control on international adoption, as the central authority, on the basis of special agreement, asks the central authority of the adoptive country ( in case there is not such kind of authority, then – the corresponding licensed or accredited authorized organization) to give them information each year about the health and social conditions of a child adopted from Georgia with the help of special form (made by the Ministry), before an adopted child is 18. But we think that this is not enough. Moreover, the placement control should be done during certain time in order to check the conditions of the adopted child and the recipient countries should be more involved for getting confidence between countries, without being in constant fear of exploitation, because the part of the critics believe that international adoption may be considered as an extreme form of exploitation, when poor and powerless children can be adopted by rich and powerful parents’

We certainly cannot raise the question of the competence of central authorities, because in case of international adoption by a foreign adoptive parent the matter is discussed by the Ministry of Internal Affairs, but we consider that if we work out an effective mechanism of control, we can manage to protect a child’s interests.

The situation is more complicated in case of the adoption of children with special needs and children having health problems. According to the official letter of SSA ( 04/77449 (26 August 2013), a legal entity in the Ministry of Labour, Health and Social Affairs in Georgia, 35 children with special needs and 102 children having health problems (mostly serious) are registered in the database. This points to the fact that adoption of this kind of children inside the country can be a problem and the majority of adoptive parents refuse to adopt these children and take care of them the way they would do in case of the healthy children.

But we do not have the right to violate them when the economic situation of the country is not advancing and only minor concessions are established in the Tax Code of Georgia for the children with special needs and not only the children but also for the foster parents. Potential foster parents should be the philanthropists to adopt a child with special needs or a child with significant disabilities, since such kind of children need not only care, but also expensive medicines and treatments that is somewhat of a luxury for ordinary adoptive parents nowadays. This is the reason I think that some changes should be made in the Tax Code of Georgia in case of adoption of these kinds of children.

At present time, the tax-exemption is considered by the second part of the Article 82 of the Tax Code. Specifically it is stated, that:

The following people can avoid taxable incomes:

- A) A person who receives the amount of 3000 GEL taxable income during the calendar year.
  - A.a) Citizens of Georgia who where the participants of the Second World War, or took part in the battles for territorial integrity of Georgia;
  - A.b) A person who has assigned the title of “Mother of Georgia”;
  - A.c) Single mother;
  - A.d) A person who has adopted a child (during a year from adoption);
  - A.e) A person who has fostered a child;
  - A.f) For a person living in the mountainous region (who supports three or more children under 18 years of age), who works in the same region and also for a person living in the mountainous region, who has one or two children (who supports three or more children under 18 years of age) and works in the same region, the tax is reduced by 50 percent on received 3000 GEL during the calendar year.
- B) When a person with special needs from childhood or a person with significant disabilities receives the taxable income up to 6000 GEL during the calendar year.

I want to focus on the “B” sub-point of the second part of the abovementioned Article. In particular, when people with special needs from childhood or people with significant disabilities receive the taxable income up to 6000 GEL during the calendar year”, use tax privileges, were not foreseen by the previous edition of the Tax Code of Georgia.

This change was made on July 30, 2013 and entered into force on January 1, 2014 what is a remarkable fact. The state paid attention to such kind of people too.

But no word is mentioned here about the benefits for adoptive parents who want to foster a child with special needs from childhood or a child with significant disabilities, for having desire to adopt such kind of a child and take him/her to the family.

Here comes the question whether the restriction to 3000 GEL is enough or not if we see the social background nowadays. Do the prices go up on the current market when the standard of living is increasing day by day? Is the taxable income of 6000 GEL during a year enough for children with special needs or children with disabilities? They need a considerable amount of money to feed themselves, take medicines and at least take care of themselves. That is why we think that an adoptive parent must get help from the state not only during a year from the adoption, but until a child is an adult. And a person, who adopts a child with special needs, must receive the amount of 700 GEL each month until adulthood. In addition, people whose taxable income during the calendar year reaches up to 6000 GEL must not be taxed.

Thus, according to our point of view, the abovementioned section must be formed as follows:

According to the second part of the Article 82 of Tax Code of Georgia, income must not be taxable for:

- A) The following individuals who receive the amount of 6000 GEL taxable income during the calendar year.
  - A.a) The citizen of Georgia who participated in the Second World War, or took part in the battles for territorial integrity of Georgia;
  - A.b) The person who has assigned the title of “mother of Georgia”;
  - A.c) Single mothers;
  - A.d) Adoptive parent (From adoption to adulthood);
  - A.e) Foster parent;
  - A.f) For a person living in the mountainous region (who supports three or more children under 18 years of age), who works in the same region and also for a person living in the mountainous region, who has one or two children (who supports three or more children under 18 years of age) and works in the same region, the tax is reduced by 50 percent on received 6000 GEL during the calendar year.
- B) When a person with special needs from childhood or a person with significant disabilities receives the taxable income up to 8000 GEL during the calendar year.
- C) A person, who has adopted a child with special needs or a child with disabilities, according to a “B” sub-point of the same section, can use tax credit and receive the amount of 700 GEL each month from the government until the child is adult.

As Natia Partskhaladze, the director of the “UNICEF” Child Protection Program notes: “The fact that everyone wants a healthy child, depends on social processes existed in the country. People avoid additional expenses. As for the children with disabilities, they need treatment and special care”.

This is the reason why it would be very important to make these changes and provide loving and harmonious environment for our future generations.

## Conclusion

If we reduce all of these discussions to some of the thesis, we will conclude that the issue of international adoption requires significant efforts from the state. In particular:

1. Effective controlling mechanisms must be developed for international adoption. Government has to ensure the protection of children, for not being in constant fear of exploitation, as sometimes there are cases when poor and sick children are adopted by the rich and powerful parents.
2. Changes should be made in the second part of the Article 82 of the Tax Code of Georgia, for giving adopters the desire to adopt a child with special needs. In particular, the second part of the Article 82 of the Tax Code of Georgia should be formed as follows:

People who must be free from taxable incomes are:

- A) The following individuals who receive the amount of 6000 GEL taxable income during the calendar year.
  - A.a) The citizen of Georgia who participated in the Second World War or took part in the battles for territorial integrity of Georgia;
  - A.b) The person who has assigned the title of “mother of Georgia”;
  - A.c) Single mothers;
  - A.d) Adoptive parent (From adoption to adulthood);
  - A.e) Foster parent;
  - A.f) For a person living in the mountainous region (who supports three or more children under 18 years of age), who works in the same region and also for a person living in the mountainous region, who has one or two children (who supports three or more children under 18 years of age) and works in the same region, the tax is reduced by 50 percent on received 6000 GEL during the calendar year.
- B) When a person with special needs from childhood or a person with significant disabilities receives the taxable income up to 8000 GEL during the calendar year.
- C) A person, who has adopted a child with special needs or a child with disabilities, according to a “B” sub-point of the same section, can use tax credit and receive the amount of 700 GEL each month from the government until the child is adult.

And finally, international adoption is one of the real opportunities to give a child his/her own family. Each government should try to provide harmonious, loving environment to live where the adopted child will be brought up peacefully.

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# PROTECTION OF OWNERSHIP ACCORDING TO THE EUROPEAN CONVENTION ON HUMAN RIGHTS AND THE CONSTITUTION OF GEORGIA

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## Abstract

According to John F. Kennedy: “the right of each human being shall be violated when there is a danger of violating the right of a single human being” - call for the nation, June 11, 1963. Nowadays, in Georgia as well as in the whole modern world, the rights to property is one of the most important rights, as this is one of the basis of the development of the country; this is why it is essential that such right be respected. The right to property is being regulated by the National Law of almost every country and by international treaties. Protection of private property is one of the main issues in the development of the liberal economy and in ensuring sustainable democratic, political and legislative systems, which shall serve the interests of the modern civilized society and the individual members of this society. In such system, the state has a role of guarantor to effectively use the right to property and it is not involved in free turnover of the property among the individuals. To put it otherwise, the function of the modern state is protection of property. Such modern state shall not fix useless restrictions and limitations on the rights of using property in a peaceful and effective manner, except for the cases, such restrictions and limitations are extremely necessary, proportional and are based on the law principles, which is a background for the effective use of the right to property.

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**Keywords:** Right to property, State, Constitution, European Court on Human Rights, Decision

## Introduction

In accordance with the Article 21 of the Constitution of Georgia, based on the amendments and additions enacted in 2006, the principles defined under the first Article of the Act №1 were developed and the following was determined:

“1. The right to own and inherit property shall be recognized and inviolable. Abrogation of the universal right to ownership, acquisition, alienation, or inheritance of property shall be inadmissible.

2. The rights listed in the first paragraph of this Article may be restricted for pressing social needs in the case and under the procedure provided for by law so that the essence of property right is not violated.

3. Property may be deprived for pressing social needs as provided for by law, by court decision, or if urgently necessary under an organic law, provided that preliminary, full, and fair compensation is made.”

Thus, the Constitution of Georgia considers the precedent law approaches of the European Court on Human Rights in relations with protection of the ownership and sets the higher standards of protecting rights to ownership. Namely, according to the Article 21 of the Constitution - Abrogation of the universal right to ownership, acquisition, alienation, or inheritance of property may be admissible only in the case when there is a “necessary public requirement” and “in the cases directly provided for in the legislation”. It is inadmissible to

deprive the property in any form without a court decision or without a proper compensation, though there are cases in the European Court on Human Rights when such issue is not solved in such way. Internal legislation strictly prohibits deprivation of the property without compliance with material and procedural law requirements and without payment of the proper compensation. The similar approach was used for the especially sensitive spheres of ownership right protection in Georgia, for example, in relations with the issues related to the restoration of the dwelling and property to the victims as a result of conflict between Georgia and Ossetia, as it has been analyzed by the experts of the Commission of Venice. One of the experts of the Commission was a member of the European Committee on Human Rights who stated that: “A proper lawful balance should be maintained for each concrete case of property protection. Maintaining a lawful balance depends on many factors and it is most essential that the procedures applied consider all relevant factors... despite of the fact, that the first Article of the Act π1 does not directly require payment of the compensation in the cases of limiting (or depriving) of property, compensation here, as a rule, is implied. .... Deprivation of the property without paying the amount considering the value of property shall be disproportional abrogation that is unjustifiable in accordance with the first Article. Besides, the first article does not always guarantee a full compensation, as long as the lawful principles of public interest, such as the measures necessary for the economic reforms, aiming at expanding social law, may imply compensation of the amount which is less than the total market value. .... Finally, abrogation of the ownership right shall meet the requirements of law and lawfulness ... confiscation of the property shall be carried out according to the requirements determined under the Law.

The State (or public authorized body) shall act in accordance with available and precise regulations under the Law which meets each essential requirement of the concept of Law. This does not mean that the mentioned abrogation should be based on certain regulations of the National Law, but shall be based on the fact, that there should be a legal and proper procedure and the proper activity shall be determined and performed by the duly authorized body and shall be impartial”.

### **Approaches to the protection of property according to the precedent law of the European Court on Human Rights**

The court has developed a system for evaluating claims for reviewing the claims related to the first Article of the Act 1 for the compliance with three determined rules which are considered to involve the following principles: Everyone has a right to use his/her property peacefully; deprivation of the property shall be subject to certain conditions (abrogation of the property shall be carried out based on interests of the public registry and/or on the international law principles); the states shall be also authorized to adopt such laws which they may deem necessary for certain purposes (for the purposes of reaching general interests, for the guarantees of paying taxes, levies and penalties). The principle of supremacy of court and the principle of legal definiteness stipulated under the Convention, requires the laws which had been used as the basis for abrogation, to be available and foreseeable enough.

The above mentioned approaches are reflected in the precedent law of the European Court on Human Rights in relations with Georgia. For example, under the court decision of September 27, 2005, on the case “Amat-G LLC and Mebaghishvilivs Georgia”, which was taken in favor of applicants, “granted the claimant company the right of determined and enforceable claim which is a property for the purposes of the first Article of the Act π1. The first and the most important requirement of the first Article of the Act 1 is that any abrogation by the public authorized body in the use of property should be legal, the second sentence of the first paragraph confirms the deprivation of property “in the cases determined by law”,

which is followed by the issue of maintaining legal balance between the common interests of the public and protection of the main rights of individuals that shall be confirmed by the fact; the abrogation should meet the legal requirement and shall not be arbitrary... ”

Non-enforcement of the final court decision during the long time period represented abrogation of their rights to use the property and violated proportional legal balance between the legal expectations of the applicants to reach enforcement of decisions and between those reasons, due to which the state in the given case was not able to enforce the court decision. The state has paid compensation to the applicants for the monetary and non-monetary loss, which was caused by the violation of their rights to use their property in a peaceful manner. The court has presented quite interesting grounds for its decision.

The same principles on respecting the property rights were underlined in other cases against Georgia in the decision taken on September 27, 2005 (“Iza” and Makrakhidze LLS vs Georgia), where the court ruled the following: the fact that the claimant companies were not able to enforce the final decision in their own interests against the state and those legal persons acting on behalf of the state and thus abrogated their rights to use their own property in a peaceful manner.

One more court decision against Georgia (Claus and IuriKiladzevs Georgia) on February 2, 2010 was that the European Court should have decided at what extent the claimants’ ownership right was breached by the National authorized bodies. The mentioned bodies refused the brothers, who were the victims of political repressions during the Soviet Union period, for the compensation of the loss incurred which should have been implemented based on the Law on the Status of the Victims of Political Repressions. The court should have decided how lawful the claimants’ expectations were regarding the monetary and non-monetary compensation in accordance with the regulations of the internal law, though they randomly refused such compensation. The court ruled the following: “It should be pointed out that according to the judicial practice, the concept of “property” may imply “the existed property” or the assets, which should be obtained by the person, accordingly, the claimant may have a little “lawful expectation” to effectively use his/her ownership right.....”

Considering the circumstances mentioned above, the court considers that when applying to the internal courts, the applicants, according to the Article 9 of the Law issued on December 11, 1997, had a claim that was regulated enough for the enforcement and provided fair grounds for them to claim compensation of the loss from the State. This leads us to the conclusion that in this part of claim, the first Article of the Act π1 may be applied.

The court considered that the applicant had an ascertained claim to obtain compensation for the moral damage and the fact that they were not able to obtain damage compensation due to a long-term inaction from the State cannot be considered along with the rights of the applicants to use their own property without any obstacle. The court allowed a part of the claim in accordance with the regulation of the Article 9 of December 11, 1997, regarding the compensation which verified the claimants’ rights to obtain compensation in the amount of EUR 4000 each for the damage incurred.

In another case, Saghinadze and et.al vs Georgia, regarding the violation of ownership right of the applicants in relations with the house in their ownership, the decision was made on May 27, 2010 and the disputable house was bestowed to them as to the refugees in their own country (from Abkhazia) based on the administrative decision. The persons had lived in this house for more than ten years.

The European court denoted that the forced eviction of the claimants from the cottage did not comply with the procedures determined under the internal legislation, as they had been evicted not based on the court decision, but based on the verbal ordinance of the Ministry of Internal Affairs, supported by special police forces. Besides, the local courts did not acknowledge the fact that the applicants had been using the house continuously and

besides, they ignored the practice of the supreme courts in this regard. Thus, the court decided that such type of deprivation of the property was a self-practice and instructed the State of Georgia to restore the rights of claimants to use the house or provide them with another proper dwelling or give them a reasonable monetary compensation.

### **Protection of ownership right in the precedent law of the Constitutional Court of Georgia**

Approaches for identifying property in the precedent law of the Constitutional Court of Georgia like the approaches adopted in the practice of the European Court on Human Rights, the Constitutional Court of Georgia delivered decisions on several cases related to the economic interests regarding the ownership. For example, in the case of “Rusenergосervice LLC, PataraKakhi LLC and JSC Gorgo-Ta, GiviAbalak’s individual company Farmer and Energy LLC vs the Parliament of Georgia and the Ministry of Energy”, the Constitutional Court underlined the fact that the ownership right and the right of inheritance was acknowledged by the Constitution and thus they cannot be alienated. It mentioned that the ownership rights may be restricted only in the case of public necessity determined by law. Restriction of constitutional right may be justified only in the case when it is necessary to separate the property and the owner for the purposes of achieving legal target. In this case, the court decided that restrictions implied legal balancing of interests and not replacing one interest with another.

Both the precedent law of the European court and the practice of the Constitutional Court of Georgia respect different rights of ownership, which includes economic interests considering the right to use the property without any restriction. The tests determined by the convention, the precedent law of Georgia, the Constitution of Georgia and the practice of the Constitutional Court of Georgia are different. The convention uses the concept of “fair balance” for the means applied and targets planned. The practice of the Constitutional Court of Georgia considers the criteria for necessary public needs from the point-of-view of abrogating ownership rights. Besides, the practices of the European Court and of the Constitutional Court of Georgia consider unambiguous criteria, which comply with the legal requirements regarding abrogation of ownership rights and for avoiding arbitrary abrogation. Besides, procedural and material laws shall be considered. In addition, in the cases related to deprivation of the property the courts shall consider the circumstance at what extent the compensation was present during such deprivation for those persons whose ownership was subject to confiscation.

Thus, we may conclude that adequate approaches are approved by the European Court and by the Constitutional Court of Georgia in the cases related to the abrogation of ownership rights and to the protection of ownership rights despite the fact, that the first Article of the Act π1 of the Convention and the Article 21 of the Constitution of Georgia have different criteria in ascertaining at what extent the ownership rights were violated by the State authorized bodies and how arbitrary such violation was.

### **Conclusion**

The European Court on Human Rights and the Constitutional Court of Georgia treat the issue of protecting ownership rights with great care, analysing the circumstance, how legal the abrogation in the ownership right is and in this case how the legal balance during the abrogation is maintained between the ownership right and the public interest. Despite the different approaches, the practice of both courts is similar according to the results achieved. Activity of both courts ensure respecting ownership rights. Co-existence of similar practices is an important proof of the fact that both of the courts act within the united European legal scope and are guided by unique legal standards. The roles of both courts should be properly



appreciated from the point-of-view of protecting ownership rights on the national and international levels, and this represents a good example of integrity while protecting the right of using property without any restriction on the European and national levels.

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## GEORGIAN LEGAL SCIENCE ABOUT BANK GUARANTEE

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### Abstract

Representation of European Union in Georgia says that, “Since 2004 trade between Georgia and European Union has been developing fast, European Union has become the main trade partner of Georgia and the share of trade with it became equal to one third of the annual trade balance [4]. Georgia was actively involved in the international commerce and bank relations. The geographic location of the country contributed to it as the short way from Asia to Europe passes through “Georgia South corridor”, as specified in the agreement of association of Georgia with European Union (AA) signed on June 27, 2014. According to the Appendix XV-A of the mentioned agreement, Georgia undertook the obligation to gradually draw its legislation nearer to the legislation of European Union and international legal instruments in the banking sphere. One of the objectives of the association agreement is integration of Georgian economy to European Union through “deep and comprehensive free trade area” (DCFTA). In this new reality bank guarantee acquires great significance, as quickly executable and strong security of performance of monetary obligations at the international market. It will perfectly facilitate this integration. This article is dedicated to the views and scientific opinions of Georgian well-known doctors and professors of law, related to the legal side of the bank guarantee that is reflected in their monographs. This article shows, according to the opinions of Georgian scientists, how ready Georgian law is for new challenges.

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**Keywords:** Uniform Rules for Demand Guarantees (URDG), Bank guarantee, Beneficiary, DCFTA

### Introduction

On June 27, 2014, the agreement of association of Georgia with European Union was signed. The issue of trade acquired even more importance in the context of “deep and comprehensive free trade area” (DCFTA) between Georgia and European Union. At present, all states of European Union should ratify the agreement concluded with Georgia which will turn customs, bank and trade relations into new mode.

In order to make the stages of development of Georgian legal science in the scientific study of legal status of bank guarantee clearer, let us follow chronology from the time when this term was used for the first time in the legislation of independent Georgia.

Bank guarantee has established in free and independent Georgia since June 26, 1997. For the first time this term was used in Georgian civil code and its main definitions remained almost unchanged until today. Legal regulations of the bank guarantee in the private part of Georgian civil code are given in chapter 21 of contractual law, which is called “bank service”, and twelve articles are dedicated to it - from 879 to 890 inclusive [7].

By the time, when the legislator has adopted a new civil code, Georgian independent bank system was very young. Some legal relations, which were offered to the country and monetary-credit system by the new civil code, were unexpected by their innovations and at the same time offered freedom of transactions and comprised many types of agreements.

The banking sector to work without hindrances, according to the Article 1517 of transitional provisions of Georgian civil code, the National Bank of Georgia was assigned to ensure cancellation of restrictions related to opening of bank accounts for physical persons. This happened in order all physical and legal persons to be able to open accounts and enter into bank service agreements stipulated by Georgian civil code. Obviously, it concerned bank guarantees as well [7]. Prior to entering of the new code into force, physical persons had the right to conclude only deposit agreements.

Obviously, the legal regulation, defined by twelve articles of new civil code was not enough for detalization that required the banking sector. By this time, ICC publication No 458 for demand guarantees has been in force for only three years. However, it was an international unified rule and the banks were careful about transfer of its norms by direct analogue into the internal regulations of the country. Now it is clear that ICC publication No 458 comprised many vague norms and could not ensure deepening of confidence towards bank guarantee, although in comparison with its forerunner - ICC publication No 325, it was undoubtedly high quality act.

In order the legal nature of bank guarantee, as securing of performance the monetary obligation, was clear for business, scientific explanations, study of foreign experience and court practice were required. But at the time when Georgian civil code came into force, court reform was just starting in the country; its objective was selection of candidates for the positions of qualified judges, further training and creation of fair court.

A large group of Georgian lawyer-scientists started to work at creation of comments of civil code of independent Georgia and conducted high-volume work. Civil code comments were issued in five volumes and acquired high popularity. The editorial board, under the guidance of Professor Lado Chanturia, composed of Besarion Zoidze, Tedo Ninidze, Roman Shengelia and Jonny Khetsuriani, created comments on Georgian civil code for the private part of obligatory law, including the relevant articles of the bank guarantee. Along with the professors, comprising the editorial board, famous Georgian lawyer-scientists - M. Kakhadze, T. Chitoshvili, Z. Dzlierishvili, T. Zambakhidze, D. Sukhitashvili and Sh. Chikvashvili - worked on this issue. The comments on twelve articles, related to the bank guarantee, belong to the Professor of the Faculty of Law of Tbilisi State University, Roman Shengelia, a prominent scientist in Financial Law [3]. These comments were the first scientific explanation that were dedicated to the bank guarantee and were issued in 2001[5].

The content of the articles, related to the bank guarantee is explained in the comments. He made clear rights and obligations of the parties of the transaction and indicated the legal status which characterizes the bank guarantee as a unilateral and non-accessory transaction, which means that it does not depend on the main obligations, nor the order, that the principal gave to the guarantor for certain payment. The irrevocability of the bank guarantee, entering of the guarantee into force, the form of submission of demand for payment to the guarantor, the obligations and rights, performed by the guarantor, which were explained in comments, served to clear expression of legal essence and objective of this financial instrument. Georgian civil code and its comments deal only with local bank guarantees that are issued within Georgian territorial framework.

These comments are scientific explanation of Georgian civil code. They do not have the obligatory of the law, as, for example, comments on Russian civil code, which were approved by Russian "Duma" and assigned obligatory force along with Russian civil code.

The next work, which was dedicated to the bank guarantee, already considered it as not only intrastate, but as an international financial instrument. It was published in 2003 with the title "some issues of bank (independent) guarantees according to the national legislation and international private law" in the book review of Georgian law of 2003 [8]. The article

belongs to Paata Khotenashvili who was the head of legal department of the National Bank of Georgia at that time and is now engaged into practice of law.

It was the first scientific article, which along with the origin and development of independent bank guarantee, reflected its significant legal characteristics already towards the sources of international law sources. It competently discussed the legal nature of bank (independent) guarantees, on the terms and their meanings, which are reflected in the UN conventions, international unified rules about guarantees, national legislation of European countries and international private law.

The work indicates that the concept of guarantee was understood naturally and incoherently according to the national legislation of various countries, and in Georgian law it had correctly defined definition. It is necessary to eradicate this vagueness. The work deals with the limits of application of the bank (independent) guarantee according to Georgian legislation, as well as according the international acts. It was the first comparative scientific legal research during the study of legal status of the bank guarantee. The work is based on monographs issued by European scientists in the period from 1996 until 2003. It was a step forward for the presentation of law of the new independent country - Georgia at the international level and reviewed readiness of Georgian law for the international market with proper legal status of such strong financial instrument as the bank guarantee.

The third work, which in Georgian jurisprudence was dedicated to the bank guarantee, belongs to one of the famous young Georgian scientists, Doctor of Law, Professor Zurab Chechelashvili. He translated German civil code into Georgian. His work in this direction is interesting in the aspect that he simultaneously has great practical experience of work in one of the leading banks of Georgia TBC bank as a lawyer, which was positively reflected in the theoretical-legal research of the bank guarantee. In his work, the legal nature of the bank guarantee was analyzed in details and its theoretical, as well as practical aspects were formed, which was reflected in the book “Georgian business law” published in 2011 and soon became popular [3].

After that a scientific work was published which belongs to the Georgian scientist, civilist, famous in Europe, author of over 120 scientific works, Professor Lado Chanturia who contributed much to creation of Georgian civil code and development of civil thinking. His new work is “Law of securing credit” published as a book in 2012 [1]. Lado Chanturia is a guest Professor at Keele University (Law Institute of Eastern Europe) in Germany. His works are published in German, English and Russian languages. In the work “Law of Securing Credit”, he discusses the bank guarantee as quick and safe means of ensuring performance of monetary obligations, arising out of credit relations.

Professor Chanturia states: “The peculiarity of guarantee is that in case of non-performance of the undertaken obligations by the principal, the guarantor is not assigned to perform the obligations of the principal before the beneficiary; he is assigned only to pay an amount”. It underlines the fact, that though the issuer of the guarantee secures the main agreement concluded between the principal and the beneficiary, it guarantees only the performance of monetary obligations and does not ensure performance of any other obligations. He also notes that “the bank guarantee ensures satisfaction of the beneficiary even when the main obligation under the agreement concluded with the principal did not arise, was performed completely, terminated, or is invalid” [1]. This legal nature grants the bank guarantee the characteristics of quickly executable security instrument and makes the bank guarantees issued by Georgian banks reliable inside the country, as well as at the international financial market.

After that, the scientific work titled “Bank Law” was published which was published as a book in 2012 [6]. It belongs to a young Georgian scientist, author of 25 scientific works, Professor of Georgian-American University, Zviad Gabisonia who has been on scientific

internship at the legal faculties in Bonn, Hamburg and Munich Ludwig-Maximilian Universities. He is the Professor of Caucasus University. His work “Bank Law” is by today the only work dedicated to legal basis of bank activities and studies the legal aspect of all directions of these activities. By using the comparative-legal method, the institutes of bank law are analyzed and compared to Georgian banking legislation. This work is drawn according to the syllabus of European University and the textbooks intended for students. It is an auxiliary textbook for study of the bank law for students of the law faculty, as well as for scientist-lecturers, judges, lawyers and practitioners of law. The bank systematically explains the concept of law, system and resources, mandatory norms of intrastate, as well as of international agreements and conventions. Bank rules and traditions, court and arbitrary practice are discussed. The fifth chapter of the book is completely dedicated to the bank guarantee and is performed with high legal and scientific degree, the same, as the whole monograph. It contains non-accessory nature of the bank guarantee and legal status of the bank guarantee.

The next scientific work, titled “Bank Guarantee” belongs to Irakli Robakidze, candidate of Doctor’s Degree of Jena Friedrich Shiller University, which is included in the Georgian textbook “Contractual Law” published in 2014 and is intended for law schools. A group of authors - Professors Zurab Dzlierishvili, George Tsertsvadze, George Svanidze, Levan Janashia and Irakli Robakidze worked on the book [5].

Irakli Robakidze’s work is comprehensive and thorough in relation to the bank guarantee. It gives a full idea and scientific explanation for terminological and theoretical definition of this financial instrument. All articles dedicated to the bank guarantee in Georgian civil code are commented scientifically. The work is based on the research of German scientists; it provides cases and reviews the newest court practice. The work is rather significant because it is the first one which gives the text of the bank guarantee, whose sample is taken on the basis of ICC publication URDG 758 and which is used by the banks for issuance of intrastate, or local guarantees.

After studying the above-mentioned works, it should be mentioned that Georgian scientists have agreed on the following legal nature and the following main principles of the bank guarantee:

The bank guarantee is an independent and non-accessory unilateral transaction. It does not depend on the veracity of the agreement for whose security it was issued. If the guarantor issues the bank guarantee in favor of the beneficiary, he is obliged to pay the amount indicated in the guarantee even when the main obligation under the agreement concluded by the beneficiary with the principal did not arise, was completely performed, terminated, or is invalid. The bank guarantee is the most attractive security for the beneficiary, because only two things are required from him. These are: 1) to send to the guarantor a written request, where the obligation, violated by the contractor should be indicated, demand payment of the guarantee amount within the term of validity of the guarantee and 2) to attach to the demand those documents, in such format, which is indicated in the letter of guarantee. Thus, Georgian law shares the principle “first pay, and then argue” [5]. Beneficiary has no other load of proving. The circumstance that authorizes the guarantor not to pay the agreed amount is only violation of the above-mentioned terms by the beneficiary. The legislation states and Georgian scientific society agrees with the regression right of the guarantor towards the principal in case of payment of the guarantee amount and does not make this issue disputable. Georgian scientists are unanimous in the issue that the framework of the obligations of the guarantor is only payment to the beneficiary of the amount on which the guarantee was issued. Scientists are also unanimous on the issue that the guarantor cannot revoke already issued guarantee, unless there is any special provision in the text of the guarantee. It is interesting that Georgian law provides for revocation of the guarantee if it is stipulated in the

text of the guarantee, but scientists consider this circumstance to be an exception, though in the banking practice there has been no case of revoking of the issued bank guarantee.

As it is made clear from the chronology, from 2003 to 2011 there were no scientific works related to the bank guarantee. From time to time, the opinions and publicist letters of lawyers appeared in Georgian internet space, regarding this issue that expressed an interest of more knowledge. During this time, Georgian banks and businessmen gained enough experience in using the bank guarantee and court practice has also been established gradually. Meanwhile, since 2010 ICC Publication URDG 758 entered into force that cleared the vague norms in force in previous years, made them more exact and introduced many new concepts. This news has increased confidence towards the bank guarantee and enabled business to get involved in the international trading, as the risk of losing money in the international trade was reduced to minimum.

Today, in Georgia in case of state procurement and announcement of tender and contest by the state, the first and main condition is submission of the bank guarantee by the bidder, starting from the tender offer; at all stages it is required until final performance of the contractual obligations.

URDG 758 new unified rules are very detailed and include definition of new and various circumstances in many directions. Scientifically it is still to be studied by the comparative legal research method towards the Georgian legislation. Despite this fact, Georgian banking and civil law completely respond to this new challenge as well. Georgian banks issue international bank guarantees with the indication to URDG 758 and foreign beneficiaries have not had any public claims yet.

## Conclusion

As we see from the above-mentioned, Georgian lawyers and famous civilist-scientists are very competent and have scientific interest towards innovations, which are offered to Georgia by international challenges. Georgian scientists know well, thoroughly study and analyze European experience related to the bank guarantee and works of European scientists. Their works are based on the scientific experience of European Universities in relation to bank guarantees.

The above-given works and comparative legal researches contribute to integration of Georgia into the international processes and approaching the legislations of the countries of European Union by Georgian legislation. It also popularizes Georgian banking law in European countries, as Georgia is ready to undertake equal partnership and perform obligations, undertaken by the association agreement in the direction of banking activities.

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# THE COMPETITIVENESS OF THE INTRA EU TRADE IN PROCESSED ANIMAL PRODUCTS IN SELECTED EU MEMBER STATES

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## Abstract

The main aim of paper is determine competitive position intra EU trade in processed animal products new member states of European Union. The method is quantitative analysis of the ex-post competitiveness indicators. The analysis was based on data from Eurostat and ComExt. The new EU member states have shown the least competitive among the processes animal products. The EU-15 countries are competitive in the agri - food. This is result greater technological and mechanization progress in agriculture.

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**Keywords:** International trade, competitiveness, agriculture

## Introduction

According to G. Kołodko, economic growth in long run requires five factors which influence simultaneously. These factors are: technological progress, economic growth, production growth, innovation economy and culture, international cooperation and political goodwill<sup>124</sup>. The increase competitive of Polish sector with including knowledge-based economy requires multifaceted activities. These activities are: support for the scientific and technical progress, increase investment in research and new technologies, i.e. biotechnology, electronics, telecommunications<sup>125</sup>. What is more, these activities are crucial for the agri - food sector development also.

The main aim of paper is determine the competitive position intra EU trade in processed animal products in new member states of European Union (EU12). The analysis includes the year 2008 and 2012.

## The analysis of intra eu trade in agri – food products

Before accession Poland to the EU, there were fear of open the agricultural market. While in the years 2004 – 2008 Polish export and import of agri – food products increase threefold<sup>126</sup>. Where the share of the agricultural sector in GDP was similar i.e. in 2004 – 4.1% and in 2008 – 4%<sup>127</sup>. The export increased especially in sectors: sugar and cereals by

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<sup>124</sup> G. Kołodko, *Wędrujący świat*, Prószyński i S-ka, Warszawa 2008, s. 262.

<sup>125</sup> W. Kowalczewski, *Wiedza jako czynnik rozwoju gospodarki* [in] B. Poskrobko [ed.] *Gospodarka oparta na wiedzy. Materiały do studiowania*, Wyższa Szkoła Ekonomiczna, Białystok 2011, p. 77.

<sup>126</sup> A. Kowalski, *Polski sektor żywnościowy 5 lat po akcesji*, Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej PIB, Katedra Rozwoju Obszarów Wiejskich, Szkoła Główna Handlowa, Warszawa, kwiecień 2009.

<sup>127</sup> M. Hałamska, *5 lat w UE: stare i nowe procesy zmian na polskiej wsi*, Instytut Rozwoju Wsi i Rolnictwa PAN, Warszawa, 28 kwiecień 2009.



90%, tobacco by 850%. Poland was a net exporter in dairy products, meat products, tobacco, processed cereals, fruit, vegetables, poultry and sugar in the years 2004 – 2008<sup>128</sup>.

In 2012, Poland remained a net exporter of cereals, wheat flour, sugar, vegetables, fruits, dairy products, beef, poultry, eggs<sup>129</sup>. Table 1 shows the intra EU trade in agri – food sector in 2008 and 2012.

Table 1: Intra EU trade in agri – food products in mld EUR

Kraj	Ex	Im	B	Se	Si	Ex	Im	B	Se	Si
	2008					2012				
Austria	6,8	7,8	-1	2%	3%	7,6	9,4	-1,8	2%	3%
Belgium	25,0	19,7	5,3	9%	7%	28,7	23,0	5,7	9%	7%
Bulgaria	1,1	1,4	-0,3	0%	1%	2,4	2,0	0,4	1%	1%
Cyprus	0,1	0,7	-0,6	0%	0%	0,1	0,8	-0,7	0%	0%
Czech Republic	4,0	4,9	-0,9	1%	2%	5,3	6,3	-1	2%	2%
Denmark	11,1	6,7	4,4	4%	3%	11,8	7,4	4,4	4%	2%
Estonia	0,5	1,0	-0,5	0%	0%	0,82	1,3	-0,48	0%	0%
Finland	0,8	3,0	-2,2	0%	1%	0,9	3,8	-2,9	0%	1%
France	36,0	31,4	4,6	13%	12%	38,8	36,7	2,1	12%	12%
Greece	2,9	5,3	-2,4	1%	2%	3,2	4,6	-1,4	1%	1%
Spanish	22,9	15,8	7,1	8%	6%	27,5	17,4	10,1	9%	6%
Netherlands	54,6	23,7	30,9	20%	9%	60,9	29,3	31,6	19%	9%
Irland	6,6	5,3	1,3	2%	2%	7,1	6,0	1,1	2%	2%
Lithuania	1,5	1,9	-0,4	1%	1%	2,3	2,7	-0,4	1%	1%
Luxemburg	0,8	1,7	-0,9	0%	1%	1,0	1,9	-0,9	0%	1%
Latvia	0,7	1,3	-0,6	0%	0%	1,2	1,8	-0,6	0%	1%
Malta	,04	0,4	-0,36	0%	0%	0,03	0,4	-0,37	0%	0%
German	42,9	49,6	-6,7	16%	19%	49,4	58,7	-9,3	15%	19%
Poland	9,4	8,3	1,1	3%	3%	13,4	10,7	2,7	4%	3%
Portugal	3,1	6,1	-3	1%	2%	3,6	6,8	-3,2	1%	2%
Romania	1,4	3,5	-2,1	1%	1%	2,8	3,8	-1	1%	1%
Slovakia	1,9	2,8	-0,9	1%	1%	3,6	4,1	-0,5	1%	1%
Slovenia	0,7	1,3	-0,6	0%	0%	1,1	1,5	-0,4	0%	0%
Sweden	3,7	6,8	-3,1	1%	3%	4,9	8,3	-3,4	2%	3%
Hungary	4,7	3,5	1,2	2%	1%	6,8	4,1	2,7	2%	1%
Italy	18,8	24,9	-6,1	7%	9%	21,2	27,8	-6,6	7%	9%
Great Britain	12,6	29,0	-16,4	5%	11%	14,6	34,5	-19,9	5%	11%
Eu12	26,2	31,0	-4,8	10%	12%	40,1	39,7	0,4	12%	13%
Eu15	248,6	236,9	11,7	90%	88%	281,1	275,7	5,4	88%	87%
Eu27	274,8	267,9	6,9	100%	100%	321,2	315,3	5,9	100%	100%

Source: own study based on ComExt

Ex – export, Im – import, B – balance, Se – share of export, Si – share of import [%]

In the years 2008 – 2012 the value of intra EU export increased by 17% (about 46,387.2 million Euro). In 2012 the largest share in export reached: Germany (15%), Netherlands (19%), France (12%), Spain (9%), Belgium (9%). In most of the new members EU were the negative balance of trade in agri – food products. In 2012 net exporters of agri –

<sup>128</sup> R. Urban, I. Szczepaniak, R. Mroczek, *Polski sektor żywnościowy w pierwszych latach członkowska (Synteza)*, Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej, Państwowy Instytut Badawczy, Warszawa 2010, pp. 62 -64.

<sup>129</sup> J. Seremak – Bułge [ed], *Analizy, tendencje, oceny. Rynek rolny*, Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej, Państwowy Instytut Badawczy, Lipiec/Sierpień 2013, Warszawa.

food products in intra EU trade among new member EU were: Poland, Hungary and Bulgaria. Polish intra EU export increased by 42 % in 2012 compared to 2008. But the biggest change in the dynamics of trade in agri – food products was observed in Bulgaria – export increased by 111%. In contrast, Hungary achieved a 44% increase in export. Lithuania recorded an increase in import by 40 % in the years 2008 – 2012. A similar situation was observed in Slovakia – 48%, Slovenia – 12%, Romania – 10%, Malta – 6%, Latvia – 35%, Estonia – 23%, the Czech Republic – 30%, Cyprus – 18%.

### Materials and methods

The competitiveness of the intra EU trade in processed animal products in agri – food sector was used the ex post method analysis of quantitative indicators such as: SI (Specialization Indicator), CR<sub>k</sub> (Coverage Ratio), XRCA (Relative Revealed Comparative Export Advantage Index), MRCA (Relative Import Penetration Index), RTA (Relative Trade Advantage Index), IIT (Intraindustry Trade, Grubel-Lloyd Index). This analysis based on database from the Eurostat and ComExt. Below the competitiveness indicators was presented.

The Specialization Indicator<sup>130</sup> SI is share of a specific product at all exports of the country to share of this product in intra EU exports. The higher this indicator, the higher is export specialization.

$$\text{Formula 1:} \quad SI_k = \frac{X_{ik}}{X_k} \div \frac{X_{iw}}{X_w}$$

where:

SI<sub>k</sub> – The Specialization Indicator

X<sub>ik</sub> – share of the product *i* in export country *k*

X<sub>k</sub> – intra EU export of agri – food products in country *k*

X<sub>iw</sub> – share of the *i* product in intra EU export

X<sub>w</sub> – intra EU export of agri – food products

The Coverage Ratio<sup>131</sup> CR<sub>k</sub> allows to determine the direction of country specialization. The country specializes in the production of product if the indicator value greater than 100.

$$\text{Formula 2:} \quad CR_k = \frac{X_k}{M_k} \times 100\%$$

where:

CR<sub>k</sub> – The Coverage Ratio

X<sub>k</sub> – *k* country export

M<sub>k</sub> – *k* country import

Relative Revealed Comparative Export Advantage Index<sup>132</sup> XRCA<sub>ik</sub> is the ratio of two quotients. The first of these is the ratio of specific product in country export to intra EU export this product. The second one is the ratio of agri – food products export in country (excluding this product) to intra EU agri – food products export. If the index reaches a value greater than 1, then the country has a comparative advantage in the production of a specific agri – food product.

$$\text{Formula 3:} \quad XRCA_{ik} = \frac{X_{ik}}{X_{im}} \div \frac{\sum_{j \neq i} X_{jk}}{\sum_{j \neq i} X_{jm}}$$

where:

XRCA<sub>ik</sub> – Relative Revealed Comparative Export Advantage Index

X<sub>ik</sub> – *i* product export in *k* country

X<sub>jk</sub> – agri – food products export in *k* country

<sup>130</sup> W. Poczta, *Potencjał i pozycja konkurencyjna polskiego rolnictwa na rynku europejskim*, Komitet Ekonomiki Rolnictwa PAN, 14-15 czerwiec, Zamość 2010.

<sup>131</sup> Ibidem

<sup>132</sup> Ibidem

$X_{im}$  – intra EU export of  $i$  product

$X_{jm}$  – intra EU export of agri – food products

Relative Import Penetration Index<sup>133</sup>  $MRCA_{ik}$  is similar to a Relative Revealed Comparative Export Advantage Index. But his interpretation is the reversed. The indicator values above 1 show a lack of comparative advantage. If the index reaches a value greater than 1, then the country has a comparative advantage in the production of a specific agri – food product.

Formula 4:

$$MRCA_{ik} = \frac{M_{ik}}{M_{im}} \div \frac{\sum_{j \neq i} M_{jk}}{\sum_{j \neq i} M_{jm}}$$

where:

$MRCA_{ik}$  – Relative Import Penetration Index

$M_{ik}$  –  $i$  product import in  $k$  country

$M_{jk}$  – agri – food products import in  $k$  country

$M_{im}$  – intra EU import of  $i$  product

$M_{jm}$  – intra EU import of agri – food products

Relative Trade Advantage Index<sup>134</sup>  $RTA_{ik}$  shows competitive advantage. It is the Relative Revealed Comparative Export Advantage Index minus Relative Import Penetration Index. It expected positive indicator values.

Formula 5:

$$RTA_{ik} = XRCA_{ik} - MRCA_{ik}$$

where:

$RTA_{ik}$  – Relative Trade Advantage Index

$XRCA_{ik}$  – Relative Revealed Comparative Export Advantage Index

$MRCA_{ik}$  - Relative Import Penetration Index

Intraindustry Trade, Grubel-Lloyd Index<sup>135</sup>  $IIT_k$  allows to specify the nature of the trade between the specific country and the EU. The indicator value close to 100 the show an intra-industry trade. While the indicator value close to 0 the show an inter-industry trade.

Formula 6:

$$IIT_k = \frac{(X_{ik} + M_{ik}) - |X_{ik} - M_{ik}|}{(X_{ik} + M_{ik})} \times 100\%$$

where:

$IIT_k$  – Grubel-Lloyd Index wskaźnik Grubela-Lloyda

$X_{ik}$  –  $i$  product export in  $k$  country

$M_{ik}$  –  $i$  product import in  $k$  country

## Result

The analysis of competitiveness of the new EU member states in intra EU trade in processed animal products is based on the verification of indicators described by formula 1-6. According to the Combined Nomenclature (CN), this group includes: dairy products, live animals, meat and edible meat offal products, meat products.

In Table 10 was presented the competitiveness indicators of dairy products in 2008 and 2012.

<sup>133</sup> K. Pawlak, M. Kołodziejczak, W. Kołodziejczak, *Konkurencyjność sektora rolno – spożywczego nowych krajów członkowskich UE w handlu wewnątrzspółnotowym*, [in] M. Adamowicz, A. Kowalski [ed.], *Zagadnienia ekonomiki rolnej*, Organ Komitetu Ekonomiki Rolnictwa PAN, Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej PIB i Sekcji Ekonomiki Rolnictwa PTE, 1(322)2010, pp. 127 – 130.

<sup>134</sup> Ibidem

<sup>135</sup> Ibidem

Tabela 2: The competitiveness indicators trade in dairy products in new member state EU

Indicators	SI		CR		XRCA		MRCA		RTA		IIT		Assessment	
	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12
Bulgaria	0,72	0,51	83,91	66,28	0,70	0,48	0,68	0,90	0,02	- 0,42	91,25	79,72	-/+	-/+
Cyprus	2,05	3,69	48,38	76,65	2,31	5,12	0,82	0,80	1,49	4,32	65,21	86,78	+	+
Czech Republic	1,35	1,12	127,53	104,64	1,40	1,13	0,83	0,87	0,57	0,26	87,90	97,73	+	+
Estonia	2,12	1,63	247,49	203,01	2,41	1,75	0,42	0,48	1,99	1,26	57,55	66,00	+	+
Hungary	0,48	0,41	75,05	86,10	0,45	0,39	0,83	0,76	- 0,38	- 0,37	85,75	92,53	-/+	-/+
Lithuania	1,66	1,53	210,21	158,85	1,79	1,62	0,57	0,77	1,22	0,85	64,47	77,27	+	+
Latvia	1,71	1,62	139,84	146,04	1,85	1,73	0,61	0,72	1,24	1,01	83,39	81,29	+	+
Malta	0,05	0,00	0,54	0,00	0,05	0,00	0,91	0,93	- 0,86	- 0,93	1,07	0,00	-/+	-/+
Poland	1,19	0,99	352,83	242,95	1,21	0,99	0,35	0,48	0,86	0,52	44,17	58,32	+	-/+
Romania	0,29	0,43	18,75	44,80	0,27	0,40	0,60	0,66	- 0,33	- 0,26	31,58	61,88	-/+	-/+
Slovenia	1,45	0,91	91,18	75,41	1,52	0,90	0,80	0,90	0,72	0,00	95,39	85,98	+	-/+
Slovakia	1,58	0,77	132,38	91,74	1,68	0,75	0,78	0,70	0,90	0,05	86,07	95,69	+	-/+
Eu15	0,99	1,02	97,63	97,30	0,99	1,02	1,05	1,05	- 0,06	- 0,03	98,80	98,63		
Eu27	1,00	1,00	101,02	99,71	1,00	1,00	1,00	1,00	0,00	0,00	99,49	99,85		

Source: own study

(-) – lack of competitiveness

(+) – competitiveness

(-/+) – the analysis are inconclusive/ambiguous

The new member states of EU are not competitive in trade in processed animal products. The most competitive products in this group are: live animals, meat and edible meat offal products and dairy products. The greatest comparative advantage in trade in dairy products show: Cyprus, Czech Republic, Estonia, Lithuania, Latvia, Poland, Slovakia. The competitiveness is reflected in the SI indicator also, which reaches value greater than 1 in most cases. When we take CR into consideration, the greatest trade specialization in dairy product show: Poland, Czech Republic, Estonia, Lithuania, Latvia. Analyzing the IIT indicator conclude that there is an intra-industry trade. The indicator was in the range of 0 to 97%. The inter-industry trade was showed in Malta. It was noted the change in value indicators when was compared the 2008 and 2012 years. For example, Poland, Slovenia and Slovakia were competitive trade in dairy product in 2008, but in 2012 were not. The main reason could be the accession to the EU of Rumania.

Table 3: The competitiveness indicators trade in meat products in EU new member state

Indictarors	SI		CR		XRCA		MRCA		RTA		IIT		Assesment	
	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12
Bulgaria	0,18	0,27	40,77	54,10	0,18	0,26	0,39	0,61	- 0,22	- 0,35	57,93	70,22	-/+	-/+
Cyprus	0,06	0,01	1,32	0,21	0,06	0,01	0,99	1,09	- 0,93	- 1,08	2,61	0,42	-/+	-
Czech republic	0,77	0,95	68,54	95,92	0,76	0,95	1,00	0,84	- 0,24	0,10	81,34	97,92	-	-/+
Estonia	2,19	1,82	81,07	127,32	2,28	1,87	1,59	0,94	0,69	0,93	89,54	87,98	+	+
Hungary	0,73	0,67	102,79	113,35	0,72	0,67	1,05	1,01	- 0,33	- 0,34	98,62	93,74	-	-
Lithuania	2,33	1,58	225,79	213,44	2,45	1,61	0,86	0,62	1,60	0,99	61,39	63,81	+	+
Latvia	2,12	1,34	141,37	103,19	2,21	1,35	0,86	0,90	1,35	0,46	82,86	98,43	+	+
Malta	0,16	0,03	0,89	0,12	0,16	0,03	1,98	2,17	- 1,83	- 2,14	1,77	0,23	-	-

Poland	1,54	1,71	406,36	456,18	1,57	1,75	0,46	0,47	1,11	1,28	39,50	35,96	+	+
Romania	0,78	0,86	73,57	100,83	0,77	0,86	0,47	0,63	0,30	0,22	84,77	99,59	-/+	-/+
Slovenia	1,00	0,88	55,01	63,90	1,00	0,88	1,04	1,09	- 0,04	- 0,21	70,98	77,97	-	-
Slovakia	0,65	0,44	37,67	25,78	0,64	0,43	1,31	1,57	- 0,66	- 1,13	54,73	41,00	-	-
Eu15	0,98	0,98	110,44	99,67	0,98	0,98	1,02	1,03	- 0,04	- 0,04	95,04	99,84		
Eu27	1,00	1,00	112,34	103,92	1,00	1,00	1,00	1,00	0,00	0,00	94,19	98,08		

Source: own study

(-) – lack of competitiveness

(+) – competitiveness

(-/+) – the analysis are inconclusive/ambiguous

The competitiveness of new member states to trade in meat products is average comparing all countries. The greatest comparative advantage in trade in meat products show: Czech Republic, Estonia, Lithuania, Latvia, Poland, Romania. The competitiveness is reflected in the SI indicator. The best indicator shows: Poland, Lithuania, Latvia, Estonia. When we take CR into consideration, the greatest trade specialization in meat product show: Poland, Estonia, Lithuania, Latvia, Hungary, Romania. Analyzing the IIT indicator conclude that there is an intra-industry trade (especially in: Bulgaria, Estonia, Slovenia, Hungary, Czech Republic, Romania). The indicator was in the range of 0,23 to 99%. The inter-industry trade was showed in Malta and Cyprus.

Table 4: The competitiveness indicators trade in live animal in new member state EU

Idicators	SI		CR		XRCA		MRCA		RTA		IIT		Assessment	
	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12
Bulgaria	0,27	0,14	19,59	37,69	1,00	0,14	1,16	0,45	- 0,16	- 0,31	32,77	54,75	-	-/+
Cyprus	0,10	0,01	25,02	2,44	0,55	0,01	0,08	0,06	0,46	- 0,05	40,02	4,77	-/+	-/+
Czech Republic	1,98	1,87	310,18	251,29	0,41	1,91	0,52	0,63	- 0,11	1,28	48,76	56,93	-/+	+
Estonia	0,72	1,15	1116,26	960,18	0,19	1,16	0,03	0,08	0,16	1,08	16,44	18,86	-/+	+
Hungary	1,40	1,23	134,63	94,89	1,31	1,23	1,43	2,24	- 0,12	- 1,01	85,24	97,38	-	-
Lithuania	0,97	1,05	131,17	154,36	0,35	1,05	0,56	0,57	- 0,22	0,48	86,52	78,63	-/+	+
Latvia	0,40	0,99	91,03	143,69	0,49	0,99	0,23	0,47	0,26	0,52	95,31	82,07	-/+	-/+
Malta	0,00	0,03	0,00	13,40	0,11	0,03	0,06	0,02	0,05	0,01	#ARG!	23,64	-/+	-/+
Poland	0,77	0,42	100,22	32,06	1,33	0,41	0,88	1,69	0,45	- 1,27	99,89	48,56	+	-
Romania	4,21	1,90	136,54	95,43	0,23	1,94	1,30	1,50	- 1,07	0,44	84,55	97,66	-	+
Slovenia	2,03	1,57	193,15	224,80	0,19	1,60	0,55	0,54	- 0,35	1,06	68,22	61,58	-/+	+
Slovakia	1,90	2,04	143,05	169,67	0,42	2,10	0,91	1,08	- 0,50	1,03	82,29	74,16	-/+	+
Eu15	0,96	0,99	100,29	104,10	1,01	0,99	1,02	0,98	- 0,01	0,01	99,85	97,99		
Eu27	1,00	1,00	103,96	103,14	1,00	1,00	1,00	1,00	0,00	0,00	98,06	98,45		

Source: own study

(-) – lack of competitiveness

(+) – competitiveness

(-/+) –the analysis are inconclusive/ambiguous

The competitiveness of new member states to trade in live animal is average comparing all countries. The greatest comparative advantage in trade in live animal show:

Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovenia, Slovakia and Malta. When we take CR into consideration, the greatest trade specialization in live animals show: Czech Republic, Estonia, Lithuania, Latvia, Slovenia, Slovakia. Analyzing the IIT indicator conclude that there is an intra-industry trade (especially in: Lithuania, Latvia, Slovakia, Hungary, Romania). The indicator was in the range of 4 to 97%. The inter-industry trade was showed in Cyprus. It was noted the change in value indicators when was compared the 2008 and 2012 years. For example, Poland was competitive trade in live animals in 2008, but in 2012 were not. And the another way, Bulgaria, Czech Republic Estonia, Lithuania, Romania, Slovenia and Slovakia were not competitive in 2008, but in 2012 were. The main reason could be lower production costs in these countries.

Table 5: The competitiveness indicators trade in in meat and edible meat offal products in EU new member state

Indicators	SI		CR		XRCA		MRCA		RTA		IIT		Assessment		
	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	'08	'12	
Bulgaria	1,04	0,60	37,32	38,09	0,80	0,57	2,08	2,24	-	1,28	1,67	54,36	55,16	-	-
Cyprus	0,63	0,33	31,10	13,70	0,47	0,31	0,30	0,41	0,16	-	0,10	47,44	24,09	-/+	-/+
Czech Republic	0,48	0,42	28,60	26,50	0,35	0,39	1,11	1,44	-	0,76	1,05	44,48	41,89	-	-
Estonia	0,78	0,55	44,25	44,82	0,59	0,52	0,73	0,81	-	0,15	0,29	61,36	61,90	-/+	-/+
Hungary	1,41	0,99	190,38	146,11	1,12	0,99	0,79	1,19	0,34	-	0,20	68,88	81,26	+	-/+
Lithuania	0,67	0,49	40,85	64,58	0,50	0,46	1,00	0,63	-	0,51	0,17	58,00	78,48	-	-/+
Latvia	0,41	0,45	20,62	42,96	0,30	0,42	0,83	0,71	-	0,53	0,30	34,20	60,10	-/+	-/+
Malta	0,05	0,02	0,40	0,19	0,03	0,02	0,96	0,96	-	0,92	0,94	0,80	0,38	-/+	-/+
Poland	1,94	1,50	147,99	162,43	1,63	1,59	1,23	1,23	0,40	0,37	0,41	80,65	76,21	+	+
Romania	0,34	0,82	5,81	52,81	0,24	0,81	2,18	1,22	-	1,93	0,41	10,99	69,12	-	-
Slovenia	0,84	0,34	33,49	23,11	0,63	0,32	1,06	1,20	-	0,43	0,89	50,17	37,54	-	-
Slovakia	0,52	0,43	31,67	40,56	0,38	0,40	0,90	0,96	-	0,52	0,56	48,10	57,71	-/+	-/+
Eu15	1,28	1,01	110,54	109,40	1,00	1,01	0,98	0,98	0,03	0,04	0,04	94,99	95,51		
Eu27	1,27	1,00	105,37	105,77	1,00	1,00	1,00	1,00	0,00	0,00	0,00	97,39	97,20		

Source Źródło: own study

(-) –lack of competitiveness

(+) –competitiveness

(-/+)-the analysis are inconclusive/ambiguous

The competitiveness of new member states to trade in meat and edible meat offal products is low comparing all countries. The greatest comparative advantage in trade in meat and edible meat offal products show Poland. In all countries SI indicator value is less than 1. Only in Poland, this indicator is greater than 1. When we take CR into consideration, the greatest trade specialization in meat and edible meat offal products show: Poland and Hungary. Analyzing the IIT indicator conclude that there was an intra-industry trade (especially in: Hungary, Lithuania, Poland, Romania). The indicator was in the range of 0,38 to 81%. The inter-industry trade was showed in Malta. It was noted the change in value indicators when was compared the 2008 and 2012 years in Hungary, Lithuania.

## Conclusion

It seems necessary to develop technological progress in agri – food sector in the new member states of EU. This due to the fact that the food processing industry is less competitive than in EU-15. But in new member states of EU have high potential in

agricultural production. In contrast, without advanced mechanization and biotechnology progress the growth of competitiveness is impossible. This is the limiting factor the full potential also.

It was noted that the effect of trade creation in agri – food products occurred in Bulgaria after accession to the EU. The EU-15 countries have remained their share of trade in agri – food products. The intra EU import trade deficit in agri – foods products stayed in the Czech Republic, Cyprus, Estonia, Lithuania, Latvia, Malta, Romania, Slovenia and Slovakia in the years 2008 – 2012.

What is more, the countries of the EU-15 are still the competition in trade in agri – food products comparing 2008 and 2012. This is due to by greater mechanization and technology progress in agriculture.

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## NEW PATHWAYS AND PARTNERSHIPS TO SCHOOL LEADERSHIP

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### Abstract

This paper describes an innovative partnership between the largest school district in the State of Texas, Houston Independent School District, and the Schools of Business and Education at the University of St. Thomas. The program includes a 48-hour master's degree, resulting in a Master's of Business Administration with principal certification. Through this university-school district collaboration, students are taught to apply principles of business including finance and leadership to diverse, inner-city school communities

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**Keywords:** Principal Training, Business, Finance, Collaboration

### Introduction and Program Overview

In June 2011, Dr. Terry Grier, Superintendent of the Houston Independent School District (HISD), the seventh largest school district in the United States, approached the University of St. Thomas (UST) armed with innovative ideas that would serve both HISD and the University. Six months later, a 48-hour Masters of Business Administration (MBA) with a joint Texas principal's certification degree was initiated. Dr. Grier envisioned a principal preparation program that would include courses in marketing, finance, ethics, and entrepreneurship in addition to the Texas "Learner Centered Competencies," which are required for licensure and certification as a principal in the State of Texas. Dr. Greer believes the skill set required of effective, principals in today's schools differs from the skills needed to be successful twenty years ago. The principal preparation program as proposed by Superintendent Grier included courses traditionally found in a School of Business. Such a vision was not new for the greater Houston metropolitan area, in 2008; Rice University launched a principal's program, which included a Masters in Business Administration. The Washington Post 2008 stated, "Education schools, where most principals are trained, emphasize teaching and managing children. But organizers...say an inner-city principal cannot succeed without enough business smarts to manage adults." It is natural that some skepticism exists about the need for preparing principals with a business approach, but it is acknowledged that the capable utilization of finance is critical to the delivery of a strong, systemic school culture that ensures learning for all. This paper describes the partnership and collaboration between the Houston Independent School District and two schools within the University of St. Thomas, the School of Business and the School of Education, to create the Masters of Business Administration (MBA) with principal certification degree, which began to be offered to students in January 2012.

The faculty of the two schools, Business and Education met with the HISD administration to determine the competencies most desired and needed by the quality school Instructional Leader (e.g., Principal). The MBA Program, which included principal certification, was then developed based upon the desired outcomes and competencies



required for a Houston ISD principal. The Program design aligns with the Strategic Direction of the Houston Independent School District.

Under the leadership of the HISD Board of Trustees and Superintendent Grier, a Strategic Direction was developed in 2010 that ensures an effective principal in every school. The blend of the MBA course content and the principal certification requirements bridges the gap in skills development for school leaders working within the district's decentralized leadership framework. This cutting-edge program development provides cohort members with a curriculum aligned to school district policies; authentic transformational leadership knowledge and skills preparation; and a rigorous internship mentored by a high performing, experienced principal, in order to enhance the collective efficacy of the individuals as members of the cohort.

### **Cohort Model**

The cohort model used in the Houston ISD-UST initiative has been studied for the past 30 years. In 2000, Bruce Barnett, Margaret Basom, Diane Yerkes, and Cynthia Norris studied "Cohorts in Educational Leadership Programs: Benefits, Difficulties, and the Potential for Developing School Leaders" and published their results in the *Educational Administration Quarterly*. Their research provided insight into the benefits and the disadvantages of the cohort model. In an earlier study on the cohort model Barnett et al reported that cohorts included the following advantages: cohort members have a sense of belonging, are accepted for their expertise and contributions, and feel important (Zander, 1982). Instructors in that study reported that predictability of course scheduling and program delivery is a distinct benefit. (Hill as reported by Barnett et al, p. 259) According to the instructors interviewed in the investigation, "cohorts can take on a life of their own" (p. 267) and faculty reported, "Groups can become more difficult to manage because they appoint their own leaders and develop cohesion that may work against the desires of the instructor. Cohorts became empowered to the point of challenging what instructors were teaching." (p. 267), While many instructors (i.e., those who used cohorts and those who did not use cohorts) reported negative findings about cohorts, some positive comments emerged in the Barnett et al investigation. The most common positive perceptions about cohort student preparation for leadership roles are that students develop strong collaborative cultures during their program, and that students are able to gain skills and knowledge not found in traditional programs. The cohort experience is designed to emphasize practice, problem solving, and real world experiences (p. 270). The students within the HISD-UST cohort have developed strong bonds and forged relationships that should carry over into their leadership role as school principals.

While both the Cameron School of Business and the School of Education, hold accreditation from the Southern Association of Colleges and Schools (SACS), the Cameron School of Business (CSB) has also achieved accreditation from the Association to Advance Collegiate Schools of Business (AACSB). The School of Education's Educational Leadership Program has likewise achieved accreditation from the Teacher Educator Accreditation Council (TEAC). It has been important that both schools (Business and Education) maintain the high standards for assessment required by each accreditation entity while also meeting the specialized needs that Superintendent Grier wanted for future leaders of the HISD campuses. The Cameron School of Business determined that nine courses, including marketing, ethics, statistics, financial accounting, economics, organizational behavior, entrepreneurial principles, and strategic management would comprise the MBA degree. The School of Education selected certification courses that directly related to the desired learning experience for the transformational principal, including the principal, instructional leadership, school law, supervision, and internships. Early in the planning process both schools came together with members of the HISD leadership team to discuss the

content and the organization of the course of study for the new degree program. Faculty members from both schools expressed a desire to integrate content from business and education schools so that students would be able to directly apply their new knowledge to campus management. At the joint meeting in September, the Cameron School of Business faculty reviewed the representative principal certification exam that the students are required to pass upon completing the program of study. At that point, the Steering Committee began the arduous task of setting goals and aligning curriculum to ensure that the students would be prepared to successfully pass the principal certification exam. Quarterly meetings were held with the Planning Team to evaluate and address any problems or concerns throughout the program’s development and implementation.

**Steering Committee**

The Steering Committee consisted of three HISD principals, the senior manager of Leadership Development from HISD, the manager of University Partnerships, two associate deans from the Cameron School of Business, the dean of the School of Education, and the director of the Leadership Program in the School of Education. Using a variety of protocols for collaboration, the Steering Committee was able to articulate five goals for the MBA Program. All of the goals and objectives tightly aligned with the nine competencies assessed for principal certification:

- 1) The MBA graduates will be professional communicators;
- 2) They will be effective collaborators, sensitive to diversity and social justice concerns;
- 3) They will be ethical decision makers;
- 4) They will be critical thinkers, with a global mindset;
- 5) They will be knowledgeable about instructional business issues and processes.

Each goal has at least two objectives that were targeted in the 15 courses of the program. Once the Steering Committee reached consensus about the goals and objectives and their alignment with each course in the program, CSB faculty task analyzed each goal by identifying topics covered, prerequisites, and math concepts. Faculty used the chart found in Figure 1. Three months were spent aligning assessments with goals and objectives, and while the Steering Committee worked on curriculum, HISD was in the process of selecting the first fifteen students for the program. The Steering Committee was committed to developing a strong cohort of participants who would be devoted to developing a cohesive learning community capable of providing psychological support and encouraging collaboration throughout the program. Several inaugural events were planned to develop strong relationships and a sense of community with university staff, school district leaders, and members of the Steering Committee. The obvious benefits of a rich cohort experience would serve as a foundation on which to build collaborative school cultures and purposeful school communities.

Figure 1. Aligning Outcomes and Assessment

	<i>Communication</i>		<i>Collaboration, social justice, and diversity concerns</i>	<i>Ethical decision making</i>	<i>Critical thinkers with global mindset</i>
	<i>Oral</i>	<i>Written</i>			
<i>Addressed? Y/N</i>					
<i>How is it assessed?</i>					
<i>Evaluated in this class for grading? Y/N</i>					
<i>How is it evaluated?</i>					
<i>Feedback provided? Y/N</i>					
<i>How is feedback provided?</i>					

### **Applicant Selection and Profile**

HISD announced the new MBA program shortly after receiving approval from its Board of Trustees in September 2011. Teachers who had a 3.0 grade point average from their bachelor's degree and were considered to be highly effective were encouraged to apply. Initially 95 teachers applied and were required to take an online leadership assessment. The applicants who met the scoring target on the leadership assessment were then asked to write a paper on how to turn around a hypothetical under-performing school. HISD leadership personnel scored the essay projects and then interviewed successful applicants. Fifteen were selected from the initial 95 applicants, and one additional student was added after the first semester. Fourteen of the 16 participants are teachers in HISD; two are former teachers who currently work in Human Resources, one is a leadership recruiter and one is a teacher recruiter. Eight of the 16 students are Hispanic, five are Caucasian, two are African American, and one is Chinese American. Four of the participants teach in high school, three in middle school, and seven work in the elementary setting as teachers or specialists. There are six males and ten females. All participants are people who have demonstrated, through writing and personal interviews, a strong motivation for contributing to increased student achievement, high expectations for every child, and efficacy needed to make a difference in the lives of teachers and children.

### **Goals of the MBA Program**

September 2011, the Steering Committee identified the five goals of the new joint MBA-Principal Certification Program keeping in mind the nine competencies that are tested on the Texas Principal Certification Exam. The first goal, *professional communicators*, addressed two objectives related to oral and written skills. Almost every course in the new program assessed professional oral and written skills.

The second goal, related to the importance of the graduates being *effective collaborators, sensitive to diversity and social justice concerns*. The three objectives under this goal target skills of utilizing appropriate group techniques for team tasks, developing effective community relations skills that inform multiple stakeholders, and demonstrating effective leadership skills in an educational context. These objectives were assessed through case study scenarios in which students reacted to problem-based situations and defended their solutions to the problem.

Similar case study scenarios were used for the third goal, which was related to being *ethical decision makers*. Students were taught to recognize the ethical issues implicit in "instructional business" situations and to develop a variety of ethical alternatives. To understand the implications of selected ethical perspectives was important to enhance their understanding and analysis of the problem-based situations.

The fourth goal, *critical thinking with a global mindset*, targeted three objectives; analyzing problems in-depth, evaluating data thoroughly, and presenting feasible solutions for problems. Assessments include scenarios from education as well as everyday life.

The fifth goal, targeted eight objectives, all related to the graduates being *knowledgeable about instructional business issues and processes*. The eight objectives demonstrated competency in the three domains of the Texas Principal Certification Exam, (i.e., school community leadership, instructional leadership, and administrative leadership) as well as knowledge in accounting, economics, finance, management, and marketing. Thirty credit hours of business courses and 18 credit hours of educational leadership courses focused all five goals and 19 objectives with the outcome of earning a Master's of Business Administration and preparation for successful completion of the Texas Principal Certification Exam.

### **Timeline of Implementation**

When members of HISD leadership, including Superintendent Dr. Terry Grier, met with UST leadership June 2011, the idea of creating a new degree plan was something written on a paper napkin. By December 2011, faculty from both schools and the Steering Committee hosted an orientation for the first MBA cohort and classes began in January 2012. Between July and December faculty designed the program, sequenced the courses, requested and received approval from the university Graduate Council and Southern Association of Colleges and Schools for the proposed new program of study. The program goals were determined and outcomes were aligned with assessments. Instructors were identified for the first courses, and the program orientation was held for the selected students. Dr. Grier's vision became a reality when classes began January 14, 2012.

### **Student Perceptions**

In an effort to ensure that the MBA with Principal's certification met the needs of the students and HISD, a six-question survey was administered to all students at the beginning of their second semester while they were enrolled in three graduate courses. The questions asked were as follows: why they chose the MBA Program, what were their expectations prior to the first class, what was their most pleasant surprise, what had they learned about themselves, what did they think should be changed, and what had they already used from the coursework. Most students answered that they were interested in the MBA Program because of the business aspect and because they want to become school leaders. Although the district paid for the tuition, fewer than half of the students chose that option as grounds for choosing the program.

Survey results indicated that many students expected more integration of business and education course content in response to the question about their prior expectations. One student stated, "I expected that there would be rigor and it's there". Students expressed that they were stretched with the statistics class and were not surprised by their own success. Other students indicated that they were surprised at how supportive the UST professors were and yet how much work the professors expected. Overall the comments were very positive about what they have used from their coursework. Students indicated that they have learned and used information about the importance of marketing, the demands of leadership, and strategic planning. When asked about what they thought should be improved, most comments were related to better communication, for future cohorts to have some training in statistics before beginning the program, and the need for more team-building exercises. The survey comments were shared with the Steering Committee in the Fall 2012 meeting where instructors discussed the need to ensure cogent integration of business and education courses.

### **Summary**

The innovative partnership with Houston Independent School District and two schools of the University of St. Thomas has been completed. The fall 2012 meeting of the Steering Committee addressed several critical elements for the two-semester internship that served as a capstone to the MBA program. The purpose of the UST MBA Internship was to apply academic learning towards powerful and practical field experience that hone essential leader competencies. Clearly defined leader standards identified by the Texas Principal Standards and by the Southern Regional Education Board (SREB) have framed the internship experience. The internship included a three-tiered support structure of campus, university, and district personnel; training around district-specific programs and initiatives; development and monitoring of a systems-based approach to problem solving; case-study analysis; and reflection. Rigorous evaluation of each intern's performance of core leader responsibilities was based on clearly defined performance criteria and an individualized learning plan

connected to school needs, student achievement, and intern areas for growth.

The Steering Committee has been involved with nearly every detail in planning the MBA, from determining which courses to include to establishing the schedule for when courses are taught. Other ways that the Steering Committee has been integral to the development of the program is that two members from the HISD Leadership Development Department, along with the university director of leadership, met with each individual MBA student prior to beginning the internship courses to develop the individualized learning plan. Consideration was given to the placement of each intern, although most of them remained on the campus where they taught. Additionally, one member of the Steering Committee, a current high school principal, taught the School Law course for the cohort. Students were required to attend the School Law Conference held June in Austin, Texas, as part of their coursework. Creating a different path for preparing aspiring leaders to successfully lead urban schools required a true partnership between the University and the school district. Crucial to the success of the joint program has been the ability to analyze and reflect upon educational practices and to accept what current practitioners have to offer as best practice.

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## COMMUNICATION AND INFORMATION MANAGEMENT AND STUDENTS' CRISES RESOLUTION IN PUBLIC UNIVERSITIES IN NIGERIA

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### Abstract

The 21<sup>st</sup> century argument for the promotion and management of Information and Communication in the delivery of education in developed and some developing economies gave birth to a planned form of using technology to bridge the gap between the university management and staff and students. Information and communication (IC) for emergency management functions best when its design follows from a solid understanding of the socio-technical systems that it is meant to support. This study examined the impact of Information and Communication in the management of crisis and to determine the existing relationship between staff/student needs and conflicts in the public universities in South West Nigeria. The increasing number of crises made communication a more demanding job for managers. Organizations face small crises every day, such as charges of denial of staff and students needs in Nigeria universities.

This study adopt the descriptive research design of survey type. Nigeria is made up of six geo-political zones namely: North-West, North-East, North-Central, South-South, South-East, and South-West. Thus, a purposive simple random sampling method was adopted and the South-West geo-political zone was selected out of which three (3) Federal universities and three (3) State universities were randomly selected. A stratified sampling technique was also used to select 2,400 consisting of 300 students and 100 academic and non-academic staff from each university. The instrument used was a self constructed questionnaire titled, Information Communication Technology and Crises Resolution Questionnaire (ICTCRQ). Before administration, the questionnaire was validated with reliability coefficient of  $r = 0.87$ . Data were analyzed through descriptive and inferential statistics tools to test the research hypotheses for the study. The result reveals that there is a significant difference between the level of information communication management and crisis between the Federal and State Universities. ( $df = (5, 397)$ ,  $F_{cal} = .297 > F_{tab} = .157$ ;  $P < .05$ ). The study also revealed that is a significant relationship between information communication management and student crisis resolution in Universities ( $r=0.66$ ,  $P<0.05$ ).

On the basis of the findings, it is therefore recommended that Management of the university system has a task of playing the unique leadership role to identify early conflict signals, prevent emergence of conflict and control or resolve an existing ones with the effective uses of modern ICT gadgets to ensure effective and efficient attainment of the university objectives.

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**Keywords:** Technological education, benchmarking, economic liberalization, hardware, software, socio-technical system

## **Introduction**

Universities in Nigeria could be said to be moving towards realizing the set goals in the first two decades of political independence in 1960, as the few universities established in the country then could be said to possess world class stature and produced outstanding scholars in virtually all their programmes. The students had access to comfortable accommodation, while regular supply of electricity, pipe-borne water and proper feeding and clothing were as sure as the sunrise. The learning condition was congenial, and the University authorities were relating with the students as responsible individuals and indeed as the future leaders of the country. Job opportunities were automatic dividends of university education.

Thus, on admission into the university, the successful candidates saw themselves as the privileged few, admitted to develop their potentialities and translate them into concrete legacy for posterity. They saw the university as a better home that produce fulfillment and happiness in work (study) and play because they were relatively satisfied with the university's environmental returns.

During the last three and half decades, Nigerian universities have, regrettably metamorphosed from citadels of learning into "centers of violence" (Rotimi, 2005). This is so because students' crisis presumed to be mediated by inadequacies in their needs satisfaction has become the order of the day. The nasty experience being faced by the Nigerian university students is well captured by Osha (2000) who avers that the university system has not fared well in Nigeria since the 1967 civil war, the breakdown of infrastructure is almost total, the electricity supply has considerably worsened just as water shortages have become seriously acute. He adds that the much valued residential hostels as well as the overcrowding in the classrooms are not only an eyesore but have led to even more stressful conditions, while arbitrary and high handed administrative procedures have worsened as students are not considered as significant aspect of the management equation. Worse still, productive teaching and research have become a herculean task as many lecturers have resorted to the sale of substandard handouts at exorbitant rates in an attempt at breaking even.

The development and modernization of most economies took its root from technological education which is a catalyst to the development of Information Communication Technology (ICT). Education in itself is the transmission of information from one medium to another whereas communication according to Thompson and Cat-Basil (2003), is described as a message or signal that reduces the uncertainty in the mind of the receiver. However, technology is a key component in achieving effective transmission of information and communication. The knowledge and the processing of information are the key drives for wealth creation and social and economic development. Thus, crisis resolution with Information and Communication Technology entails the usage of hardware and software to retrieve process and transmit data in order to guide against crisis and to resolve crisis in the universities.

## **Communication and Information Technology and Crisis Resolution**

Communication is just not for conveying information, but to persuade and influence people. Although, communication skills have always been important to managers, the ability to persuade and influence others is even more critical today. To persuade and influence, managers have to communicate frequently and easily with others. Daft (2008) notes that people find interpersonal communication experiences unrewarding or difficult and thus tend to avoid situations where communication is required. Effective persuasion doesn't mean telling people what you want them to do; instead, it involves listening, learning about others' interest and needs, and learning people to a shared solution. Green (2001) stressed that new computer technology increases educators' capacity to use data systematically to manipulate the interactions inherent in teaching and learning situation.

Over the years, the behaviourists have shown interest in finding out the causes of certain human behaviour with the intention of finding a standard pattern of human action and inaction based on “cause” and “effect” phenomenon. Communication is not just sending information, honoring the distinction between sharing and proclaiming is crucial for successful management.

To corroborate this, Daft (2008) asserts that:

When people interact, they put themselves into each other’s shoes, try to perceive the world as the other person perceives it, try to predict how the other will respond. Interaction involves reciprocal role-taking, the mutual employment of empathetic skills. The goal of interaction is the merger of self and other, a complete ability to anticipate, predict, and behave in accordance with the joint needs of self and other. It is the desire to share understanding that motivates executives to visit employees on shop floor, hold small informal meetings, or eat with employees in the cafeteria. The things managers learn from direct communication with employees shape their understanding of the organization. (p. 659).

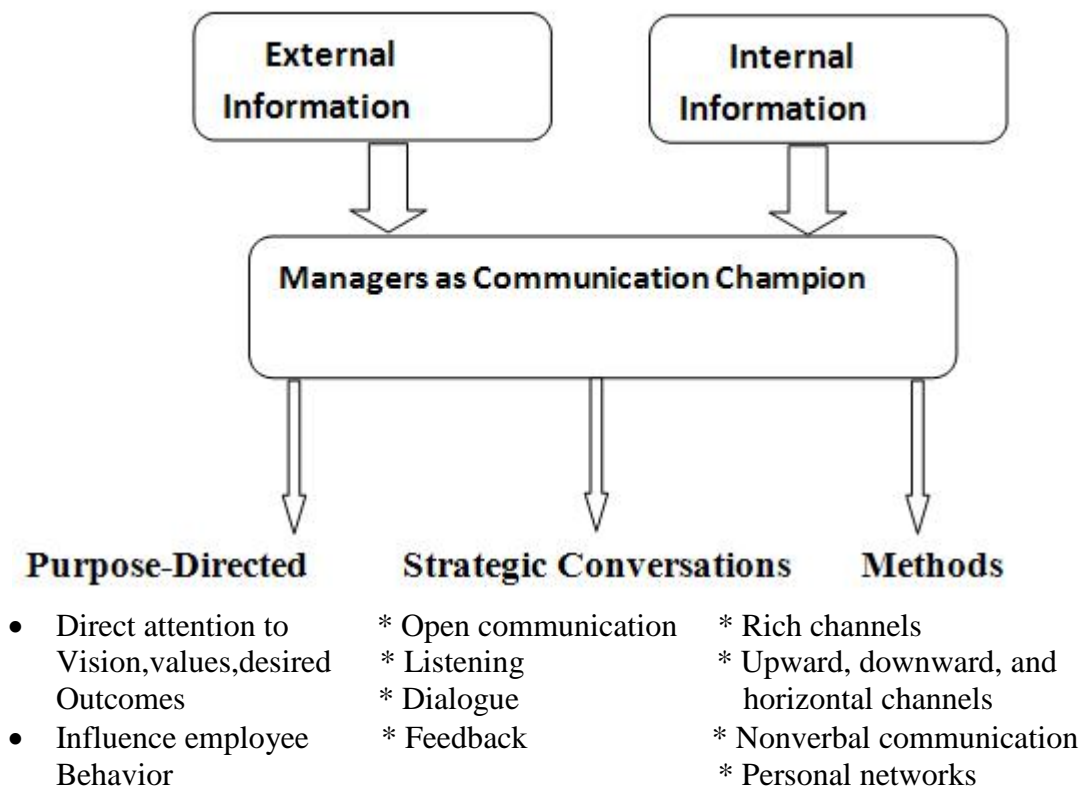


Figure 1: The Manager as Communication Champion Model  
Source: Adapted from Mintzberg (1973)

The roles of management in championing communication entails gathering important information from both inside and outside the organization and then contribute appropriate information to others who need it.

According to Agu and Anyikwa (2002), information communication refers to all technical gadgets that are used for the generation, retention, and transmission of information like the computer, the e-mail, the fax, telephones, the internet etc. All these gadgets provide fast and easy way of collecting and disseminating data in instructional communication. The channel richness of communication is the amount of information that can be transmitted during a communication episode. In crisis management, the capacity of



an information channel is influenced by three characteristics: (1) the ability to handle multiple cues simultaneously; (2) the ability to facilitate rapid, two-way feedback; and (3) the ability to establish a personal focus for the communication.

The use of information communication to resolve university crisis entails that all technical gadgets that are used for the generation, retention, and transmission of information like the computer, the e-mail, the fax, telephones, the internet etc. are efficiently and effectively put into regular usage in the dissemination of information before and during crisis. All these gadgets provide fast and easy way of collecting and disseminating data in instructional communication. It is also important to note that the channel richness of communication should be a major focus in resolving students' crisis in the universities.

The channel richness of communication is the amount of information that can be transmitted during a communication episode. In crisis management, the capacity of an information channel is influenced by three characteristics: (1) the ability to handle multiple cues simultaneously; (2) the ability to facilitate rapid, two-way feedback; and (3) the ability to establish a personal focus for the communication.

Highchannel

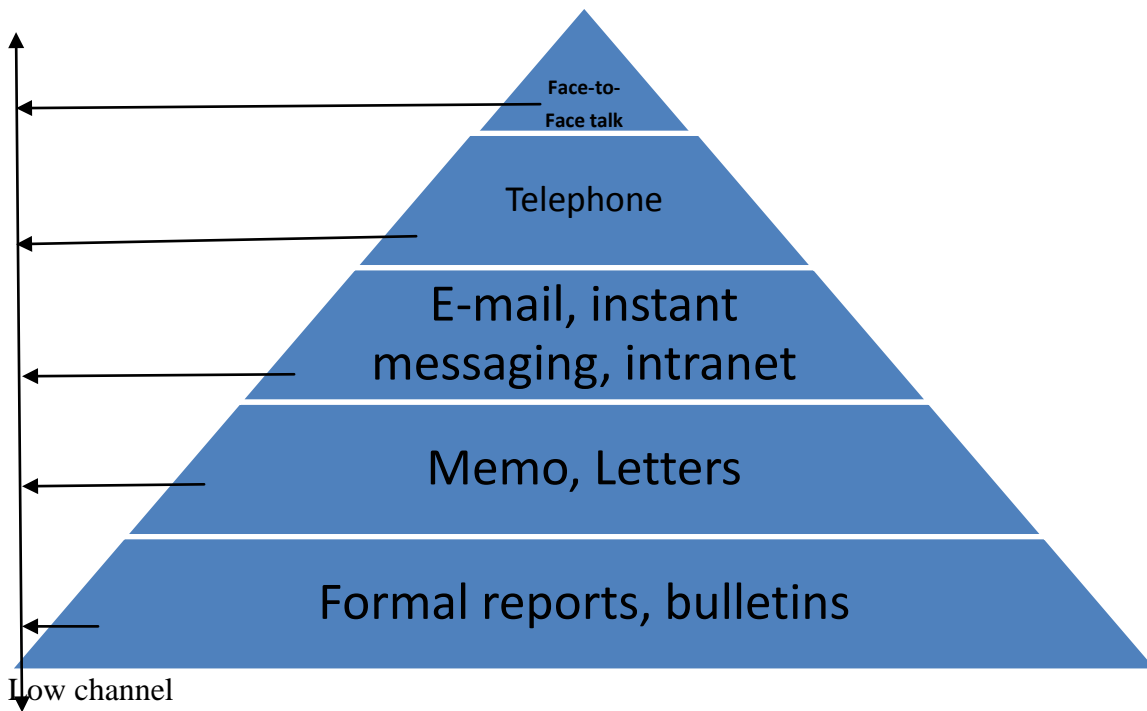


Figure 2: The Pyramid of Channel Richness  
Source: Daft (2008: 662)

High channel richness has the advantages of being personal, two-way, and fast feedback, while the disadvantages are no record, spontaneous, and dissemination hard. On the other hand, Low channel richness advantages are provision of records, premeditated, and easily disseminated, but with a disadvantage of been impersonal, one-way and slow feedback.

A clear point of the discussions was the need for improved measurement of key constructs. To assess the impact of ICT on crisis, a robust set of measures is required that can be applied over time and space, and with respect to many event types. There are examples from other areas where reliable and valid measures of key constructs have helped sustain inquiry in the area (e.g., assessments of economic vulnerability). The development of such measures in the area of crisis resolution would enable benchmarking (e.g., of efficacy of planning, response and recovery efforts), and enhance credibility of work in the domain for

policy makers, researchers and the general public. Three different constructs received considerable attention during crisis resolution: control, trust and system state.

Control as a central problem in crisis resolution is a common term used in manufacturing. A number of challenges were raised to its use in crisis management, where systems tend to be much more open-and therefore less subject to influence-than typical manufacturing systems. Nonetheless, the question remains: what are appropriate measures for determining whether planning, response and recovery processes are (i) operating within tolerance limits and (ii) not subject to nonrandom sources of error?

A second recurring construct in need of operationalization was trust. The question of how to measure trust arose in discussions of single operators using technologies, through policy makers attempting to assess the information provided to them from the field. In the first case, given the complexity of much ICT, at which points of contact between human and technology do (and should) trust occurs? Options discussed included “at the point of interaction” (e.g., the input or output device) and “at the point of processing” (e.g., the CPU or the instruction set provided to the CPU). A driving question was, what do users need to be able to see or explore in order to trust the technology?

The third important construct in need of measurement was system state. Participants recognized the need for viewing crisis resolution as a multi-disciplinary endeavor, and the task of doing research on ICT in crisis resolution as therefore requiring a similarly multidisciplinary approach. A number of opportunities for future research were identified in measuring the state of socio-technical systems (e.g., critical infrastructures). Specific examples included benchmarking of performance (e.g., reliability) of critical infrastructure systems, though other less obvious examples (such as management trust in such systems) were also discussed.

Information and communication (IC) for emergency management functions is best when its design follows from a solid understanding of the socio-technical systems that it is meant to support. Yet as is evident from past and more there are significant gaps in scientific understanding concerning how IC should be designed used and evaluated. An agenda for IC-centered basic research in the domain of crisis resolution is needed to identify questions which will enable researchers to begin to close these gaps that arouse from university students’ crises caused by ineffective communication. (Quarantelli, 1997; Stewart and Bostrom, 2002; Orlikowski and Iacono, 2001).

Reviewed literature shows that universities in Nigeria, especially since the post civil war have witnessed series of conflicts, violence and destruction of lives and properties and other unimaginable practices which are quite injurious to academic excellence (Smah 2007, Osha 2000 and Rotimi 2005). The challenge of meeting the demand for academic freedom; The challenge of responding to the demands of powerful unions such as the Nigeria Labour Congress(NLC), Academic Staff Union of University (ASUU), Non-Academic Staff Union of University (NASU) and so on; The challenge of running a cult-free association amongst students; The challenge of generating sufficient funds to meet rising expectation; The challenge for institutional autonomy in an era of economic liberalization / meltdown; The demand for transparency and accountability; The challenge of responding to university admission in the midst of tight competition; and The challenge of quality effective information communication to control and resolve crises remains an object of research.

### **Statement of the Problem**

Student crisis in Nigerian universities has assumed an unmitigated dangerous dimension that every stakeholder of the university system is at a crux. Almost on daily basis are new reports on our universities’ bulletins, on the national newspapers and academic journals of the confrontation by university students on campuses. Many students and lecturers

have been kidnapped, maimed, raped or even lost their lives while valuable properties have been looted, destroyed or burnt due to students' crisis. There is hardly a full academic session that student and staff crises will not result in loss of studies, delayed graduation for students and economic waste for students, parents and the country as a whole. The issue of globalization as a way out of mis-information or deficiency recorded when ICT gadgets are not available or sufficient to control/or resolve crises remain an object of research.

### **Research Questions**

1. Is there any difference between the level of information communication management and crisis between the Federal and State Universities in South West Nigeria?
2. Is there any relationship between information communication management and student crisis resolution in Universities in South West Nigeria?

### **Research Hypotheses**

H.o1: There is no significance difference between the level of information communication management and crisis between the Federal and State Universities in South West Nigeria.

H.o2: There is no significant relationship between information communication management and student crisis resolution in Universities in South West Nigeria.

### **Methodology**

#### **Design**

Descriptive research design was used with survey methods to ascertain the role of ICT in the management of crises in Nigeria public universities.

The population of this study comprised of all the 6 Federal Universities and 6 States in South West Nigeria as at 2012.

#### **Sample and Sampling Techniques**

Nigeria is made up of six geo-political zones namely: North-West, North-East, North-Central, South-South, South-East, and South-West. Thus, a purposive simple random sampling method was adopted. South-West geo-political zone was selected out of which three Federal universities (University of Ibadan, University of Lagos, Federal University of Technology, Akure) and three State universities (Lagos State University, Adekunle Ajasin University, and Osun State University). Also, a stratified sampling technique was used to select 2,400 consisting of 300 students and 100 academic and non-academic staff from each university.

#### **Instrumentation**

The instrument for data collection was a self developed questionnaire titled: The instrument used was a self constructed questionnaire titled, Information Communication Technology and Crises Resolution Questionnaire (ICTCRQ) which has a 25-items based on Likert scale format of Strongly Agree (SA) =4 points, Agree (A)=3 points, Disagree (D)= 2 points, and Strongly Disagree (SD)= 1 point. The questionnaire was subjected to face and content validity by colleagues, and test-retest reliability method. The reliability value was  $r = 0.87$  which indicated that the instrument was reliable before administration.

The researcher with the assistance of two graduate students administered the questionnaire to the respondents. Completed copies of the questionnaire were retrieved immediately.

The statistical tool used to analyze the data comprised of simple descriptive statistics such as mean and standard deviation, correlation and one way ANOVA at a level of 0.05.

## Results

### Hypothesis one

There is no significance difference between the level of information communication management and crisis between the Federal and State Universities in South West Nigeria. In analyzing this hypothesis, a one way ANOVA was used to ascertain the level of differences between the Federal and State Universities.

Table 1 Summary of Difference in the Level of Information Communication Management and Crisis between the Federal and State Universities in South West Nigeria.

Source of Variation	Sum of Squares	df	Mean Square	F-cal.	F-val.	Sig.
Between Groups	3453.31	5	1426.78	.297	.157	P<.05
Within Groups	246882.52	394	41147.09			
<b>Total</b>	<b>250335.83</b>	<b>399</b>				

\* Significant

Table 1 show that there is a significant difference between the level of information communication

management and crisis between the Federal and State Universities. (df =(5, 399), F-cal = .297 > F-tab= .157 ; P < .05). Thus, the null hypothesis is rejected.

### Hypothesis Two

There is no significant relationship between information communication management and student crisis resolution in Universities in South West Nigeria.

Table 2 Summary of Relationship Between Information Communication Management and Student Crisis Resolution in Universities in South West Nigeria

Variables	N	Mean	SD	r- cal	r-tab	Decision
Information Communication Management	150	40.70	13.64	.066	.40	*
Students' crisis resolution	150	16.50	17.68			

\* Correlation is positively significant at 0.05 level (2-tailed)

The result of the test performed indicates that there is a positive and significant relationship between information communication management and student crisis resolution in Universities (r=0.66, P<0.05). This implies that the hypothesis which states that there is no significant relationship between information communication management and student crisis resolution in Universities in South West Nigeria.

## Discussion of Results

The analysis of results revealed that information is essential to the survival of an organization. The significant relationship between information communication management and students crisis resolution is buttressed by Popoola (2002 & 2004) that in an information rich society or organization, information management is capable of solving any problem be it administrative, crisis or otherwise. On the issues affecting the university system both at Federal and State universities, managing information is necessary for better decision making regarding human and material resources which are always the focus of crisis as corroborated by Adebayo ,2007; Erwat & Fabunmi,2006; and Oyewusi, 2008).

In the process of solving universities crisis, the study revealed that information communication management has impact on the university management in making and communicating decision effectively but not on long term basis and this is supported by the finding of Ajayi, Omirin and Fadekemi (2007). The study align with the finding of Martensson (2000) that most school managers make use of formal group meeting, the

telephone, informal individual meeting, internet facility as their information materials to avert crisis.

### **Conclusion**

The study found out that there is a high level of information communication management and students' crisis in Nigerian universities but it is more pronounced at the Federal universities than the State universities. Also, availability, retrieval, processing, and analysis of information through technological gadgets in the universities as a relationship with crisis management.

### **Contribution to the Study of Knowledge**

The study has contributed significantly to knowledge in the sense that, it has enabled the university management to be aware of the vital role information communication management plays in crisis resolution and the need to have modern ICT gadgets to manage crisis in short and long term situations at the universities in Nigeria.

### **Recommendations**

The outcome of the study provides a reasonable evidence for the following recommendations:

1. Management of the university system has a task of playing the unique leadership role to identify early conflict signals, prevent emergence of conflict and control or resolve an existing ones with the effective uses of modern ICT gadgets to ensure effective and efficient attainment of the university objectives.
2. The university staff and management should be train and re-train on how to acquire, process, store, retrieve, and analyze information communication for making decision during crisis.
3. Adequate and modern information communication gadgets should be purchased for the universities in Nigeria.
4. University managers should have access to where information is stored so as to encourage them obtain necessary information useful during crisis resolution.

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## **DEVELOPING LEADERS IN HIGHER EDUCATION: UNIVERSITY FACULTY EXPLORE SELF-MENTORING™**

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### **Abstract**

In higher education, where new faculty may lack assurance to lead in the university setting and where it is critical for faculty to learn how to lead successfully in this environment, self-mentoring can provide a means for faculty to build confidence through self-development to which all faculty, new and existing, can become leaders in any setting.

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**Keywords:** Self-mentoring, coaching, mentoring, higher education faculty, leadership

### **Introduction**

Faculty in higher education is akin to other systems when it comes to providing a strong program of support for newly hired instructors. Brightman (2005) suggests there are three components for teaching to improve at the college level. The first two factors are a valid and reliable student evaluation instrument accompanied by a norming report for comparative and diagnostic information. The third, and what is believed to be the most significant, is a mentoring process. The purpose of this paper is to review practices of support that are available to new faculty with focus on a study applying self-mentoring, a new program that has recently gained international attention.

### **I.**

Mentoring and coaching are often used in the same breath (Garvey, Stokes, Megginson, 2014); as well as interchangeably in conversations. Even more multifarious are the numerous meanings assigned to each practice in any given situation and by any profession. Mentoring and coaching have become nationwide emphases in both education and business in the US as research increasingly suggests that professionals benefit from the guidance and service of a mentor (Allen, Eby, O'Brien, & Lentz, 2008).

Across the Atlantic Ocean in the United Kingdom, Robert Garvey, a business professor at York St. John School of Business has examined historical references to search for the origin of the two practices – coaching and mentoring. In terms of mentoring there are multiple different beginnings of mentoring that originated in ancient Greece. Coaching is not referenced until decades later but also has a presence in early history. Garvey is author of a six volume series entitled the Fundamentals of Coaching and Mentoring (2014). Regardless of the ancestral roots of these two practices, they certainly have a strong presence today in both business and education. And yet another practice has recently yielded positive results from preliminary studies in leadership development. Self-mentoring is currently moving to the forefront and gaining national attention as a complementary practice or viable alternative for individual or group mentoring and coaching programs (Bond & Hargreaves, 2014). Self-mentoring evolved from a dire need. A retired superintendent transitioning into higher education as a new faculty member found the task overwhelmingly daunting due to a disconnect with an assigned mentor. This is not to suggest that the mentor was lacking in expertise or ability, but a chasm was felt that could not be overcome. The fledgling faculty

member began to draw upon her innate and learned leadership skills from decades of practice in the field. She developed a plan for surviving her first year that involved setting expectations, developing strategies, gathering and analyzing data, networking, and monitoring her progress. At the end of the year, pleased with her success, the former superintendent began to share the process that she so aptly named 'self-mentoring' with others (VaASCD, 2014).

### **The Art of Self-Mentoring**

Self-mentoring is the act of leading oneself in an unknown environment or even hostile settings if necessary. Self-mentoring is the process of an individual of any age, profession, gender, race, or ability—YOU—taking the initiative and accepting responsibility for self-development by devoting time to navigate within the culture of the environment in order to make the most of the opportunity to strengthen competencies needed to enhance job performance and career progression (Beckford 2013; Bond & Hargreaves, 2014). Self-mentors are given steps to lead while accepting responsibility for their personal and/or professional growth.

Integrating new hires into an organization is a critical aspect of leadership development and sustainability (Lambert, 2003). She believes leadership is a process, not an innate or taught set of individual skills. Lambert, a scholar in the field of leadership development, states that leadership includes problem solving, broad-based skillful participation, conversations and stories among colleagues, and task enactment in the environment. While leadership is also viewed as a key to sustainability (Fullan, 2000), commitment is viewed as equally important. Oakes, Quartz, Ryan, and Lipton believed in 1999, and it still holds true today, that unless those involved are committed to change, prevailing behaviors will return. Self-mentors, in comparison to using other practices, are more committed and passionate about sustaining their success (Carr, 2014). A sense of accomplishment is so motivational that they endeavor to sustain the personal empowerment and self-efficacy (Bond & Hargreaves, 2014). Avil Beckford, (2012) agrees that self-mentoring puts you in the position of power. You take control of your life and journey on the path that is right for you.

Barth (1999) views leadership as everyone's work and explains that leaders grow when they engage with others to make sense of the world, reach out to the newly hired, commit to shared outcomes and develop their identities as owners of their system - the organization. Self-mentoring strengthens the existing culture in a system. It is a structured process for employee induction in the organization but it also provides leadership opportunities among seasoned members ready to move into leadership roles, those identified for future administrative roles, those serving as support to new hired, and those who are struggling but willing to take an initiative to alter their course. Research suggests that there is increased self-confidence and self-efficacy by self-mentors (Bond & Hargreaves, 2014; Carr, 2014), which strengthens the connection and commitment to the institution.

### **Leadership Support: Coaching, Mentoring & Self-Mentoring**

Coaching, mentoring, and self-mentoring each have parallel yet exclusive characteristics, which inherently brands each practice, or combination of practices, valued for organizations. Individuals immersed in a new environment require skills to navigate through what can be treacherous waters. An organization is a living, breathing, and ever-changing complex system of interlocked subcultures (Schein, 1992). This system of interlocked subcultures is networked to accomplish the goals of an organization (Lezotte & McKee, 2002). Individuals must first have an understanding of the system in which they are embedded, in order to perform and identify implied or often un-implied expectations from the



environment. An individual can rely on a mentor to provide guidance. An individual can use a coach to guide them through challenging areas. An individual can accept responsibility and learn to self-mentor or apply a combination of the practices. It does not matter how the individual weaves his way through a maze of complicated layers of the system, only that he does it to his ability and preference. An individual must use whatever resources are available to her in concert to have a successful experience. This can be challenging for even the most experienced.

Coaching, mentoring, and self-mentoring, each provide support for individuals navigating within an environment, but each have a unique approach that should be aligned with the needs of the individual and the organization. There is a stronger relationship between coaching and self-mentoring in comparison to mentoring as shown in Figure 1.1.

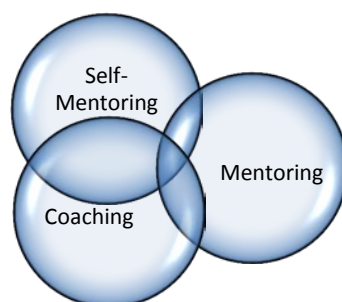


Figure 1.1 Coaching, Mentoring, and Self-Mentoring

This exists primarily in the shift of power to the individual in both self-mentoring and coaching practice, which is not as prevalent in mentoring practices whereas the mentor guides the process. Central to all three practices is the idea of self-development (Huang & Lynch, 1995). Each practice advocates for the personal and/or professional development of an individual.

Coaching is a process that guides an individual or group of individuals for the purposes of improving personal or job related performance. The basic tenant, that individuals have the answers or they can find the answers (Whitworth, Kimsey-House, & Sandahl, 1998) has not changed over the years. Coaching continues to focus on what the individual, referred to as the coachee, wants whether it is personal transformation or a performance goal to be achieved (Garvey, Stokes, & Megginson, 2014). In most coaching situations, the coachee controls the meetings and dictates the pace as well as the agenda (Whitworth, et. al).

Mentoring also uses someone with experience and often older, a mentor, to provide formal or informal guidance to a mentee, a lower ranking individual with less experience or new in the profession or position (Schoenfeld & Magnan, 2004; Nakamura & Shernoff, 2009; Alred & Garvey 2010). This guidance is built on a relationship of trust. The power of mentoring is in the opportunity for collaboration, goal achievement and problem solving (Ragins & Scandura, 1997; Nakamura & Shernoff, 2009; Thomas & Saslow, 2011). When the pairing of a mentor and a mentee is compatible, a relationship of trust can build; however, when the mentor and mentee are mismatched, the results are often disastrous and referred to as 'negative mentoring' (Scandura, 1998; Allen, Eby, O'Brien, & Lentz, 2008; Eby, Durley, Evans, & Ragins, 2008; Burk & Eby, 2010). There are five types of negative mentoring practice experiences: general dysfunctionality, mismatch within the dyad, lack of mentor experience, manipulative behavior, and distancing behavior (Allen, et al; Burk & Eby). General dysfunctionality can be the mentee's personal problem interference or a negative attitude by the mentee to the work environment, individuals in the setting, or a general lack of responsibility. Dyad mismatch is when both the mentor and mentee report a mismatch in personality or work ethic. Lack of mentor expertise occurs when the mentee believes the mentor lacks the necessary skills—interpersonal or knowledge driven—to serve as mentor.

Manipulative behavior exists when the mentoring position is used for power, influence, or political manipulation. The final type of negative mentoring is distancing behavior, which results when the mentor intentionally neglects to provide proper guidance or sufficient time to the mentee. In spite of these negative scenarios, mentoring practices and programs remain indispensable in providing new hires with essential support.

Given the background of coaching and mentoring, self-mentoring is a practice that requires additional study. Hence, a study to gain insight was formulated.

### **The Case Study**

Two new faculty members from a university in North Carolina would be trained in self-mentoring and work independently in different settings applying the principals of this practice. A collective (multiple) case study approach was chosen since this study involved exploring multiple bounded systems over time and through detailed, in-depth data collection involving multiple sources of information such as observations, online interactive video recordings, emails, interviews, video, documents.

While the two faculty members were new to this university, each had experiences in higher education prior to taking this new position. The two faculty members were also experienced in mentoring practices but new to self-mentoring. They worked in different colleges at the university and did not know each other prior to this study. Contact with each other would be limited to the formal training sessions. A more detailed overview of each participating faculty member is provided.

#### **Faculty member A**

As a new faculty member at a large southeastern school of nursing, faculty member A knew that an important first-year goal was to establish an understanding of the existing and potential networks which would help her to achieve her scholarly role definition there. Coming into this university as an associate professor with over 10 years' experience teaching at a variety of other academic institutions, she decided that she would benefit from a program which enabled her to set goals and objectives while reflecting on her progress to clarify her new role at her new educational institution.

#### **Faculty member B**

While moving to a new area and university opened up paths for growth in a multitude of areas, for another higher education faculty member, it also created chaos. Opportunities come in many forms and can often be unsettling. Seeking to make meaning of the internal conflicts associated with her new position, to be successful and define what that meant to her, Faculty member B chose to take the invitation to join a self-mentoring project at the university. Mentoring was of particular interest to her. She had been a mentor to faculty and to students and believed mentoring to be both a moral choice and a spiritual fulfillment. At a previous university, she had taken doctoral courses in education and in one course, The Professorial Role, she had written a paper exploring the concept of mentorship.

#### **Methodology**

For this collective (multiple) case study, the primary question driving the study was: In what ways does self-mentoring support new faculty in a higher education setting? A grounded theory was considered as this theory supports rich descriptive data that can be captured during participant interviews and interactions. The benefit is related to the participants' perceived reality rather than what the researcher, prior to conducting the research, assumed to be true. Grounded theory allows data to be collected in a variety of methods using editing strategies, which is less prefigured and permits searching for segments of text from interviews to generate and illustrate categories of meaning (Marshall and Rossman, 2010).

The faculty members met several times over a period of one year. Some meetings were in a face-to-face format and others were online using interactive video-conferencing. The sessions focused on the four levels of self-mentoring. Data was collected before, during, and after the meetings. While the two faculty members attended the meeting together, the primary resource was the facilitator. Self-mentoring advocates for internal and external resources; it does not limit the interactions to a single contact but may require group contact. In most cases; however, a self-mentor will be self-mentoring outside of a study group format. Each participant signed a contract to self-mentor as a testament of personal commitment.

#### Level 1: Self-Awareness

During the first formal session, the participating faculty members discussed the leadership they had experienced in a variety of settings as well as leadership processes and traits. Before the close of the session, each faculty member was asked to compile a list of personal or professional expectations for their setting. Then they were asked to narrow the list to one expectation, which would become their primary focus for the next level.

For faculty member A, she planned to pursue a tenure and promotion application within her first few years here, so she realized that focusing her efforts on teaching quality, creativity, scholarly research projects, and success with publishing manuscripts were paramount. Previously, she would consistently volunteer for many service and community activities without viewing her contributions in a strategic way. What she realized now was that she needed to first set clear scholarship goals, and then view every opportunity offered to her as either a way to move forward with those goals, or as a distraction which would take her time away from her goals. Joining a self-mentoring study on campus led by a university faculty member facilitator provided her time for reflection about goal setting, timetables and networking with other academics at her new university.

For faculty member B, mentoring was of particular interest to her. She had been a mentor to faculty and to students and believed it to be both a moral choice and spiritually fulfilling. At a previous university she had taken doctoral courses in education and in one course, *The Professorial Role*, she had written a paper exploring the concept of mentorship. She writes that she began to wonder, what is this education before me and how will self-mentoring help me answer and find the right questions? She believed that balance was essential as well as not losing the 'self' in all the demands placed on university faculty that ranges from high volumes of service, full course loads of teaching, to ongoing research projects and publications.

This is where the process began - a meeting with the university faculty facilitator for an overview of the practice and what would be expected as a commitment from each individual. Faculty member B described her first encounter with the university faculty facilitator as a person that was warm and inviting, which heightened her comfort in participating immediately. Each faculty member was given a self-mentoring manual (Carr, 2012) that contained an overview as well as multiple forms that could be used during the process to guide their efforts.

#### Level 2: Self-Development

During the second session, each faculty member articulated the chosen expectation, developed measurable strategies, established an implementation timeline, selected appropriate measurement methods to assess and evaluate the progress, and incorporated peer and self-reflection time into a timeline. Both faculty members committed to a set amount of time each week to concentrate on meeting the expectation. This level of self-mentoring required organization, commitment, and dedication from each self-mentor. Using journals to document struggles, breakthroughs, and processes is a time-proven age-old strategy (Bromley, 1989; Adams, 1990), both faculty members agreed to document their experiences. Self-

mentoring also suggests using self-observation and peer feedback (Bond & Hargreaves, 2014; Carr, 2014).

#### Faculty member A

Faculty member A's data was quantitative. She used a spreadsheet to log observable change over time. She began by establishing a simple Excel worksheet where she listed her professional goals for the next two years. She matched those goals to the appointment, reappointment and tenure document presently in use at both her school of nursing and her larger university. This enabled her to visualize both her accomplishments and those areas where gaps could be identified. She tracked her progress over the semesters – approximately 7 months - in meeting identified goals and to regularly question if a particular scholarly opportunity (requests for proposal, requests for abstracts, seminars and conferences, etc.) closely matched her strategic goals in her self-mentoring plan.

#### Faculty member B

After the first session, Faculty member B read the self-mentoring handbook that had been provided to both faculty members and began to complete templates in the manual. In the process of completing some of the pages in the manual, something felt unsettling and she struggled with the tasks. She explains that it just felt too sterile, too academic and she thought, How can I tailor it to my quest, me, at this point in time? The planning template was divided into sections, such as a contract with a goal and role to self during the process as well as time commitment. In addition there was a chart where goal, activity and time spent could be tracked. The work felt overwhelming and she sensed she was destined to failure in something that was intended to support the turbulence she felt in her job. She contacted the university faculty facilitator and explained what she was feeling. She was told to use the tools only as guides when needed as the forms were variations of the same task but designed to offer personal preferences.

She abandoned the forms in lieu of a journal and began the first page with an entry from *The Wise Heart* by Jack Kornfield (2008), a book she acknowledges as a favorite. She explained that the shift from completing forms to the journal was what she was been searching – balance and freedom to create herself in a new job.

Her plan, which the handbook helped by providing structure and prompts, was to embrace the process for emancipatory knowing using questions such as, what are the barriers to freedom, what is wrong with this picture, what is invisible and who benefits (Chinn & Kramer, 2008). She wanted to integrate once again the practice of mindfulness meditation, yoga, journaling and Buddhist psychology teachings, all pieces of her life that she abandoned upon moving. She began to realize she had been unable to prioritize her personal needs above the demands of the new organization.

#### Level 3: Self-Reflection

The third level complimented the previous session as each faculty member shares data they collected and how they incorporated peer or self-reflection into their timelines. The faculty members explained how they allotted time for self- and peer-reflection with personally chosen internal and sometimes external peers. Other faculty members, inside and outside of the respective departments, were identified as resources. Powerful conversations occur through peer-reflections (Harkins, 1999). Conversations provided opportunity to meet peers in other departments and colleges, to build support and often lasting relationships (Patterson, Grenny, McMillan, & Switzler, 2012).

#### Level 4: Self-Monitoring

In the final level of self-mentoring, the emphasis is continued self-mentoring in the absence of any formalized structure or external support from the faculty facilitator. The faculty members were provided time to reflect and shared the results of both efforts at self-mentoring. From reviewing recommendations and data, both faculty members developed a

plan for continual monitoring. New expectations could be developed for each year or continual work in one designated area would be equally feasible as well as practical.

### **Data Collection**

Each faculty member collected data unique to their specific self-mentoring plan. Faculty member A maintained an Excel worksheet, journals, and notes from her experience. She tracked requests for proposal, requests for abstracts, seminars and conferences that were aligned with her strategic goals in her self-mentoring plan. Faculty member B used a planning template she divided into sections, such as a contract with a goal and role to self-mentor during the process as well as a time commitment. In addition she maintained a chart where goals, activities, and time spent was tracked. She maintained a journal as well.

For the purposes of this study, a review of the documentation that supported each faculty member's efforts was important but more to the self-mentors as the data drove their efforts. Two exceptions were first, if either faculty member had been unsuccessful in their self-mentoring attempts and second, to align data from the interviews, documents, emails, and journaling with the process for any cross-referencing in establishing timelines or sessions.

### **Data Analysis**

Manual data coding was used to check for patterns. The first cycle coding was in Vivo and a second cycle of coding utilized pattern coding (Saldana, 2009). Analytical data were collected from memos, observations, journal entries, open-ended questioning during seminars, individual and group interviews, and available documents.

During the first cycle coding, the faculty members' responses suggested they both were experiencing high levels of frustration with their performance in the new setting and lower levels of confidence in their ability than prior to their arrival. While each expressed a different source to the frustration, their frustration levels were similar when queried. They both were intelligent and accomplished faculty members with a previous track record of success. It was baffling to both as to why they were struggling in a new environment that was, by all accounts, akin to their prior positions. Regardless, each identified the expectations necessary for their success and mapped out a plan using self-mentoring to guide them through the process. While they both had similar expectations, the steps they took were different to accomplish the same goal. These two diverse methods formed the cornerstone of what self-mentoring is- a process that is unique to each individual.

Emerging from the collections of data were several reoccurring themes. First, the words, 'work' and 'overwhelm' were key words that emerged as both words related to the organizational management of task and work responsibilities or duties. Neither faculty member was able to assess the workload aligned with performance goals in the new environment even though both had successful track records in previously positions. Both faculty members had been comfortable in the previous setting as well as accustomed to what was expected. For Faculty member A, the new environment was overwhelming with demands and she was lacking a process for prioritizing projects that directly impacted her performance. Faculty member B, the new environment hindered performance due to an imbalance with workload pressures and time for personal activities unrelated to the position. It became important for this faculty member to recognize the need for this balance.

The second theme also related to management with the key word priority emerging as a pattern. A review of data suggested that both faculty members were unable to assess or separate what was a priority in the new environment. Even if they were able to identify the tasks or work, they were still unable to develop a plan. Both allowed distractors to block their leadership vision that had always worked efficiently in the past. The distractors varied for

both faculty members but had the same effect – the inability to organize as well as prioritize a plan of action. The more they became frustrated, the more they were unable to navigate in the new environment. More interesting is that both faculty members were assigned university mentors whom were unsuccessful, which resulted in both faculty members taking the initiative to self-mentor. Since the purpose of the study was not to determine why mentoring attempts were unsuccessful prior to self-mentoring, information was not captured regarding the mentoring practices.

Faculty member A credits self-mentoring as enabling her to identify this need and make this shift through the data collection. This obviously had not been a problem for this faculty member at the previous setting but was a challenge in the new position. Faculty member B explained that the unsettled feelings she had from the new job with its expectations and stressors were an education for her. Self-mentoring provided the “space and means for diving into the feelings and ways-of-being that brought her back to herself and allowed for the creation of space in her job and the nourishment her core self”. Second cycle coding yielded similar patterns during data review.

An additional theme that emerged from observational data was that both faculty members had a lower rate of confidence than expected for the years of experience and familiarity with their environment when they began self-mentoring. They lacked confidence in their ability to meet the challenges in the new position while they both acknowledged they possessed the skillset yet were unable to explain why they were incapable of applying these skills in the new setting without the use of self-mentoring. While it was a new setting, it should have been similar in performance objectives and goals. Both were perplexed as to why they were facing a challenge that was unexpected and neither could really explain it as the study began. Their confidence increased after self-mentoring. Both faculty members were, as they reported, operating with a level of confidence held previously or above. They both believed that self-mentoring greatly increased their confidence as being able to lead in their environment as well as prepared them with skills to navigate in a new setting.

From participation in self-mentoring, the faculty members both firmly believed and credited their success – increased performance and confidence – to self-mentoring. In other words, they were able to gain the self-confidence they possessed earlier in their careers simply by taking steps to analyze their new environment and identify the obstacles that created a challenge that prevented them from feeling secure in their roles. After the academic year of participation in this project, faculty member A shared that she learned more about goal setting and refining her potential contributions to this academic community. Faculty member B shared, “It’s become a difference in the way I view myself at work. It’s really taking that strategic perspective that I never had really had.” Now, a year later, both admit they continue the process of self-mentorship to find balance in a busy and demanding academic world.

## **Conclusion**

Self-mentoring can be a valuable practice for higher education faculty, new to the profession or new to the position. The study suggests faculty involved in self-mentoring gain confidence as leaders through self-selected activities. Both faculty members began self-mentoring to create meaning in their new faculty roles at their university. Self-mentoring was a tool to assist them in focusing on their development. The faculty members were empowered to make decisions and determine the method to meet expectations. Leaders emerge when they have the confidence to make decisions and plan for their success.

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# **IMPACT OF EDUCATIONAL ASPIRATIONS ON VOCATIONAL CHOICES OF THE FEMALE SECONDARY SCHOOL STUDENTS IN ONDO WEST LOCAL GOVERNMENT AREA OF ONDO STATE, NIGERIA**

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## **Abstract**

The study investigates the impact of educational aspiration on vocational choices of the female secondary school students in Ondo West Local Government of Ondo State, Nigeria. The study used descriptive survey design targeting some of the female students from the 3 Female Secondary School in Ondo West Local Government. Purposive sampling technique was used to select 3(three) schools, from which 200 students were selected from each schools using simple random sampling. Data was used using questionnaire. Simple percentage and frequency count were used to analyze data obtained. From the analysis of the data collected, it was established that environment has a great effect on the educational aspiration on vocational choices of the female secondary school students. However, the socio-economic status of parent also has an impact on the educational aspiration of vocational choices of the female secondary school students. Based on the findings, the following recommendation were made: since the environment affects the educational aspiration of vocational choices of the female secondary school students, Ondo State should provide some schools that are adequately staffed and equipped with all the facilities that are necessary for upward performance in education. It is hoped that the findings of the study will equip the administrators to know the impact of educational aspiration on vocational choices of female students, in order to benefits the students, parents and the school system.

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**Keywords:** Aspiration, vocational choices, social status, self efficacy

## **Introduction**

A female has seen herself to possess great potentialities which can be trapped like the male through education. Hence, the female aspiration and keenness for educational pursuit.

Today, many offices are been headed by the women as they obtain the education as a ladder to success in life. The western education which gradually wipe away a tradition which compels and paved way for positive aspiration of female education.

According to Lent, Brown and Hackett's (2000), career development model was utilized to examine the interactive relationships among learning experiences, career self efficacy beliefs about our abilities to succeed, social persuasion, physiological and affective states.

Education can be viewed broadly from two main perspectives. Firstly, it can be seen as:

- i. The process of transmitting the cultural heritage of a society from generation to another.
- ii. The channel by which individual are equipped to participate in the social life of the community and to make their contributions as members of the society.

iii. Perceived as one of the main mechanisms of prompting social change and for adjusting the role of individual to meet the demands of social and economic changes. The cost of these functions of education is perhaps of great importance in a developing country, such as Nigeria where institutionalized ideas, beliefs and practices about women and their status to impede their education. These beliefs and practices inhabit their education because it is logical that the status of women in any society will determine to some degree the kind of opportunities including those relating to education, which will be provided to them. The types of careers women choose and factors influencing their choices are relevant issues to examine especially since most research reveals women continue to work in lower paying, traditionally female-oriented jobs (Watson, 2002).

Educational aspirations are important variable in predicting academic achievement and may be seen as an element in academic achievement motivation focusing as they do on the desire for success and the development of academic objectives to succeed in education, particularly educational feeds or to gain particular degree. of equal importance, the need to study female adolescents in the early stage of career development, as aspirations are often crystallized during time (Hellenga, Aber, & Rhodes, 2002).

### **Parent Socio-Economic Status and the Educational Aspiration on vocational Choices of the Female Secondary School Students**

Many renowned schools has advanced research on the impacts of educational aspiration on vocational choices which might be used as a yardstick to assess female secondary school student in Nigeria. Research findings has shows that people of high socio-economic status send their female children to school earlier than those of low socio-economic status. Mau & Bikos, (2000) believes that parent's educational level has been positively related to aspirations of youth.

According to Signer and Saldana (2001), the positive relationship between adolescent females career aspirations and their mothers educational achievement.

Mau & Bikos, (2000) cited previous findings showing a positive association between a family's Socio- economic status and aspirations. Youth from higher socio economic statuses were more likely to be knowledgeable of and choose professional occupations. In contrast, Brown & Barbosa (2001) found career aspirations of young females who came from low income families were confined to experiences of their relatives and friends. Influential Siblings are thought to play a key role in the career development of adolescents from lower socio-economic background Ali, Mcwhirter, & Chronister, (2005) studies show a positive association between high school students aspirations and their family's socio economic status, which is frequently related to parental education levels (Mau & Bikos, 2000; Signer & Saldana, 2001).

Trusty (2002) indicated that a low socio-economic status resulted in reduced and unrealized expectation. Additionally, Socio-economic status had a direct effect on unequal aspirations and expectation. Signer's and Saldana's (2001) in a study found the social status of mother's occupation as opposed to the social status of father's occupations had a stronger correlation with the social status of female student's career aspiration. The researcher attributed this finding to the fact that mother's exhibit a greater presences in many home.

Despite their increasing numbers, women have tended to enter the workforce in lower- status; lower paying jobs and remains clustered in a limited number of conventional career (Tinklin, Croxford, Ducklin & Frame, 2005). Low -paying traditionally female careers, including administrative support, sales, nursing, teaching, social work and clerical jobs, reflected society's persistent attitudes regarding stereotypical occupational roles for females (Watson, Quatman and Elder, 2002).

However, women earned roughly two-thirds the income of their male counterparts. This discrepancy in income was partially attributed to the disparity between traditionally male and traditionally female occupation. For example, women are less likely to be employed in science or engineering jobs as these are considered traditionally male occupations. However, females who are employed in these jobs earn roughly 20% less than their male counterparts (Graham & Smith (2005)). Factors narrowing women into traditional role occupations included social and family influences, a lack of awareness regarding non-traditional options, an unwelcoming environment in many male-dominated fields, discrimination within career fields, high turnover rates for women, and less seniority in given occupation.

### **Pupils Intelligence and its effect in Educational Aspiration on Vocational Choices of the Female Secondary School Students**

Female vocational choices and expectations have been viewed as significant determinants of both short-term educational and long-term career choices. (Mau & Bikos, 2000; Schoon & Parsons, 2002), and as a reflection of adolescents' future social mobility and career self concept. The critical role of vocational choices and expectations in career development of female is reflected in their integral position in most career theories and in the large body of research conducted over the last half century (Rojewski (2005)).

Gottfredson (2002) proposed a similar process occurring in the last developmental stage of orientation to inner self (age 14 onwards). She described two critical processes in the development of occupation aspirations, those of circumscription and compromise. Circumscription describes the process whereby adolescents limit their occupational aspirations to a range of acceptable alternatives. Within this range, female will also compromise their occupational aspirations, exchanging more ideal aspirations for more real expectations in terms of their eventual career choice. (Schoon & Parsons, 2002) argued that the traditional emphasis on individual factors in the development of occupation aspirations does not sufficiently recognize the constraints of the social circumstances within which adolescents aspire, emphasizing that for many adolescents.

Current research on female occupational aspirations (Schoon & Parson, 2002) has been conceptualized within the theories that more readily recognize the influence of contextual factors. According to Lent, Brown & Hackett, (2002), Social Cognitive Career Theory (SCCT) emphasizes the psychological and social significance of demographic influences on female occupational aspirations. SCCT holds that vocational choices are influenced by the different socialization practices that female students are exposed to, as well as the internalization of these different experiences. These influences include psychological, historical, cultural, economic and socio-political variables. SCCT focuses on the interaction between the female cognitive variables and the contexts that may limit or encourage personal agency in her career development. Specifically, SCCT views occupational aspirations and expectation as a reflection of the female career self efficacy. The core variables in SCCT include person (self efficacy, outcome expectation, interest, goals) and contextual (support, barrier) variables, which are posited to represent proximal influences on career outcomes, meaning that personal goals interrelate with person, contextual and learning factors to explain academic and career choice and attainment. While SCCT does not specifically name occupational aspirations, the construct is related closely to goals (Rojewski (2005)). SCCT is concerned with two types of goals, choice content goals, which refers to the type of activity domain, and performance goals, that is, the level or quality of performance in which one aspires in the given domain.

### **The Effects of Religious Beliefs on Educational Aspiration in the Vocational Choices of the Female Secondary School**

The beliefs of parents are reflected on the educational aspiration of their female children for it is what parents believe that they will pass to their children. The present exploratory research attempts to address some of the gaps in the border literature identified by Rojewski (2005) by testing the nature of the relationships between female occupational aspirations, expectations, and aspiration/expectation discrepancies and traditional research variables of gender and occupational status, and extending this examination to include career development constructs, namely career decision status, career decision-making self efficacy, the perception of barriers, and the development construct of career maturity and career indecision. The family is the first place where the child learns the appropriate behaviours patterns, attitudes, and activities of female secondary school and higher institutions are significantly influenced by distinctive youth culture found among them. Many of them left their homes as adolescent for secondary school where they lack parents' adequate cultural socialization to mix up with other youths, values, attitude and modes of behaviour. Significantly, most of these youth variables have considerable effects on their future vocational choices either positively or negatively.

Prideux (2007) argues that, it is therefore important that these career constructs be examined in addition to the demographic, cognitive- personal and contextual variables that have received so much attention in the study of vocational choices. However, Lapan, Adams, Turner & Hinkelman (2000) reported that female seventh graders expressed higher self efficacy when they believe that their vocational choices matched their gender.

### **The Effect of Academic Achievement of parents on the Educational Aspiration on Vocational Choices of Female Secondary School Students**

Occupational status and educational level of female's parents had a significant impact on their career choice. Replications in 1980's of earlier studies showed girls had broadened their career attainment remained low, especially for high status. (Wahl & Black burst, 2000). Recent studies refuted earlier findings and asserted that females demonstrated and interest in a greater number of careers and displayed more gender-role flexibility in their career aspirations than male. (Francis, 2002; Mendez & Crawford, 2002)

However, Watson, *et.al* (2002) noted adolescent females were more conflicted between their future careers and commitment to marriage and family. Studies on gender and career aspiration in the 1970's revealed girls had more restricted career aspirations than boys, and girls often opted for a narrow range of occupational categories. (Mendez & Crawford, 2002; Wahl & black burst, 2000). Adolescence would be an ideal time to study the career development of young women, as many changes occur during this time that strongly influence the formation of career aspirations and preferences.(Watson *et al*, 2002)

In contrast, Brown & Barbosa (2001) found vocational choices of young females who came from low income families were confined to experiences of their relatives and friends. Influential siblings are thought to play a key role in the career development of adolescents from lower socio- economic background (Ali, McWhirter & Chronister, 2005).

A women's educational level has also been a strong predicator of the number of years she will be employed. With more women choosing majors that require continuous employment, women are extending their participation in the work force. In addition, women themselves have tended to associate a post secondary degree with success and increased salary, thus, perceiving a greater payoff of pursuing post secondary education than men. (Troupoucis, 2004).

## **How to Encourage Female Educational Aspiration on Vocational Choices in Secondary School**

A research carried out by Aber & Rhodes (2002) revealed that career aspirations represent an individual's orientation toward a desired career goal under idea condition. Many rational government had resisted the establishing more primary, secondary and university education in the urban areas than the rural areas where most female populace dwell and lack accessibility to education in other to benefit both the male and female students. The federal government of Nigeria has come out with a laudable programme of Universal Basic Education (UBE) envisaged as war against illiteracy. The researcher also showed light that the various loan boards has been established where female students who are financially handicapped could have access to loans. Many states government award bursary to students of their origin, while the federal government introduced federal character in admission into the universities and other higher institutions as students are admitted on merit whether female or male. This stops discrimination against talented students.

### **Statement of the Problem**

The non-challant attitudes towards work of the female secondary school students as affected the educational aspiration on the vocational choices of the female secondary school students. Therefore, this study will investigate some of the impact of educational aspiration on vocational choices of the female secondary school students.

### **Research Questions**

The following questions were raised by the researcher for this study;

1. What is the effect of the environment on the educational aspiration of female secondary in vocational choices in Ondo State?
2. Does the level of education of the parents affect the educational aspiration of their female students on vocational choices in Ondo state?
3. How does the socio-economic status of parents affect the educational aspiration on vocational choices of female secondary students in Ondo State?

### **Methods**

The research design for this study is descriptive research of the survey type. It aimed at finding and to the impact of educational aspirations on vocational choices of female secondary school students in Ondo west local Government, Ondo State.

The population of this study comprises of all the female secondary schools students in all public Secondary Schools in Ondo West Local Government Area of Ondo State.

### **Sample and Sampling Techniques**

Out of the three (3) Female Secondary Schools in Ondo West Local Government area of Ondo State, all the (3)Female Schools were selected. Purposive and Random Sampling Technique was used in selecting students of the school as respondents.

### **Results**

#### **Research Questions One**

What is the effect of environment on the educational aspiration of female secondary schools student on vocational choices?

Table 1 The Effect of Environment on the Educational Aspiration of Female Secondary Schools Student on Vocational Choices

S/N	Items	% Agree	% Disagree	Total respondents	% Total
1	The environment has a strong influence on the academic performance on the female student	78.33	21.67	600	100
2	Peer group influences affect vocational choices in female secondary school	70	30	600	100
3	Conducive environment affect effective teaching and learning	71.67	28.33	600	100
4	Availability of good social amenities affect vocational choices in female secondary school	75	25	600	100
	<b>Average Total %</b>			600	100

Source: Fieldwork

From table 1, the effect of the environment on the educational aspiration of female secondary schools students in vocational choices was observed. 78.33% agreed that the environment has a strong influence on the academic performance on the student while 21.67% disagreed. Also, 70% agreed that peer group influences affect vocational choices in female secondary schools while 30% disagreed. Furthermore, 71.67% agreed that conducive environment affect effective teaching and learning. While, 28.33% disagreed. Finally, 75% agreed that availability of good social amenities affect vocational choices in female secondary school while, 25% disagreed.

However, responses were subjected to Pearson's product moment correlation coefficient to ascertain the relationship that exists between the variables identified by the research questions.

Table 2 Summary of Relationship between Environment and Educational Aspiration of Female Secondary School Students on Vocational Choices

Variables	N	Mean	SD	r- cal	r-tab	Decision
Educational aspiration	600	50.0000	25.61907			
Environment	600	1.5000	.53452	-.991	.275	*

\* correlation coefficient is significant at 0.05 level

The result of the test performed indicates that there is a negative and significant relationship between environment and educational aspiration of female secondary school students in Ondo State ( $r = -.991$ ,  $P < 0.05$ ).

## Research Question Two

Does parents' level of education affect the educational aspiration of their female students on vocational choices?

Table 3 Parents' Level of Education and The Educational Aspiration of Their Female Students on Vocational Choices

S/N	Items	% Agree	% Disagree	Total respondents	% Total
5	Parent monthly income affect the career of their children	75	25	600	100
6	Parent qualification affect the interest of their children in their career choice	75	25	600	100
7	Parent usually urge their children to aspire more on their education	71.67	28.33	600	100

8	Parent gives financial support to their children in order for them to look beyond secondary school education	75	25	600	100
	<b>Average Total</b>			600	100

Source: Fieldwork

In table 3, 75% agreed that parent monthly income affect the career of their children while 25% respondents disagreed. Also, 75% agreed that parent qualification affect the interest of their children in career choice while 25% disagreed. Moreover, 71.67% agreed that parent usually urge their children to aspire more on their education while 28.33% disagreed. Finally, 75% agreed that parent gives financial support to their children in order for them to look beyond secondary school education, while, 25% disagreed.

These responses were also subjected to Pearson's product moment correlation coefficient to ascertain the relationship that exists between the variables identified by the research questions.

Table 4 Summary of Relationship between Parents' Level of Education and Educational Aspiration of Female Secondary School Students on Vocational Choices

Variables	N	Mean	SD	r- cal	r-tab	Decision
Educational aspiration	600	50.0000	25.61907			
Parents Level of Education	600	1.5000	.53452	-.998	.275	*

\* correlation coefficient is significant at 0.05 level

From table 4, the result of the test performed indicates that there is a positive and significant relationship between parents level of education and educational aspiration of female secondary school students in Ondo State ( $r = -.998$ ,  $P < 0.05$ ).

### Research Question Three

How does the socio-economic status of parents affect the Education Aspiration on vocational choices of female secondary students?

Table 5 Parents Socio-economic Status of and Educational Aspiration on Vocational Choices of Female Secondary School Students

S/N	Items	% Agree	% Disagree	Total respondent	% Total
9	The level of sociality of the parent affect career choice	78.33	21.67	600	100
10	Parent influences the decision of their children in their choice of career	83.33	16.67	600	100
11	Parent occupation affect the vocational choices of their children	75	25	600	100
	<b>Average Total</b>			600	100

Source: Fieldwork

In table 5 reveal that 78.33% agreed that the level of sociality of the parent affect their children career choice while, 21.67% respondents disagree. Also, 83.33% agreed that parent influences the decision of their children in their choices of career while, 16.67% disagreed. Finally, 75% agreed that parent occupation affect the vocational choices of their children while, 25% disagreed.

Table 6 Summary of Relationship between Parents Socio-economic Status and Educational Aspiration of Female Secondary School Students on Vocational Choices

Variables	N	Mean	SD	r- cal	r-tab	Decision
Educational aspiration	600	50.0000	31.87			
Parents Socio-economic status	600	1.5000	.5477	-.993	.275	*

\* correlation coefficient is significant at 0.05 level

From table 6, the result of the test performed indicates that there is a positive and significant relationship between parents socio-economic status and educational aspiration of female secondary school students in Ondo State ( $r = -.993$ ,  $P < 0.05$ ).

### Discussion of Findings

Findings on research question one which states, what is the effect of environment on the educational aspiration of female secondary school students on vocational choices? Findings indicated that the environment has a strong influence on the academic performance of the female student. These findings in tune with the work of (Helenga, Aber, & Rhodes, 2002) who stated that the educational aspiration represents an individual orientation toward a desired goal under idea conditions. More simply stated, educational aspiration “provide information above an individual’s interests and hopes, unflattered by reality” in addition, peer group influences affects vocational choices in female secondary and these findings is also in tune with the work of (Luzzo, & Mc whiter, 2001) which states that, a peer group provides a control mechanism to the female daily activities. Such control mechanism can be in the form of praise and acceptance when the girl does what the group expects from her. That is, the girl because of her daily interaction with this group, acts in line with the dictates of the group.

As regard to the Research question two, which states, does the level of education of the parents affect the educational aspiration of the female students on vocational choices? Findings indicated that, parent monthly income affect the career of their children and also parent qualification affect the interest of their children in career choice has supported by (Mau & Bikos, 2000) work which states that, parent educational level has been positively related to aspirations of the female students. And also, Burlin (2001) stated that both parents education level wielded a strong influence on career choice of their daughter. In addition, (Signer & Saldana, 2001) noted that there is positive relationship between adolescent female’s career aspirations and their mother’s educational achievement.

Findings on Research question three which states, how does the socio- economic status of parents affect the educational aspiration on vocational choice of female secondary schools? Findings show that parent influences the decision of their children in the choice of career and also parent occupations affect the vocational choices of their children. {Wahl & Blackhurst ,2000) indicated children’s career aspirations were more closely related to parental occupation. Among adolescent females in particular, career choice was strongly influenced by the mother’s occupation. The mother’s occupation was credited with impacting female’s aspirations because children often attended work with their mother’s and were more likely to know what their mother’s did for living. Also, Signer & Saldana (2001) study found that social status of father’s occupation had a stronger correlation with the social status of female students’ career aspirations. Furthermore, Mau & Bikos (2000) cited previous findings showing a positive association between a family’s socio- economic status and aspirations. Female students from higher socio- economic status were more likely to be knowledgeable of and choose professional occupation. Also, in contrast, (Brown and Barbosa 2001) found career aspirations of young females who came from low income families were confined to experiences of their relatives and friends. Additionally, socio- economic status



had a direct effect on unequal aspirations and expectations. Finally, Trusty (2002) indicated that a low socio-economic status had a direct effect on unequal aspirations and expectations.

### **Conclusion**

Based on the findings of the study the conclusion drawn was that environment in Ondo West Local Government Area of Ondo State has a great influence on the educational aspiration of vocational choices. Furthermore, the socio- economic status of parents has a strong influence on the educational aspiration on vocational choices of female secondary school students.

### **Recommendations**

Based on the findings, the following recommendations are given:

- (1) It is important to examine the resulting problems confronting students during and even after their secondary education. There are considerable differences between socio-economic classes and high level of educational opportunity. Our educational system is so structured in a way that some schools are adequately staffed and equipped with all the facilities that are necessary for upward performance in education and entry into these schools are competitive and determined by socio-economic background of the applicants.
- (2) Many other schools are ill-equipped and not well staffed and this adversely affects the educational aptitude and aspiration of the students in these schools. The only way out of this ambivalence is that a single compulsory curriculum be provided for all students. If this could be done, the elements of choice in the selection of school, course and duration in the system will be removed. The individual will no longer be influenced by her class position since all students will take exactly the same subject and remain in full time education for the same time.
- (3) Although, this seems to be what planned adequately, the inequality sector pursuit is not planned adequately. The inequality among the schools in terms of curriculum staffing and provision of facilities and entry pre-requisite still exists.
- (4) Another way out, although this might sound unrealistic, a move in direction of economic equality in order to reduce inequality of education opportunities outside rather than inside the school, but since there is little sign that economic inequality in Nigeria would be reduced. One sees no real evidence to suggest that class differences in educational attainment will reduce significantly in the foreseeable future.
- (5) It has to be pointed out at this junction that those schools which are not adequately supported by the government should be provided with necessary tools for equal educational attainment. Children in early and forceful marriages which inhabit zealous female students. More enlightened programmes should be set in machinery for parents and their children to understand and accept the relevance of education while the principles of equalitarianism for all woman folk should strictly be followed to the grass root to eradicate favoritism and partiality among classes of workers and the government should provide along establishment of schools with job opportunities, so that huge financial expenses and knowledge attain are not wasted eventually.

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## TEXT – ART FOR LISTENERS

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### Abstract

Since the last century, the text is understood as a poly-semiotic structure. For example, P. Sergio, based on French experience, offers the list<sup>136</sup> comprising eight formed components; that is the idea of “discourse” in the text related to theory is already ambiguous. We can identify three main determinants of “discourse” based on different cultures and thoughts. In the linguistic context, the term was first coined by American scientist Z. Harris in his article “Discourse Analysis<sup>137</sup>”. However, the broad application of the term was acquired twenty years later. In the world of linguistics, discourse is defined as a speech, text, dialogue, which is an integral part of communicational case. Thus, discourse is countering the text both dynamically and statically. The understanding of the term by French Structuralists and Post-Structuralists is indicated through works by M. Foucault<sup>138</sup> and his followers. According to the scientists, discourse equates the style of speech, the manner and carries individualistic qualities (political discourse, teachers’ discourse, the authors’ style as discourse). This vision represents discourse in a social color.

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**Keywords:** Discourse, Text, Reader, Listener

### Introduction

Until recent times, the science saw a literary work (and discourse as well) as a (immanent) close system and carried out the so-called internal research of the text. Thus, all the external aspects used to be rejected and the text was perceived as a unity closed to itself<sup>139</sup>. Hence, the role of the listener (as well as that of the reader) was almost ignored. However, if regarding the fact that the text itself comprises the three elements (a narrator, the text and a listener), we will understand the fallacy of the aforementioned assertion. Any sort of fiction or text is structured around those three basic elements, which according to Wolfgang Keiser are called “the first narrative line (plot<sup>140</sup>)”.

Before actually analyzing political discourse along with the listener’s role, let us evaluate the references of the fiction works and their readers while the role discussion of the works in the world of the Romanic literary world offers an interesting mix of both scientific works and numerous research results in the field proper.

While analyzing the aspects of the text, one should make the following comparisons: a literary text, the same novel, is a certain type of discourse. The author is logically equaled to the author of the discourse and the reader is the addressee of the one.

Throughout the centuries, there were two types of readers: first, people for whom reading is a typical sort of entertainment and the other type, for whom the text always represented the source for mental work and an interesting structure of its own. The ones of

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<sup>136</sup> Sériot, Patrick. *Structure Et Totalité: Les Origines Intellectuelles Du Structuralisme En Europe Centrale Et Orientale*. Paris. 1999:12

<sup>137</sup> Harris, Zellig. *Methods in Structural Linguistics*, New-York. 1951:42

<sup>138</sup> Foucault, Michel. *Dits et écrits*. Paris. 1994:34-38

<sup>139</sup> Karalashvili Revaz. *A Book and a Reader*. Tbilisi, 1977:3-4

<sup>140</sup> Karalashvili Revaz. *A Book and a Reader*. Tbilisi, 1977:6

the first category try to “escape” into the text (using it as a shelter) and thus sincerely “enter” into the roles offered by the characters created by the author. This circumstance is described by the fact that the inspiration level of any kind of political as well as other kinds of discourse is observable even among such kind of people whose IQ and ability to analyze is relatively low. The world history is rich of examples of the kind. Another research carried out in the last years of the twentieth century in France additionally proves the fact. As it turned, the works easily perceived by genre, have more readers than the ones reading and analyzing of which required more effort and mental energy<sup>141</sup>. The reader and the listener of the kind tries to find «une source d'évasion» in the text so as they made it be solution for their everyday problems and respond all those questions the individuals might have<sup>142</sup>. The circumstance is explained also by the fact that moralists' novels enjoy wider popularity regardless the epoch<sup>143</sup>.

For example, in the thirteenth century, “the Rose Novel” written by Joan de Men, remained actual in the sixteenth century France. The same can be said about the works by La Fontaine and Moeller. In this case, the addressee of the discourse may not notice the sheer fact that the authors, just like any other people, may well incorrectly address the question raised by the reality of the time. At the same time, the issues are perceived according to the history and political creed shared by contemporary representatives of the epoch. Thus, the reading or perceiving the text in this very line may cause less favorable consequences, visual representation of which are (or have been) the deliberate and forceful equalization of individuals into the faceless mass by authoritarian regimes of various types (Nazis, etc.).

In reality, the text is not the object of “fun”, but the animated, mental dialogue with the author. While creating the text, potential addressee of the text is first to be considered - the one who is to share its ideas, enrich it and take us to specific goals. The actual participation of the reader in the text had already been mentioned by enlighteners of the eighteenth century France, which is proved by the following quote by Voltaire: «*Les livres les plus utiles sont eux dont les lecteurs font eux-mêmes la moitié*»<sup>144</sup>.

The enlighteners rejected any kind of volatile approaches to the text analysis. According to them, the reader should approach the text as an object of “deep pondering” and should contribute to forming the inherent pictures of the textual body. During the reading process, various writers and scientists used to take an interest in the role of the reader, the true representation of which is the works of well-known French authors like Stendhal, Maupassant, Flaubert and others. The authors also took into account the circumstance according to which it was extremely hard to find the reader who would be “exemplary” and share, enrich and partly transform the work. Stendhal dedicates his outstanding work “Cloister of Parma” to the small but “happy” society with the words literary given as “To the Happy Few”<sup>145</sup>.

Various authors of the twentieth century reveal themselves to our society not as “preachers” but friendly interlocutors with the reading audience.

“*Je suis un être de dialogue et non point d'affirmation*”, says Andre Gide, the French author at the beginning of the century.

In the midst of the twentieth century, the reader related to the problem had been actively promoted by Russian formalists as well. They juxtaposed practical and poetic languages. According to them, practical language has the ability to turn any subject into

<sup>141</sup> Steiner, George. *Passions impunis*. Gallimard. 1997:43

<sup>142</sup> Steiner, George. *Passions impunis*. Gallimard. 1997:46

<sup>143</sup> Voltaire. *Dictionnaire philosophique*. Gallimard. Paris. 1962.

<sup>144</sup> Stendhal. *La Chartreuse de Parme*. Flammarion. Paris. 1964.

<sup>145</sup> Gide, Paul Guillaume André. *Réflexions sur quelques points de littérature et de morale*, Mercure de France, 1897.

phenomenon what makes it lose the true idea and depth. Through poetic language, however, ideas acquire their true sense and the problem of automatic transfiguration falls apart.

Russian formalists attached specific role to the way of reading by which the reader should be able to see the true ideas beyond the subjects and phenomena.

In the 60s of the previous century France, numerous researches were held regarding the literary communications, specifically concerning relationships between the author and the reader. Various sciences participate in the work analysis – linguistics, semantics, stylistics, lexicology, grammar, etc. The text limits had to be widened. Attempts for many approaches were applied. Sciences such as philosophy, psychology, sociology, histories and others had to be widely appealed. Since that time, based on the cognitive perception, text analysis (with many followers in France) has been enjoying wide popularity. French scientist, Roland Barthes considers the reading audience as a sole participator in the process of the text creation; whereas the author is in constant pursuit of desirable readers:

“If I enjoy reading the phrase of any kind, or word, this means the creator of those had been enjoying the same joy. And if vice versa? If I, an author, seek joy in writing, this means the reader should enjoy it as well. Therefore, I feel compelled to find my reader, even if I do not know what their physical address is<sup>146</sup>.”

Michel Butor expands Barthes’ idea with the following words: “A person writes with the intention to be read. I always write for the watching eye, even for my own. The sheer process of writing already involves participation from the reader<sup>147</sup>.”

Italian writer Umberto Eco recognizes the reader as the most important element in the epic world<sup>148</sup>. Eco entitles the work composed for the reading audience with an interesting title: “Lupus in Fabula”. These Latin words tell us the fact that wolf is the true character in all “fables”. Juxtaposing the wolf and the reader, the scientist and writer recognizes the reader as one of the most and basic element of the epic world. The wolf belongs to the forest; therefore, Umberto Eco represents the forest as the metaphor of the literary (fiction) work.

According to the scientific view, the book represents a thick forest for the reader. The forest is equated with the shady, ambiguous associations and strife for the positive outcome, thus making him or her activate their brainpower and intellectual abilities. The symbol of the forest is also given in the critical letters by Borsches. According to him, “The forest is the garden where each path has various ramifications and even when the path is not clear, each passer-by still has the ability to cut through.”

Hence, in the world of text, while “roving”, the reader faces the constant choice, strains their intellectual abilities and thus tries to go on the favorable path.

Umberto Eco thinks that “each text represents that very sluggish structure which requires from readers to perform their own share of work<sup>149</sup>.”

## Conclusion

Regarding the mentioned above, we can conclude that in the process of text analysis the addressee first works on developing his/her imagination, acuteness and different cognitive skills. We should not miss the fact that the images displayed by the text reading are nearly always different in each reader’s mind – whether they are of the written or vocal texts. This circumstance ensues from the difference of individual perceptions of the world bound to different social strata, political visions, spatial and time and various different engraved clichés of the time.

<sup>146</sup> Barthes, Roland Gérard. *Sur la littérature*. Presses universitaires de Grenoble, 1980:20

<sup>147</sup> Butor, Michel. *Matière de rêves : série de cinq ouvrages*. Hachette. Paris. 1985:18

<sup>148</sup> Eco, Umberto. *Six promenades dans les bois du roman et d’ailleurs*. Gallimard. Paris. 1996:2-3

<sup>149</sup> Eco, Umberto. *Six promenades dans les bois du roman et d’ailleurs*. Gallimard. Paris. 1996:10-12

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## CONCEPTUALIZING THE UNDERSTANDING OF PROFESSIONAL IDENTITY IN TEACHER'S CAREER

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### Abstract

The article deals with the research designed as the Grounded Theory to explore and conceptualize the practising teachers' perception of their professional identity. The practising teachers – master students of the professional master study programme „Teacher” study module “Education for Well-being and Cohesion” taking the course „Educator’s Professional Identity and Pedagogic Mastery” were chosen to help to formulate the theory. Analogies (metaphors) and narrative essays have been used as the techniques for identifying concepts. Making associations, brainstorming, coding, making concepts, conceptual sorting in categories, memoing and outlining theories was the procedure how teachers conceptualized the various elements used to construct professional identity. Word frequency list and keyword-in-context list techniques were used to carry out computer-aided content analysis and represented by the help of Wordle.net – the tool for generating “word clouds” from text that is provided.

The outcome of this research is the content of teachers' professional identity discussed and analysed in the light of various theories and in close link with the concepts of “professional career”, “personality development”, “career” and “self-concept”. Based on the keywords provided by teachers, the teacher's professional identity structure consisting of 4 components: professional “self-concept”, harmony of professional identity, successful self-determination and creative professional activity was elaborated by adding criteria notions, as well as the content analyses of teachers' narratives was used to identify professional identity development statuses.

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**Keywords:** Professional identity, teacher's career, self-concept, self-determination, professional competence

### Introduction

Today with the growth of inter-related environmental, economic, social and political problems, there is need for more responsible citizens. Education is essential pre-condition to make wise choices and work responsibly, creating good conditions for social, economic and environmental sustainability both locally and globally. This determines the need for a holistic view of education and interdisciplinary approach and new requirements for teacher education focusing on the aspects of teacher's professional identity and life-long learning, for the growth of the teacher as a holistic personality.

Referring to the latest guidelines and approaches in education and according to the requirements of the labour market, Professional Master's Study Programme ‘Teacher’ has been accredited in the University of Latvia. The Programme ensures professional Master degree studies in teacher education that are directed to personal well-being and coherent

development of society encouraging the development of both interdisciplinary pedagogical competence and sustainable development oriented pedagogical and research activity and providing an opportunity to obtain one of the 33 subject teacher's qualifications.

The Master's module (60 ECTS) comprises the courses: *Sustainable Cultural Environment of Education, Holistic Development of Personality in Education Practice, Educator's Professional Identity and Pedagogic Mastery, Education Research for Local and Global Changes, Didactic Approaches in Education Practice, Practice in Research and Development of Master's Thesis.*

In relation to the conceptualization of one's professional identity, the aims of the Programme particularly stress that completing the course, the students will be able: to demonstrate skill of examining features of development of holistic personality and clearly and convincingly communicating information taking into consideration peculiarities of the target audience; to evaluate one's professional competence, planning and directing self-education towards harmonised development of the society.

The students are offered learning assignments for the development of convergent and divergent thinking skills, bilingual studies, formal, non-formal and informal learning processes, the practice in the context of the local community and global education. Innovative approaches to programme monitoring and evaluation of the personal significance are searched for. Master studies are oriented towards cross-disciplinary and inter-disciplinary teaching activities and relate to personality development and professional career.

### **Professional Identity in Teacher's Career**

The professional identity of a teacher is discussed and analysed in the light of various theories – personality and work environment type theory (person – environment fit) (Holland, 1985; 1997), professional self-concept theory or career anchor theory (Schein, 1993), career development theories (Ginzberg, Ginsburg, Axelrad, Herma, 1951., Super, 1957, Buller, 1965), profession psychology theories (*“психология профессий, психология труда”*: Толочек, 2005, Зеер, 2006, Пряжников, Пряжникова, 2001, Романов, 1983, Кибанов, 2007), acmeology theories (Вишнякова, 1998), etc.

In general, it is recognized that analysis of professional identity is based on the understanding of person's professional and individual growth throughout life (*“life career”*) (Patton, McMahon, 1997), comprehensive and dynamic development in the main spheres of life (work, family, leisure) (Sharf, 2006), as well as on understanding of human social activity (Wolfe, Kolb, 1980) and efforts for achieving a condition in which it is possible to satisfy the personal needs, correlations of personal and professional development and reach a sense of life success (Lāce, Miķelsone, 2012; Толочек, 2005; Пряжников, Пряжникова, 2001). Thus, analysing the concept of professional identity, there should be a close link between the concepts of “professional career” and “personality development” (Wolfe, Kolb, 1980; Толочек, 2005), as well as “career” and “self-concept” (Schein, 1996; Callanan, 2003; Зеер, 2006).

The concept “career” is defined as deliberate and successful progression at work or other activity spheres where achievement is possible. Career is a sequence of various socially significant human roles related to the individual's work, studies, self-expression and leisure activities (Miķelsone, 2008). Career can be understood in a narrower and broader sense. In its narrower sense career is a professional growth, which can take place both vertically and horizontally ensuring the individual's professional competence development. In career development the need of self-realization and the need to be recognized by society are emphasized. On the other hand, in its broader sense career is associated with the human life as whole and with the life success in general. In this perspective, any professional activity that creates feelings of frustration, interferes with individual's harmonious personal life or



creates a sense of failure cannot be considered as a successful career. In the broader sense career can be described as progressive development of the basic human life spheres – family, work, leisure, but in the narrower sense – life dynamism and professional activity. Thus, the career is not only a progression or development, but more a successful progression or development. So far the teacher's sense of self and his/her need for personal development is not researched sufficiently as a condition of personal career. A teacher, who does not feel personal satisfaction about his/her life in general, who does not feel the impact of professional growth as part of his/her life perfection, also loses optimism and zest in professional activities. Therefore, subjective achievements of one's career are very significant as they make a person a lot more responsible for his/her career development (Hall, 1996).

From a subjective point of view, the individual's perception of a successful career is formed by inner standards, perceptions about satisfaction and social networking achievements (Ballout, 2007). Hall (1996) emphasizes that the ultimate goal of one's career is a psychological success, in other words, feelings of pride and personal achievements (inner peace, happy family, etc.), which is formed through reaching the most important goals of one's life. But vertical or objective career achievements are at the basis of out-dated understanding of career, where the goal is a vertical climbing up the career ladder within organizational hierarchy together with the increase of salary. Hall (1996) stresses the importance of psychological achievements suggesting that there are very many ways of reaching them and that they depend only on the unique needs of each individual, while vertical and objective career achievements can be reached only by moving up the ranks of organizational hierarchy.

Career is a subjective opinion of a person about his or her professional future and expected self-expression possibilities; it is individually acknowledged behaviour and attitudes (based on understanding of personal values), which is grounded in the professional and life experience.

Career guidance is a subjective activity that can be viewed from the person's perspective at one's own activities. Career development is influenced by person's subjective evaluation (self-evaluation) of personal career development and different career stages, and emotional feelings that come as the result of this evaluation.

Developing one's career, the individual perfects his/her professional self-concept, which includes the answers to the following questions:

- ✓ What are the spheres of my abilities, skills and competences?
- ✓ What are my strengths and weaknesses?
- ✓ What are my main motives of live, my needs, desires and goals?
- ✓ What do I want or do not want and why (because I have never desired it, or because I have reached a certain level of understanding and therefore I do not want it)?
- ✓ What are my values (the main criteria by which I judge things I do)?
- ✓ Do I work in organization that meets my values?
- ✓ How good do I feel about what I do?
- ✓ How proud or ashamed am I about my work and career? (Schein, 1993).

Motives, values and talents are gradually merging in a professional "self-concept" and they form understanding of '*who I am*', '*who I am not*', and '*who I would like to be*'. Thus, progressive awareness about one's own development and formation of independent planning, implementation and adjustment, as well as readiness to analyse oneself in time and find personally significant meaning in a particular professional activity can be considered as the goal of professional development and professional self-realization (Schein, 1993, Пряжников, 1996), which also defines and forms a professional identity of a person.

Similarly, Callanan(2003) also states that, first of all, a key to a successful professional activity is explicit self-identity development, then setting the career goals, and finally – the choice of the career strategy, which must be in compliance with this identity.

Professional “self-concept” that is based on regular self-assessment and exploration of the further goals can be considered as the most important element of professional identity (see Figure 1).

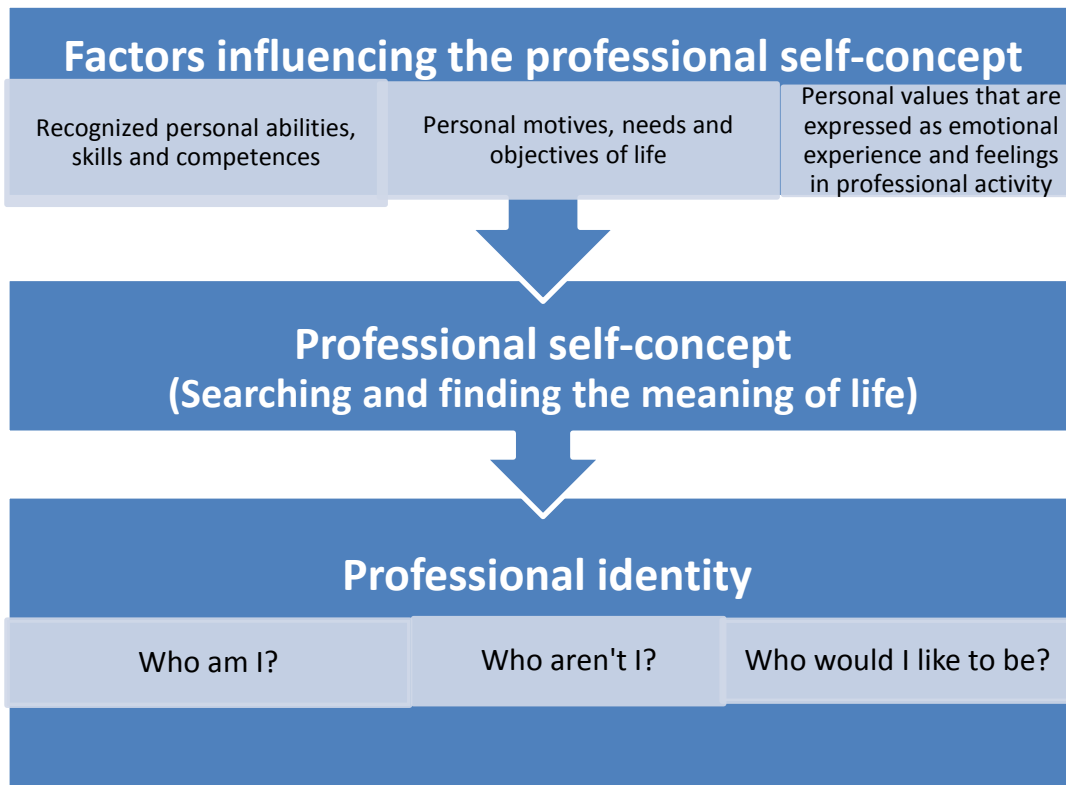


Figure 1. Professional Identity Development.

The understanding of professional identity described in career theories and procedural conditions leads to the following components of the teacher’s professional identity (Lāce, Miķelsone, 2012): professional self-concept; harmony of professional identity (merging with personal identity); successful self-determination and innovative professional activity.

### Research Methodology and Data

The research was designed as the **Grounded Theory** (originally developed by Glaser and Strauss in the 1960s) to form inductively concluded theory on research phenomenon – practising teachers’ perception of their professional identity. The aim of the research was to explore new relationships to be used as a theory in other studies and in life. The expected outcome was to develop theory about phenomenon of interest – the theory that is entirely dependent on the research sample perspective, attitudes, values, positions, privileges, geographical position, etc. Scott (2013) compares the Grounded Theory to a research tool which enables one to seek out and conceptualize patterns and structures „through the process of constant comparison. (A bit like being the x-ray machine of the social world?)”<http://www.groundedtheoryonline.com/what-is-grounded-theory>.

The sampling of the study was purposive – theoretical – practising teachers – master students of the professional master study programme „Teacher” study module “Education for Well-being and Cohesion” taking the course „Educator’s Professional Identity and Pedagogic Mastery” were chosen to help to formulate the theory. 24 respondents involved in exploring

and shaping their own understanding of teacher's professional identity were of different age and aimed to advance in their careers both horizontally and vertically. Therefore, the participants of this research were not differentiated by age groups, but all characteristics of adult life stages were respected and analysed.

The research began with raising generative questions which helped to guide the research, but they were not intended to be static:

*What is the teacher's professional identity?*

*How do teachers define and perceive their identity?*

*How do teachers evaluate their professional identity?*

The data were collected by analogies (metaphors) and narrative essays.

Analogy is a cognitive process of transferring information or meaning from a particular subject (the analogue or source) to another particular subject (the target), or a linguistic expression corresponding to such a process. It plays a significant role in problem solving such as, decision making, perception, memory, creativity, emotion, explanation and communication. Analogy can be expressed by metaphor. People often represent their thoughts, behaviours and experiences with metaphors, as metaphors are rich, data-reducing and pattern-making devices which help to connect data with theory. For this research metaphor of the elephant was used as a tool to find out how teachers conceptualized the various elements used to construct professional identity.

Metaphors, as Lakoff and Johnson (1980:5) explain, are a vehicle for “understanding and experiencing one kind of thing in terms of another. ... a fundamental mechanism of mind... a fundamental scheme by which people conceptualize the world and their own activities”. Metaphor allows to use what is known about one's physical and social experience to provide understanding of countless other subjects. It does not necessarily correspond to what is happening in the observable physical world, but is every bit as “real” because people take it for granted, act upon it and often can't conceive of alternative way of viewing things.

According to Ortony (1975) and Osborn (2009), metaphors can serve a variety of functions, their pedagogic value ... : the compactness, the inexpressibility and the vividness: they can reduce overload in mental storage of units of knowledge, thereby facilitating discourse; they can express our experiences in rich and vivid language, which fosters a communicative and/or explanatory role of metaphor; they can spark creativity; they can underpin the cognitive function of conceptualizing — namely, generating or understanding concepts — by giving the concept a familiar and compact terminological framework, obviating the need for a more elaborate, intricate, convoluted, or elusive language in order to express the concept more concretely.

So it was decided to explore the extent to which—and how—teachers engaged in various forms of professional work might define and perceive their professional identity. Expected outcome –to get keywords of professional identity, raise teachers' self-awareness of their professional identity. To begin data gathering, core theoretical concept(s) were identified. Tentative linkages were developed between the theoretical core concepts and the data. Initially there was used open coding, considering the data in minute detail while developing some initial categories. Later, there was a move to more selective coding – systematically coding with respect to a core concept.

The procedure involved: making associations, brainstorming, coding, making concepts, conceptual sorting in categories, memoing and outlining theories. In the beginning, the participants were asked to share their associations with the elephant. In order to minimize pre-conceptions, the brainstorming: *what they associated with the parts of the body of the elephant: the trunk, the ears, the tail, legs, tusks etc.*, took place. Afterwards, the respondents worked in groups of 3 and they compared the teacher's professional identity to elephant, by filling up the shape/ model of elephant with the content that to their mind corresponded to

*teacher's professional identity*. Later on the groups compared their understanding as to what they had put in separate parts of elephant's body, 20 in total: the mouth, belly, internal organs, heart, stomach, forehead, lungs, backbone, head, brains, eyes, teeth, tusks, tail, trunk, ears, legs, skin. Together the participants came up with 130 notions that teacher's professional identity contained, every group proposing on average 16 terms, from minimum 10 per group to maximum 27 terms. The terms were shared concerning the previously discussed parts of elephant's body and computer-aided content analysis was carried out.

"Content analysis involves categorizing information and then comparing the frequency of occurrence of different categories" (Robson 2013: 523). In addition to deciding on categories, a recording unit as an individual word had been selected. Word frequency list technique for coding the text was used to carry out computer-aided content analysis. "Word frequency list provides lists of words in the document, ordered according to the number of times that they appear; together with the frequencies themselves" (Robson 1999: 281). The content of teachers' professional identity theory was depicted by the help of **Wordle.net** – the tool for generating "word clouds" from text that is provided. The clouds give greater prominence to words that appear more frequently in the source text. For example, the prevailing notions in teachers' cloud (Figure 2) were *knowledge, skills, professional, sense, listen, belonging, stability, responsibility, ability, new*.



Figure 2. Respondents' Understanding of Teacher's Professional Identity.

During the process of verification and summary, the effort was made to evolve toward core categories. From these 130 terms 14 items had been selected as new, not found in the theory: *sense of belonging (belly)*, *emotional resilience (skin)*, *sense of security (the tusks)*, *love for people (heart)*, *humour (legs)*, *added value (trunk)*, *cooperation (the tail)*, *tolerance (the mouth)*, *flexibility (stomach)*, *positivism (bottom)*, *diversity (lungs)*, *individuality (backbone)*, *professional sense (backbone)*, *attitude (the mouth and belly)*.

Memoing was the next stage – a process for recording the thoughts and ideas as they evolved throughout the study. Starting with extensive marginal notes and comments and later on they tended to increasingly focus in on the core concept.

Finally the teachers were asked to evaluate their professional identity using the terms by their choice from the list of 130 terms. The format of the evaluation was narrative essay. On the whole 172 pages of narratives were received and analysed. From the new descriptors – keywords proposed by teachers in describing teacher's professional identity, the most mentioned in the narratives was cooperation in 40 cases, attitude and sense of security in 24 cases, tolerance – 10, added value and love – 8, sense of belonging – 7, diversity, flexibility – 6, emotional resilience and humour mentioned in 5 cases.

Based on teachers' keywords, the teacher's professional identity structure consisting of 4 components: professional "self-concept", harmony of professional identity, successful self-

determination and innovative professional activity (Lāce, Miķelsone, 2012) was elaborated by adding new notions to criteria (Table 1). In the content analysis of teachers' narrative essays, the individual word had been used, as well as paragraphs or whole items had been used as the recording unit. Key-word-in-context (KWIC) list was used to carry out computer-aided content analysis.

Table 1. Teacher's Professional Identity Structure, Its Criteria (based on Lāce, Miķelsone, 2012) and notions added by teachers.

Component and criteria	Teachers' narratives	Notions added by teachers
<p><b>Professional "self-concept":</b> understanding the personality; finding personally significant meaning in professional activity; professional ambitions</p>	<p><i>I put self-exploration as the second most important, because one should be self-critical towards oneself (Respondent 2).</i></p> <p><i>Teachers' professional mastery consists of the knowledge, skills, attitudes developed through the accumulation of professional experience during work, observing ethics and morality, and the quality of their work (R24).</i></p> <p><i>It allows to search and find answers to the questions – what belongs to you; what you know; who you know; who you are (R 7).</i></p> <p><i>I possess the experience, contacts and skills in journalism, not the majority of teachers have, this is useful to get along at school, planning lessons, organizing after school events and cooperating in local community (R2).</i></p> <p><i>Evaluating my personal identity, I can say that I am aware of myself. I have clear idea who I am and what I should not look for in myself. I am aware of my goals in life. With regard to myself I am both critical and demanding, but I love myself (R4).</i></p> <p><i>I do forget about myself, I get lost into consultations, negotiations with colleagues and students. ...I have a light and good feeling (R20).</i></p>	<p>Tolerance Positivism Individuality Professional sense</p>
<p><b>Harmony of professional identity (merging with personal identity):</b> individual satisfaction; all achievements in life (work, family, leisure), life success</p>	<p><i>I understand and am understood, so I have a sense of belonging. I am a patriot of my school (R2).</i></p> <p><i>Yes, I feel I belong to this time and this place (R3).</i></p> <p><i>It is very important to schedule time for myself, so I can read, go to theatre, concerts, attend exhibitions, engage in crafts, explore the world and even write the lyrics. It is equally important to talk about this with children, to share experience enriching each other (R10).</i></p> <p><i>I'm curious. I am definitely interested in everything that takes place in the education system. There may be times it is not at all related to my direct duties. But I am somehow lucky to find the information even without looking for it specifically. ... my colleagues often come to me with a variety of issues "If you do not know something, go to XX, she definitely knows." Of course, there is no way that I know everything. Not at all. But I never refuse to help, and then we are looking for the answer together (R3).</i></p> <p><i>Another issue could be the mastery of aligning work life with private, in order it is acceptable for my family. I am fortunate to have family members of creative professions and at the same time teachers (R15).</i></p>	<p>Sense of belonging Emotional resilience Sense of security</p>
<p><b>Successful self-determination:</b> social activities of an individual; series of career decisions (purposeful dynamics); self-confidence and desire to demonstrate the results of activities;</p>	<p><i>Positive cooperation needs dialogue, hearing and accepting wishes (R9).</i></p> <p><i>My teaching should be improved by a methodological diversity, I lack diversity in teaching and miss alternative approaches to problem solving (R5).</i></p> <p><i>My attitude towards students is the first condition in students' successful acquisition of the study content (R20).</i></p>	<p>Love for people Attitude Cooperation Diversity</p>

<p>awareness of future perspectives; dividing strength for whole life</p>	<p><i>Sometimes this abandonment leads to an incredible exhaustion and the loss of surrounding world, but then I am glad that I have friends and dance, where to forget about everything in a completely different way (R20).</i></p> <p><i>One is, how I myself evaluate my career, how it is influenced by my values, challenges, goals, as well as the ability to balance work and personal life. The second – what is the economic situation, the success criteria. In addition, the success criteria do not always determine job satisfaction (R3).</i></p> <p><i>The meaning of teacher's life is to make the world a better place, but the world – are we – all people (R14).</i></p> <p><i>It would be useful to engage in the exchange of experience in order to improve my professional activities (R19).</i></p> <p><i>I have to improve my skills of working with students in conflict situations. There are often such cases of a conflict (even small conflicts), where I get confused, because I do not know what to do, how to solve it, of course, often I act instinctively, without knowing whether this behaviour is correct. In these situations, I feel very uncomfortable because my students can feel my uncertainty and that can lower my reputation in their eyes. This is a dangerous situation because the students can get disappointed in teacher (R11).</i></p>	
<p><b>Innovative professional activity</b> implemented novelties; creative ideas for future creativity when implementing professional tasks</p>	<p><i>... and I will be such teacher as I would like to be (R 18).</i></p> <p><i>The luggage of my experience will be packed by the stories of laughter and tears, it will be rich with variety of cultures, open and inviting ... (R5).</i></p>	<p>Humour Added value Flexibility</p>

## Discussion

In accordance with the characteristics of age periods proposed by career theories in the aspect of career development (Gibson, Mitchell, 2006; Sharf, 2006; Miķelsons, 2008), three career development stages (Lāce, Miķelsons, 2012) were identified during the process of analysing teachers' narrative essays.

**Stage 1 – Exploration.** Discovering teacher's profession in correlation with the analysis of one's own needs, interests, abilities and values. In this stage the initial identification with teacher's profession begins to develop. Gradually the needs of professional development are analysed, clarified, setting priorities for further activities. *“My teaching should be improved by a methodological diversity, I lack diversity in teaching and miss alternative approaches to problem solving” (R5).* The exploration takes place in a pilot stage when serious and responsible duties are not yet performed, however, the main task of this stage is to recognize the professional priorities (Super, Thompson, Linderman, 1988). In accordance with identified priorities, it is important for the teachers to develop their own life programme, a plan or scenario setting high objectives, even if that means dropping out of their studies or work if considered as unsuitable. *“I would have to learn to creatively enrich my teaching in both standard and non-standard situations” (R19).* The closest professional objectives are being set on the road to professionalism (Пряжников, Пряжникова, 2001). However, without implementing the real potential, many objectives and plans are left unaccomplished (Buller, 1965).

Therefore, at this stage a substantial task for a teacher is to engage in consciously constructive activities that are based on the assessment of one's own possibilities, limits and

evaluation of the real circumstances, as well as recognising the value of the teacher's profession within the general value system of an individual.

**Stage 2 – Career awareness.** The main characteristics – balanced striving to reach the goals (Buller, 1965). If the expected evaluation is obtained, then more responsible duties are assumed, which is a condition for further development of professional activity (Super, Thompson, Linderman, 1988). The closest and further objectives of the professional career are being established, and the details of career objectives are being clarified (Ginzberg, Ginsburg, Axelrad, Herma, 1951). This stage is characterized by adequate perceptions of possible difficulties and obstacles, as well as knowledge of one's own skills that would further help to implement the planned activities (Пряжников, Пряжникова, 2001). *“Humour helps to relax, encourage, change any uncertain situation not only in the classroom, but also with colleagues. However, next to the humour is the posture and rigor which among students creates a sense of stability, while makes easier the teacher's work because there are clear rules and boundaries” (R23).* Initial professionalization takes place during the pedagogical practice. It cannot be qualified as unprofessional activity; however, on this level of development it is possible only as qualitative reproductive activity based on the acquired professional exploration stage. Other characteristic features are independence in performing professional duties and assessment of personal features that are significant for the profession (Зеep, 2006). Therefore, when organizing evaluation, a gradual advancement towards independent self-evaluation is necessary facilitating teacher's ability to develop appropriate self-evaluation criteria.

**Stage 3 – Development of an individual professional style.** An individual professional style gradually develops by integrating educational experience with the initial professional experience (Зеep, 2006). *“The teacher's skill is to be next to, encourage, cheer up and let the child experience the joy of discovering” (R12).* Therefore, in the study process and praxis a teacher is able to propose innovative ideas and search for new challenges. Ambitions are based on already acquired evaluation and real possibilities. The objectives are fewer, and each of them is more thoughtful. *“So in the self-evaluation part of teacher's mastery, focusing on the understanding of self, I want to emphasize the important factors for myself: openness to the new, the importance of knowledge, empathy, ability to listen, to accept, motivate. To be able to do it the teacher needs to be healthy, emotionally resilient, sympathetic, loving, friendly, sincere and respected. I will mention also the intuition, more precisely – professional intuition that is often just as useful as the professional knowledge or skills” (R2).*

This stage is characterized by decision making process, where individuals try to find the optimal balance between one's own readiness for professional activity and its objectives and reality of the work life. There is a possibility for knowledge-based contemplation about other related professions. Practical personal professional development takes place together with a regular adjustment of plans in conformity with the performed self-evaluation (Пряжников, Пряжникова, 2001). Identification with the profession can be observed, as well as flexible professional working style and highly qualified activities (Зеep, 2006).

One more approach to analyse teachers' narratives was to identify professional identity development statuses.

Already Erikson (Eriksons, 1998) suggested that a healthy personality is the one that actively explores the surrounding environment, reveals internal personal integrity and is able to perceive genuinely the world and also oneself. In later research studies on identity development and modifying Erikson's work, it is found that there are four identity development statuses which a person moves through: *diffusion, moratorium, foreclosure, and achievement* (Kroger, Martinussen, Marcia, 2010; Sharf, 2006; Marcia, 1991). These statuses can be measured through interviews or self-report questionnaires, or survey questions and for

the purpose of this research through narrative essays. In order to identify the status of professional identity, Vondracek and Skorikov (1997) suggests simple definitions based on the professional status indicators. Each of these statements is a simple tool for measuring everybody's status (Table 2).

Table 2. Professional Identity Development Statures and Their Indicators (based on Vondracek, Skorikov, 1997).

Identity development status	Indicator	Narrative / Evidence
<b>Diffusion</b> refers to having few clear ideas of what one wants and not being concerned about the future.	I don't know what I want; what happens, happens.	Not applicable
<b>Moratorium</b> is a time, often more than several months, in which one explores options while wanting a direction, but not having one.	I don't know what I want, but I want to find out.	<i>I've realized that I do not know who I am. Perhaps it's stated too loud, but I feel like that(R5).</i>  <i>In private life I sometimes think I do not know myself at all. In order to overcome this I have created a plan that fits perfectly into my journey to the top (R4).</i>
<b>Foreclosure</b> refers to making a choice, often based on family tradition, without exploring other options.	I know what I want and I follow established paths.	<i>I'm a woman. I am 49 years old. I am good at interacting with people. I can find common language with children. I have skills in Computer Science. I am able to manage the work of a large database company (large school). I know a lot of new technology applications. But I'm constantly learning and improving myself (R 18).</i>  <i>I like to learn. It is not easy, but otherwise it is impossible today. I am self-confident, responsible, tolerant, curious. Others think I'm a fun, friendly and polite. My colleagues consider me competent in informatics. And a lot of people address me with questions about computers, computer hardware and software. And I'm trying to help as much as possible(R 18).</i>
<b>Achievement</b> refers to knowing what one wants and making plans to attain an occupational goal.	I know what I want and have made plans already.	<i>I am certain that I am where I need to be – at school. I learn, because I wish to do that, I work with students, because I really like it. And only time and experience together with the regular desire to improve, to learn something new will help me to talk about my growth and my own – personal career (R6).</i>

## Conclusion

During the Grounded Theory research, the practising teachers' perception of their professional identity was explored and conceptualized by the means of analogies (metaphors) and narrative essays. The prevailing identifying concepts in teachers' metaphors were knowledge, skills, professional, sense, listen, belonging, stability, responsibility, ability, new.

In order to construct professional identity, the theories on "professional career", "personality development", "career" and "self-concept" were subjectively enriched by teachers' conceptualized notions: sense of belonging, emotional resilience, sense of security, love for people, humour, added value, cooperation, tolerance, flexibility, positivism, diversity, individuality, professional sense, attitude. The outcome of this research was the elaborated notions of content criteria of teachers' professional identity structure components: professional "self-concept", harmony of professional identity, successful self-determination and innovative professional activity:

1. Professional self-concept that is characterised by understanding one's own personality, finding personally significant meaning in professional activity and



professional ambitions was enriched by tolerance, positivism, individuality and professional sense;

2. Harmony of professional identity (merging with personal identity), with typical satisfaction of the individual, achievements in various spheres of life (work, family, leisure), and general success of life was complemented by sense of belonging, emotional resilience and the sense of security;
3. Successful self-determination that is expressed through social activities of an individual, making career choices (purposeful dynamics), self-confidence and belief in the future gained love for people, attitude, cooperation and diversity;
4. Innovative professional activity with implemented novelties, creative ideas for future and creativity when implementing professional activities was elaborated by humour, added value, flexibility.

Identifying the respondents' professional identity development statuses, the analysis of teacher's narratives confirms that teacher as a profession is a conscious choice characterized by professional identity moratorium, foreclosure and achievement statuses. Mostly respondents' entries in narratives revealed the current status of Master studies – looking for new directions (moratorium) and making informed choices (foreclosure). There were no respondents not being concerned about the future (diffusion) and only 3 revealed the characteristics of achievement status.

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## RETURNS TO EDUCATION IN EUROPE. SAME OR NOT?

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### Abstract

The main aim of the paper is estimation of the Mincer equation parameters for European countries. The Mincer equation describes the impact of years of schooling and the work experience to the wages. The estimates of that equation were obtained using cross-section data for selected European in 2002 and 2010. Obtained results show huge differences returns to education in European countries. It seems that countries with better labor market outcomes can be characterized by lower rates to education. The variation of estimated rates stayed unchanged in analyzed period.

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**Keywords:** Mincer equation, returns to education, labor market

### Introduction

Although the analyses of the impact of skills on earnings receive attention since Adam Smith's "Wealth of Nations", published in 1776, the pioneer in measurement of human capital and estimation its impact on wages was Mincer (Mincer, 1958).

Mincer identifies two kinds of investments in human capital: the investments in formal education (measured by years of schooling completed) and investments during the working life (measured by years of work experience). Mincer (1974) estimated rates of returns from on-the-job training and their impact on the wage distribution for several different occupations. He showed that earnings profiles imply a decline in on-the-job training investments with age. Mincer also showed that on-the-job training investments increase with the level of schooling. Mincer concept prompted new studies, however the necessity of some modification of the model was crucial. For example the non-linear relationship between wages and schooling received particular attention (Lemieux, 2006).

Starting from Mincer (1974) the issues of wage and human capital distribution has been studied by many authors. The empirical analyses indicate that the return rate on education is no greater than 10% of initial income per additional year of education or 30-35% for achieving higher level. Several reviews of the empirical results can be found in the literature; see Psacharopoulos (1994), Psacharopoulos and Patrinos (2004), Hanushek and Woessmann (2010) and Strauss, de La Maisonnette (2007).

Parameters of the Mincer regression are usually estimated using individual data observed for a particular country by labor force surveys. On the macro level, Mincerian equation is estimated on the basis of regressions for both cross-section data and time series; see Hausman, Taylor (1981), Moretti (2004), Krueger and Lindahl (2001). The main assumption for the cross sectional analysis is the homogeneity of regression parameters. Consequently, the impact of education and the experience on the observed wages does not vary across countries.

In this paper I estimate the Mincer equation for European countries and relax the assumption of constancy of parameters across countries. The variability of parameters was obtained by estimation of parameters for particular countries. The differences between parameters were tried to be explained by labor market features.

## Data

The empirical analysis presented in the paper is based on the cross-section series taken from the European Union Structure of Earnings Survey (SES), a large representative enterprise sample survey. The SES provides comparable information on the level of remuneration and individual characteristics of employees such as sex, age, occupation.

Also, the International Standard Classifications (ISCO-08, 2012) is used. According to ISCO-08 four major levels of skills can be separate. Skill levels are defined by considering the level of education and qualifications gained by on-the-job training or practice. According to ISCO-08 methodology there are four levels of skills. The first level requires elementary qualifications and primary or the first stage of basic education. The second level involves individuals with secondary levels of education (basic vocational, general and vocational comprehensive) and post- or non-tertiary levels. The third level is related to education accomplished in the first stage tertiary education. The fourth level captures individuals with tertiary level of education accomplished.

Table 1 presents basic descriptive statistics of wages in selected European countries in 2002 and 2010. The highest average hourly remunerations (ca. 16-18 PPS in 2002 and 18-19 PPS in 2010) can be observed in case of Denmark, Luxembourg, Norway, Ireland and Belgium. The lowest are reported in case of Bulgaria, Romania and Baltic States. Differences between lowest and highest wages declined in analyzed period. We can observe a kind of convergence process in that case. In general, in old EU15 countries (except of Portugal) wages were higher than mean in our sample. The similar pattern one can find when studying the diversity of wages. Country statistics show highest variation of wages in southern European countries (Portugal, Italy, Romania, Bulgaria and Slovenia). The lowest coefficients (below 0.3) of variation were noticed in Denmark, Norway and Sweden.

The preliminary, qualitative analyses, indicate that the existing diversification of wages in Europe with respect to the level of skills and labor market experience is strong. The empirical strategy takes into account those empirical effects.

## Empirical results

The standard regression form of the Mincer equation can be written as:

$$\ln wage_t = \alpha_0 + \alpha_1 edu_t + \alpha_2 age_t + \alpha_3 age_t^2 + \varepsilon_t,$$

where

$\ln wage_t$  is observation number  $t$  of the logarithm of the hourly wage (in PPS),

$age_t$  denotes observation number  $t$  measuring the experience ( $age_t$  may equal 1...5 depending on the age group, there are 5 intervals for age: 1 – less than 30 years, 2 – from 30 to 39 years, 3 – from 40 to 49 years, 4 – from 50 to 59 years, 5 – 60 years or over);

$edu_t$  is the observation number  $t$  of the occupational group ( $edu_t$  may equal 1...4, according to the standard division with respect to skills).

The parameters  $\alpha_2$  and  $\alpha_3$  describe the impact of the age to the salary, and parameter  $\alpha_1$  shows the relative change of worker's salary caused by skills level increase. The parameters of the above equation were estimated OLS using cross-section data concerning men and women in 2002 and 2010 in European countries.

The results of estimation are presented in Table 2 which contains the point estimates, t-Statistics, adjusted  $R^2$  and number of observations. There is positive and statistically significant impact of skills level on remuneration. Depending on country of region, the improvement of skill level resulted in 17-51% change of salaries. The estimated value of  $\alpha_1$  parameter can be treated as measure of returns to education in particular country. As it was mentioned above, the skills level can be easily mapping to education level.

Additionally, the returns to education (in 2010) are presented on Figure 1. Analysing results presented in Table 2 and on Figure 1 one can find that the highest returns to education have been noticed in Southern European countries, Romania and Poland. These economies can be characterized by relatively low wages level and low labour productivity, high wage dispersion and relatively worse educational attainment in tertiary degree as compared to other countries. The lowest (18-20%) returns to education one can find for Denmark, Norway and Sweden. Relatively low returns can be observed in core EU countries. The labour force in this group of countries is well educated, the wages are relatively high and less diversified (Figure 2). Comparing the results for two separate periods indicate on lack of large changes (Table 2), however some minor can be find (Figure 3).

In most of the analysed countries the work experience plays significant role in wage formation. Extended Mincer equation with nonlinear dependency between wages and work experience is also taken into account. In general, the level of wage can be described by quadratic function of individuals' work seniority. Each additional year of work experience is connected with an increase in the wage. The differences in returns to work experience are also diversified among countries. Although direct economic interpretation of estimated  $\alpha_2$  parameter as return to work experience is not allowed due to nonlinearities, we can see that distribution of these estimates is similar to that for  $\alpha_1$  values. There are some cases in which the impact of work seniority on salary is statistically insignificant. Typically in emerging markets. However, the pattern is that the lowest values are in NMS countries and the highest

## Conclusion

The main aim of the paper was to estimate the extended Mincer equation parameters across European countries. The variability of estimated returns to education and work experience was obtained by using particular countries data.

Analysis showed statistical significance of skills level impact on wage level in analyzed countries. The value of estimated returns to education rate vary from 17% in Scandinavian countries to 50% in Southern Europe countries. The changes in returns to education between 2002 and 2010 occurred but was not dramatically.

Analyzing the level of estimated returns we can observed that countries with lower estimated returns to education can be characterized by higher wages and labor productivity, better educated labor force and lower dispersion of wages. In this group of countries the work experience plays more important role as compared to the remaining countries.

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Table 1. Descriptive statistics of hourly wages in selected EU countries in 2002 and 2010 (in PPS)

Country	2010						2002					
	Mean	Median	Min	Max	Std dev	Coef. of Var.	Mean	Median	Min	Max	Std dev	Coef. of Var.
Austria	15.1	13.0	6.2	46.4	7.6	0.502	14.3	12.3	6.5	36.9	6.8	0.473
Belgium	17.6	15.0	10.0	42.1	7.2	0.407	16.8	14.2	8.7	36.9	7.2	0.428
Bulgaria	4.7	4.0	2.1	13.1	2.6	0.547	2.8	2.3	1.3	7.1	1.4	0.519
Czech Republic	7.3	6.3	3.7	20.1	3.4	0.471	6.6	5.6	3.0	17.5	3.1	0.474
Denmark	18.6	17.4	11.5	35.7	4.9	0.265	16.5	15.1	11.0	30.8	4.1	0.251
Estonia	7.1	6.4	3.2	17.8	3.1	0.445	5.1	4.4	2.2	13.5	2.3	0.453
Finland	14.8	12.8	7.8	35.4	5.7	0.382	12.8	11.2	8.1	29.1	4.6	0.357
France	13.7	11.6	6.7	40.3	6.0	0.438	14.7	11.7	6.9	62.7	8.1	0.555
Germany	16.0	13.9	7.5	40.0	7.6	0.471	15.0	12.8	8.3	41.8	6.2	0.410
Greece	12.0	10.0	6.2	43.0	6.2	0.517	12.1	11.0	5.3	27.7	5.2	0.425
Hungary	7.1	6.0	3.8	19.7	3.7	0.519	5.6	4.7	2.7	13.5	2.8	0.504
Iceland	11.5	10.3	7.1	24.5	3.8	0.326	12.9	11.4	7.6	29.7	4.8	0.368
Ireland	17.7	15.3	9.0	40.3	7.1	0.400	16.3	14.0	8.7	40.3	6.7	0.412
Italy	14.1	11.0	7.0	42.6	8.2	0.580	14.9	11.6	7.4	47.5	8.5	0.570
Latvia	5.7	5.2	2.6	13.2	2.3	0.393	4.2	3.6	1.9	9.6	1.8	0.428
Lithuania	5.4	4.8	2.8	12.0	2.2	0.417	4.5	4.1	1.9	10.6	1.9	0.426
Luxembourg	18.5	14.2	8.5	58.5	10.1	0.543	18.1	14.4	9.4	47.0	8.9	0.492
Malta	11.4	10.2	6.5	24.0	3.8	0.338	4.1	3.7	2.3	7.9	1.3	0.321
Netherlands	15.2	13.6	6.8	32.4	5.4	0.358	14.8	13.7	7.0	30.1	4.9	0.334
Norway	18.2	16.7	11.7	34.1	4.7	0.257	16.4	15.2	10.2	30.1	4.2	0.258
Poland	7.8	6.5	3.6	22.6	4.2	0.536	6.3	5.2	3.0	17.3	3.4	0.541
Portugal	9.6	6.7	4.0	31.2	6.9	0.712	8.6	5.9	2.9	30.2	6.3	0.724
Romania	5.2	4.3	2.3	15.3	3.2	0.618	3.3	2.8	1.6	9.9	2.1	0.633
Slovakia	7.0	5.8	3.3	19.0	3.4	0.487	5.4	4.4	2.9	17.2	2.9	0.535
Slovenia	11.5	8.7	5.5	33.9	6.5	0.564	11.0	7.9	4.5	33.9	6.9	0.631
Spain	13.2	10.8	7.2	35.9	6.1	0.463	12.4	9.7	6.6	36.5	6.2	0.503
Sweden	13.9	12.6	9.6	28.1	3.8	0.276	13.1	11.7	9.1	26.9	3.8	0.287
UK	15.0	12.5	7.6	36.4	6.7	0.444	16.6	13.6	8.7	36.3	7.4	0.442

Table 2. Estimates of parameters in Mincer equations in European countries in 2002 and 2010

Country	2010						2002					
	edu	age	age <sup>2</sup>	_cons	Adj. R <sup>2</sup>	obs	edu	age	age <sup>2</sup>	_cons	Adj. R <sup>2</sup>	obs
Whole sample	0.347 (36.82)	0.238 (7.16)	-0.030 (-5.56)	1.071 (21.64)	0.336	2889	0.339 (24.38)	0.285 (5.60)	-0.041 (-4.95)	0.833 (11.10)	0.218	2261
Austria	0.345 (14.69)	0.364 (4.24)	-0.046 (-3.25)	1.163 (9.16)	0.762	80	0.358 (14.53)	0.411 (4.56)	-0.051 (-3.45)	1.037 (7.78)	0.765	80
Belgium	0.296 (20.30)	0.252 (4.74)	-0.028 (-3.24)	1.619 (20.55)	0.860	80	0.277 (12.20)	0.361 (4.87)	-0.044 (-3.62)	1.360 (11.46)	0.807	50
Bulgaria	0.439 (17.96)	0.113 (1.33)	-0.021 (-1.51)	0.248 (1.96)	0.784	90	0.357 (16.22)	0.238 (2.95)	-0.032 (-2.47)	-0.619 (-5.20)	0.776	80
Czech	0.363 (16.71)	0.194 (2.56)	-0.029 (-2.33)	0.744 (6.60)	0.761	90	0.326 (15.91)	0.161 (2.15)	-0.027 (-2.24)	0.623 (5.62)	0.764	80
Denmark	0.180 (14.04)	0.320 (7.17)	-0.042 (-5.81)	1.960 (29.49)	0.763	90	0.184 (14.50)	0.319 (6.88)	-0.045 (-5.92)	1.851 (27.00)	0.775	80
Estonia	0.351 (15.51)	0.162 (1.99)	-0.033 (-2.52)	0.884 (7.19)	0.745	86	0.334 (15.54)	0.051 (0.65)	-0.020 (-1.57)	0.572 (4.92)	0.768	80
Finland	0.272 (15.21)	0.226 (3.61)	-0.030 (-2.90)	1.624 (17.47)	0.739	90	0.253 (17.89)	0.178 (3.44)	-0.024 (-2.86)	1.554 (20.32)	0.810	80
France	0.312 (19.00)	0.181 (3.16)	-0.016 (-1.68)	1.415 (16.57)	0.826	90	0.330 (20.48)	0.210 (2.57)	-0.026 (-1.60)	1.457 (14.82)	0.877	64
Germany	0.357 (19.08)	0.440 (6.73)	-0.058 (-5.46)	1.132 (11.66)	0.832	90	0.327 (11.56)	0.357 (3.45)	-0.048 (-2.82)	1.331 (8.69)	0.657	80
Greece	0.292 (13.44)	0.378 (4.90)	-0.040 (-3.21)	0.984 (8.54)	0.758	87	0.309 (13.91)	0.439 (5.41)	-0.051 (-3.85)	0.660 (5.50)	0.778	80
Hungary	0.402 (19.29)	0.059 (0.81)	-0.003 (-0.28)	0.736 (6.80)	0.809	90	0.353 (18.42)	0.057 (0.82)	-0.004 (-0.36)	0.467 (4.50)	0.812	80
Iceland	0.231 (12.57)	0.197 (2.94)	-0.031 (-2.82)	1.571 (15.82)	0.674	80	0.318 (13.88)	0.195 (2.36)	-0.034 (-2.48)	1.394 (11.44)	0.718	79
Ireland	0.280 (14.70)	0.459 (6.90)	-0.065 (-5.95)	1.461 (14.78)	0.758	90	0.315 (14.36)	0.358 (4.48)	-0.051 (-3.91)	1.339 (11.30)	0.744	80
Italy	0.370 (14.46)	0.296 (3.30)	-0.033 (-2.26)	1.102 (8.28)	0.732	90	0.435 (13.64)	0.471 (4.04)	-0.058 (-3.05)	0.684 (3.96)	0.737	80
Latvia	0.330 (17.12)	0.077 (1.15)	-0.014 (-1.32)	0.800 (8.00)	0.767	90	0.260 (11.50)	0.041 (0.50)	-0.012 (-0.90)	0.443 (3.62)	0.629	80
Lithuania	0.351 (17.78)	0.023 (0.33)	-0.005 (-0.45)	0.728 (6.97)	0.787	86	0.351 (21.23)	0.124 (2.05)	-0.022 (-2.27)	0.181 (2.02)	0.852	80
Luxembourg	0.382 (15.57)	0.362 (4.20)	-0.046 (-3.26)	1.294 (10.10)	0.761	88	0.359 (14.76)	0.286 (3.23)	-0.034 (-2.34)	1.382 (10.64)	0.758	78
Malta	0.278 (22.62)	0.204 (4.56)	-0.032 (-4.29)	1.426 (21.71)	0.869	81	0.225 (10.17)	0.241 (2.94)	-0.038 (-2.77)	1.282 (10.77)	0.598	75
Netherlands	0.264 (17.39)	0.423 (7.98)	-0.055 (-6.37)	1.357 (17.21)	0.825	90	0.224 (12.31)	0.363 (5.42)	-0.049 (-4.46)	1.513 (15.30)	0.717	79
Norway	0.191 (15.98)	0.265 (6.35)	-0.037 (-5.37)	2.012 (32.41)	0.778	90	0.216 (19.42)	0.255 (6.26)	-0.038 (-5.70)	1.781 (29.58)	0.841	80
Poland	0.408 (17.53)	0.219 (2.70)	-0.030 (-2.27)	0.619 (5.12)	0.780	90	0.455 (19.15)	0.240 (2.76)	-0.033 (-2.30)	0.136 (1.06)	0.826	80
Portugal	0.508 (17.22)	0.338 (3.28)	-0.041 (-2.45)	0.279 (1.83)	0.782	90	0.509 (16.27)	0.414 (3.62)	-0.062 (-3.30)	0.222 (1.32)	0.778	80
Romania	0.471 (17.92)	0.120 (1.30)	-0.017 (-1.13)	0.180 (1.32)	0.783	90	0.473 (17.03)	0.280 (2.76)	-0.040 (-2.41)	-0.699 (-4.65)	0.790	80
Slovakia	0.360 (15.53)	0.144 (1.76)	-0.021 (-1.57)	0.765 (6.32)	0.736	88	0.327 (13.81)	0.230 (2.66)	-0.040 (-2.84)	0.355 (2.78)	0.713	80
Slovenia	0.402 (20.98)	0.139 (2.05)	-0.007 (-0.58)	0.993 (9.88)	0.862	84	0.396 (19.48)	0.149 (1.97)	-0.007 (-0.59)	0.745 (6.72)	0.851	77
Spain	0.335 (17.83)	0.138 (2.10)	-0.005 (-0.44)	1.313 (13.43)	0.816	89	0.381 (18.63)	0.346 (4.62)	-0.042 (-3.47)	0.821 (7.43)	0.834	80
Sweden	0.197 (14.56)	0.212 (4.49)	-0.029 (-3.78)	1.805 (25.71)	0.729	90	0.251 (21.56)	0.208 (4.89)	-0.030 (-4.33)	1.517 (24.09)	0.862	80
UK	0.346 (19.09)	0.362 (5.68)	-0.054 (-5.21)	1.295 (13.70)	0.818	89	0.342 (17.59)	0.332 (4.67)	-0.054 (-4.64)	1.370 (13.01)	0.806	80

Figure 1. Estimated returns to education in Europe in 2010 (in pp.)

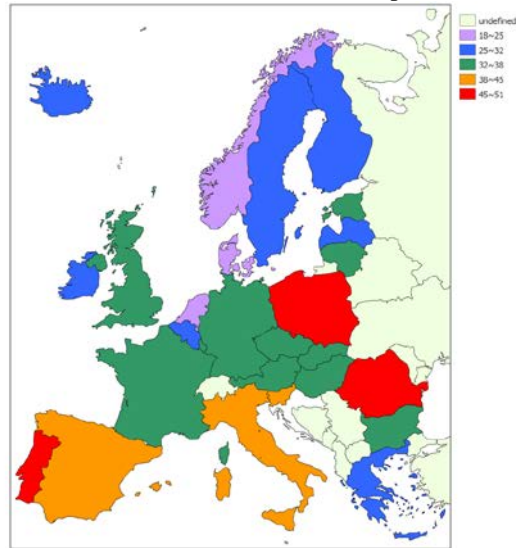


Figure 2. Returns to education vs. labour productivity, wage coefficient of variation and mean wage in European countries in 2010 and 2002

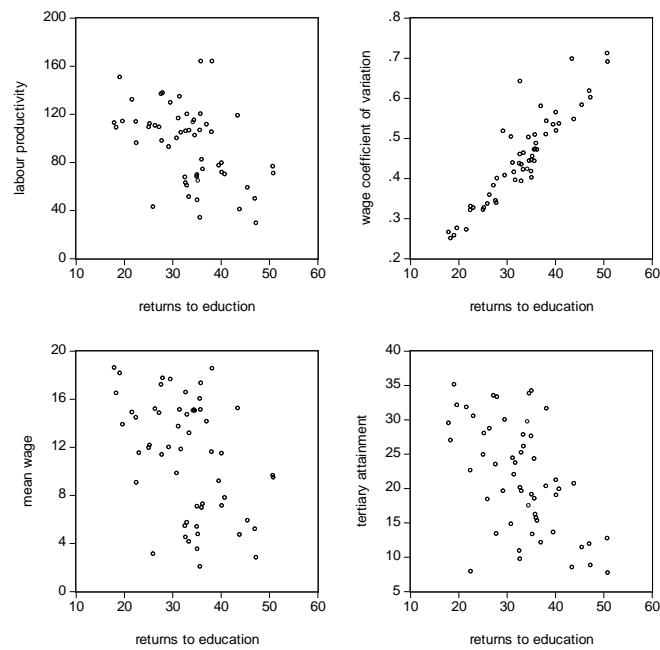


Figure 3. Changes in returns to education between 2002 and 2010





## THE ROLE OF FORUMS IN ONLINE INSTRUCTION

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### Abstract

Student's learning and teacher's teaching could be enhanced by technology if used appropriately. Technology could encourage more independent and active learning among students. A key reason for the use of technology within a learning situation is to enhance the quality of learning and teaching. Computer-based online discussions or online forums have been used in a wide range of higher education setting to provide major learning environments for distance education or to supplement face-to-face discussions. The article reviews the challenges and benefits of forums in online education and poses the issues of characteristics, integration, maximizing learning, controversy and the role of the instructor and administrator as a facilitator/participant within the discussion forum. It reveals several foreign studies regarding the topics and provides recommendations for potential users of the tool throughout the international arena of education. In order to foster an interactive learning community and encourage student interactions, all of the administrators, faculty, and staff in a distance education program need to collaborate with each other at an institutional level. Besides fostering common educational practices in conventional classrooms, distance education is portrayed as possessing more potential and thus more promise in promoting student interactions and enhancing learning outcomes by utilizing advanced computer technology.

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**Keywords:** Forum discussions, online education, instructor role, students' interaction, higher education setting

### Introduction

Online forums also known as discussion boards or message boards enable users of a website to interact with each other by exchanging tips and discussing topics related to a certain theme. Learning through online forums is an important learning strategy for students to improve their language skills along with others. The use of computer based online discussion through online forums is evident in the curriculum of many courses throughout the world in universities in Australia, New Zealand, South Korea, the United Kingdom, the United States (Scott & Ryan 2009) and in Georgia as well. With the rapid development of computer-mediated communication, online forums have become more involved in classroom settings to promote student critical thinking, knowledge construction and language learning autonomy. There is a need for teachers to encourage students to use new technologies such as online forums to gain more exposure in the language along with many other various disciplines. Asynchronous online discussion forums are some of the simplest computer-mediated communication tools that teachers can easily integrate into their teaching to extend discussions beyond classroom contexts.

### Characteristics and Integration

Online forums require students to participate; grade student efforts; involve learning teams; structure discussion; have a hand in assignment; use experience in posing questions and scenarios; relate the discussion to course objectives; establish a friendly, open environment; use authentic tasks and topics; emphasize learner-centered instruction;

encourage students to give constructive feedback and suggestions; let students experience, reflect and share the benefit of using threaded discussion; be sure that instructors facilitate collaboration and knowledge building; encourage dialogue and referencing of other student postings; use humor for motivation; use emoticons to help convey ideas and feelings; provide a social presence, in which students and instructor are able to present themselves as "real people" and communicate with their personality.

The online discussion forum allows students to work together on projects in small groups, participate in on-going discussions focused on course content, and to "present" group project products to the rest of the class. All of this is done independent of student location and time of actual participation in the discussion forum. This is coordinated with a separate web site for the readings and assignments of an online course. Making weekly participation in the discussion a requirement "institutionalizes" the discussion forum within the course.

Weekly discussion topics are coordinated with the web course assigned readings for each week. Students are asked to respond to one or two open ended questions designed to elicit discussion about the topics. Requiring students to respond to at least three other student postings initiates a round of discussion among the participants. Each student's posting is listed in the forum under the weekly topic.

Student group projects are on-going across 14 weeks of a 15-week semester. Students assign themselves to a topic by posting their name and email addresses and stating what sub topic they are interested in doing research on. Group size is usually limited to 6-10 students for ease of communication. Students may exclusively use the work area set aside for their topic in the discussion forum or they may correspond using email or chat rooms.

All postings within the large group are public and archived so that whole transcripts can be re-viewed as needed and readily accessible to all participants. This written record constitutes a body of knowledge collectively written by participants in the course. Group project work can be public or sheltered by password assignment.

Participation in the virtual conference demands that students become actively engaged with the course content and through the interaction with their peers, negotiate the meanings of the content. They construct knowledge through the shared experiences that each participant brings to the collaborative discussions. The online web courses about teaching offer deeper perspectives and opportunities to learn because the participants are teachers from school districts around the state and other states. This is not a narrowing of perspectives, but a broadening of the knowledge base as experiences are shared and compared relative to teaching issues.

This particular use of the discussion forum, to negotiate and construct knowledge, is an example of using the technology as a cognitive tool and not simply as another kind of blackboard or one-way communication method. Cognitive tools and environments stimulate cognitive learning strategies and critical thinking (Jonassen, 1998). Students engaged with course content in discussions and group work with other students engage in generative processing of information. Students draw upon their own experiences and interpretations and share these with the group discussion. They draw on their own teacher stories to relate to the course content. They read other student responses and interpretations and compare these with their own thoughts. This involves the processes of reflection and the construction and reconstruction of domains of knowledge. It is a negotiated interpretation of knowledge with student ownership. The learning is deeper and more long lasting and students refine their thinking and their voice.

The discussion forum environment evens the playing field of opportunity and accessibility. Those students who have a reflective style that does not lend itself to quick, off the hip questions or comments now have time to contribute their well thought out responses. Connections that few have time to make in the stream of classroom discourse now stand out

in a discussion forum flow of asynchronous discussion. Those students who migrate to the back of classrooms suddenly find that in the virtual environment their voice is not only solicited, but it is required and they are discovering that they can interact with the content of the course and their peers.

Group work within this environment imparts a shared sense of purpose and develops a group identity with a sense of interdependence and belonging. The initiation of these tasks can be perceived as exceptionally difficult for students who are not familiar with the concept in a web-based environment. The tasks must be structured with clear instructions and expectations. The public display of group work products in the discussion forum through the use of graphics, Power Point displays, or links to web sites maximizes the learning potential for the whole class and provides a model for students to use in future work.

Students are never anonymous as their name is posted with their comments. They develop an identity online as well as a voice as they tell their stories and mutually construct understandings around the course content.

The discussion forum makes active participation by all students the price of citizenship within this learning community. The asynchronous environment assures that there is time enough for all to respond. Hartman, et al. (1996) found that computer-mediated-communication did not just redistribute shares of a constant pie (communication time), it actually increased the size of the pie. Communication is among all participants, including the instructor and it is accessible at all times.

### **Benefits**

Online forums provide many benefits to students and teachers. Students are found to be in favor of the self-paced, self-regulated feature of asynchronous discussions compared to face-to-face discussions.

On the other hand, online forums create a discussion environment. Everything that gets posted gets read over and over again. Online forums rarely turn into heated arguments as people are given time to research and consider their comments before replying. This in turn, makes high-quality discussion. Smith (2001) points out that well structured and appropriately facilitated online discussion can provide a learning environment that allows the immediate application of new information to learners' personal and professional lives. Besides, online forums are more flexible compared to face to face communication as they provide time to reflect and think and allow both introverted and extroverted students to be involved in online discussions. By participating in online forums, access to knowledge is free; forum members could willingly share their wealth of knowledge and experience with other members. In return, every member of the forum can benefit from this infusion of free knowledge.

Here are some potential benefits of regular online forum participation according to Pavlina (2005): Intellectual exchange; learning new ideas and refining old ones; enjoying community membership; influencing the forum's evolution; contributing to others; making new friends and contacts; new business leads; keeping up with current events; learning about new opportunities.

There has been evidence that the messages composed by students in online forums include longer solutions for problem-solving, and consist of deeper reflections compared to face-to-face discussions. Researchers have found that students can take more time to read, craft, reflect on their responses, and find relevant information when composing messages in such an environment (O'Neill et al. 2006). Online discussions build a motivating social practice of current generation students, who use technology to contact friends and family throughout the day. In online forums, students develop their autonomy in language learning. Each participant is given more authority to shape or lead the discussion in the direction they prefer, while teachers may have relatively less control over the learning interactions.

A well-structured online discussion forum can provide students with extensive practice in writing. The online forum allows opportunities for the facilitation of curricular objectives via modern technology. Online discussion forums provide an authenticity in writing and therefore serve as a meaningful supplement to the writing curriculum. The implementation of the online forum appears to provide reinforcement tasks to enable students to practice their writing. Besides that, the online forum also facilitates collaborative learning. Students could share their ideas and opinions in order to produce better quality writing as compared to if the tasks were to be completed independently.

Schuetze (2010) conducted a research in the University of Victoria Canada and the University of Kiel in Germany. The study showed that most students of both universities felt comfortable writing online and they wrote more than ever before. They used the forum more actively than in a face-to-face classroom or chat. In turn, some students also mentioned that they liked to read what other students posted in online forums.

In a study among twenty-five Chinese and Kiwi learners, Gerbric (2005) encountered that online forums provide opportunities specifically for particular groups of students. Chinese students found the virtual and text-based nature of the medium allowed them to enter discussions more easily and they felt more comfortable with their written responses compared to face-to-face discussions.

A number of studies have found that online forums are beneficial in developing communication skills. The greatest potential for effective use of online communication as a learning tool is when the students are 'at a distance' from the school and their teachers.

Holmes (2004) acknowledged a period of increased communication between online participants of his study after 10 days of interaction on online forum and asserted that input from teachers or instructors during this period led to maximized learning opportunities.

Scott and Ryan (2009) in their study discovered that online members become more engaged in discussions and interacted effectively when they were set appropriate tasks. For an example, a complex task that requires research and discussion is more suitable for small groups to work on collaboratively. When students are given problems related to their prior experience, the discussions show higher levels of interaction, and the participants show more passion for the topic.

Through online forums, teachers are able to document the growth of their students' ability to support a point in their messages. Students improved their ability to respond to a classmate and to make a point supported with evidence.

Online forums are a good way of communicating, especially when the teacher or lecturer is unavailable. It is also a good way to communicate with everyone as it creates a good communication between students and school. Students are more comfortable and less aggressive when participating in online forums. Online forums also offered more equal opportunities for group members to voice their opinions; they demonstrate very high levels of interaction among group members. Online forums are regarded as a social interaction that reduces students' reliance on the face-to-face discussions.

## **Challenges**

Because of the limited opportunities for face-to-face interactions between an instructor and their students, distance education has brought many new challenges to the teaching and learning process. Effective curriculum design is hindered by the lack of understanding of the characteristics, attitudes, and needs of the students in these courses (Williams, 2006). At the same time, the faculty needs to develop skills in helping students adjust to the unique features of distance education. However, the lack of adequate training may prevent them from fully participating in the distance education practices, especially considering that they have to spend twice as much time in preparing and delivering an online

course as compared to a traditional course. Distance learning students desire content and motivational support beyond course materials and are limited in their success without it (Williams, 2006). Collaborative learning is necessary in building one's own cognitive process. To promote learner-centered education, the American Psychological Association (APA) designed a document -- Learner-Centered Psychological Principles -- to provide a guideline of the factors affecting learning in the 1990s (APA Work Group of the Board of Educational Affairs, 1997). It includes 14 principles which are grouped into four domains: cognitive and metacognitive factors, motivational and affective factors, developmental and social factors, and individual differences factors. Principle 11 relates closely with student interaction issues under the developmental and social factors. It states that learning is influenced by social interactions, interpersonal relations, and communication with others. Besides active communication, interaction, online presence, and moderated discussions, the formation of an online community is one of the key elements for high-quality online education. Fostering interactivity in an online community is the main indicator of success in online courses (Bender, 2003).

Outcome of traditional education and distance education are the same, only if one selects the appropriate teaching material and method, including student-to-student interaction and timely teacher-to-student feedback. In general, the collaborative learning culture promoted by the cognitive apprenticeship theory can be applied into all the situations of the teaching and learning processes. However, because of its unique application for the distance education field and the urgent needs of such theories in the field, the cognitive apprenticeship theory is very helpful in planning distance learning courses.

The implementation of a constructivist approach to learning and teaching that emphasises the "social" construction of knowledge causes some problems for both the online learner and online teacher. Some learners may prefer to work independently so group projects, or the requirement to participate in online discussion forums at a particular period of time in a course may not suit all approaches to learning.

The level of learner engagement with communication features is both a reflection of the design of the online course, and the ability of teachers to engage the learners in dialogue. It indicates that online interaction between course participants is a critical feature of online teaching.

The emphasis placed on social interaction in a constructivist context and the opportunities for interaction provided by technology support the importance of collaboration and group knowledge construction in an online context. In the online classroom, it is the relationships and interactions among people through which knowledge is primarily generated.

Operating in the online environment means that bodily differences and social values attached to visible differences are invisible and irrelevant - teachers and learners online construct themselves through text in the discussion forums, for example (distinctions of gender, ethnicity, body shape or impairment, accent or speech styles 'don't matter' – visual cues of difference are missing) and the challenge is to know more about online sociality and the 'special circumstances' of learners.

Using grades to reward participation requires careful thought, as meaningless postings do not equate to quality learning outcomes. Clearly defined expectations in terms of levels of participation and assessment requirements are essential.

### **Instructor Role**

Course leaders have the opportunity with the online environment to adapt, modify and change whole sections of the course, or ways previously planned to proceed, to engage with content, to assess – according to the students' needs, interests, expectations, contexts and prior learning's, so long as the Course Specification (objectives, etc.) continue to be met.

Online means being able to truly take account of what students want, re-shaping the environment to make the most of students' collective experience and expertise, mobilizing them to construct knowledge for their own purposes.

Online instructors rated the following as the top four techniques for keeping asynchronous online discussion on topic:

- carefully design questions that specifically elicit on-topic discussion,
- provide guidelines to help online learners prepare on-topic responses,
- reword the original question when responses are going in the wrong direction, and
- provide discussion summary on a regular basis.

From the growing use of online forums for education, we see that they can operate well — with specific questions getting resolved quickly, and open-ended discussion questions receiving a strong flow of contributions. But they can also operate poorly, with little student participation and questions that go unanswered for long periods of time. An instructor would like to make use of an online forum so as to promote better outcomes. How can an instructor use her own behavior to incentivize higher student participation? For example, if the instructor actively appears on the site, does this tend to increase student participation (because they are hoping to get the instructor's approval) or decrease it (because they assume that the instructor will answer the questions herself)? Is there an optimal way to trade off these two forces, and how does the best outcome the instructor can elicit through her behavior depend on the size of the class — as the class size becomes large, can the instructor step back and let the class do most of the work on the forum? While such questions appear at the heart of discussions about best practices in these forums (Andresen 2009), there has so far not been a formal way of reasoning about them.

In a study that asks the question of what role an instructor should undertake in an asynchronous discussion forum (sage, guide, or ghost), Andersen (2009) found that it depends on what the instructor wishes to accomplish. Learner ratings of a course will show that an instructor is more enthusiastic and expert if s/he increases his/her postings. ... However, an instructor that contributes significantly to a discussion tends to decrease the length of discussions (this does not necessarily decrease the quality of the discussion, however) as well as their frequency. What appears to be occurring in this situation is that the instructor can decrease learner-learner interaction because the learners begin to rely on the instructor to answer questions, becoming the expert or sage to 'settle' debates.

The role of the instructor in online discussion forums is a key one in many forms of online education. However, (Mazzolini & Maddison, 2005) argue that without face-to-face feedback, it is not easy for instructors to gauge the "health" of their discussion forums, especially when dealing with distance education students, and it can also be difficult for coordinators of online programs to judge when their instructors are doing a good job in supporting their students-learning online.

The coordinators of online programs are likely to judge forums intuitively and assume that forums containing large numbers of student postings are best. As a consequence they are likely to encourage their instructors to "jump in" often, by making frequent postings and starting new discussion threads in order to encourage students to post.

If coordinators aim to achieve positive responses for issues such as instructor enthusiasm and expertise on university evaluation surveys, then our experience suggests that coordinators should encourage their instructors to post often, even if the student posting rate does go down in the process. Obviously there is a balance to be achieved here. Instructors posted approximately half their postings during each forum and half at the end, which is compatible with the instructor survey. Instructors who tend to post most towards or at the end of forums scored particularly highly for enthusiasm and expertise on university evaluation

surveys, but as these were the instructors who also tended to post the most overall, this was not surprising. The instructors tended to post questions, answers or a mixture of both, had very little effect on students - responses to the surveys, except that students did seem to regard instructors who answered lots of questions as more enthusiastic, and they did not appreciate it when instructors mainly posted “housekeeping” type postings rather than engaging actively in the online discussions.

### Conclusion

Williams (2006) applies the institutional theory to higher education institutions and concludes that six basic components underly the institutions' capacity of offering distance education courses. The six basic components are Administrative commitment (allocating resources), Online student support services (registration, advising, providing access), Full-time online coordinator (assisting course development and online teaching issues), Internal/External financial and technology resources (computers, online course management system), Online professional development (developing faculty online knowledge), and Adequate faculty participation (enough innovators supporting online education). Teachers are experiencing change in terms of their teaching philosophies, their relationships with learners, and their work patterns and activities. The physical space defined by a classroom has been replaced by a virtual space defined by a learning management system. Teachers' roles have changed from being the “experts” in their field to being facilitators of learning. They are reasonably comfortable with the notion that they combine this role with another one that defines them as learning partners. This is a situation that not only allows but also encourages other members of the group to assume leadership by enabling participants' opportunities to change the course direction, share resources or assist the group by proposing initiatives. Much progress is being made in getting the best out of the online environment. Nevertheless, it is pointed out that many of the difficulties that online teachers continue to raise focus on the tensions between teaching philosophies, learner expectations and traditional organisational mindsets. While the experienced teachers are well aware of the importance of shared understandings, there is also the acknowledgement that the rapid pace of change in the information and communication technologies requires a great deal of flexibility and adaptability by both teachers and learners.

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# IMPLEMENTING THE NEW SENIOR SECONDARY SCHOOL CURRICULUM FOR THE REALIZATION OF THE OBJECTIVE OF ENTREPRENEURSHIP EDUCATION IN ONDO STATE, NIGERIA

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## Abstract

The study examines the implementation of the new senior secondary school curriculum for the realization of the objective of entrepreneurship education in Ondo State, Nigeria. Today, many graduates from Nigerian Secondary Schools are unemployed and cannot employ themselves. They are curiously idle because they lack the pre-requisite for job creation despite the secondary education received. Descriptive research design of survey type was used. Ondo State is made up of three Senatorial districts (North, South and central) with 304 Public Senior Secondary Schools and over 280 Government approved Private Secondary Schools (EMIS, 2014). The target population from which the sample was selected consisted of 18 public secondary schools and 18 private secondary schools from each of the 3 Senatorial District in Ondo State, Nigeria selected through a simple random sampling and stratified random sampling methods. One Principal and 5 teachers were randomly selected from each school after stratification into urban and rural areas with equal chances. A total number of 108 principals and 590 teachers were sampled as respondents. Data were collected through the use of a self-developed and validated questionnaire tagged 'Implementation of the New Senior Secondary Curriculum Descriptive Questionnaire' (INSSCDQ), with a reliability coefficient of  $r = 0.76$ . One research question and two hypotheses were generated and tested. The result shows that there is a significant difference in the Perception of Teachers in the implementation of New Senior Secondary School Curriculum between Public and Private senior secondary schools in Ondo State ( $t_{\text{cal}} = .667 > t_{\text{val}} = .564$ ;  $P < .05$ ). Also, the test performed showed that with means of 13619.10 for urban and 13323.33 for rural. Thus, the differences was not statistically significant ( $t_{\text{cal}} = .256 < t_{\text{val}} = .804$ ;  $P > .05$ ). The result provides a sufficient evidence to recommend that entrepreneurship education should be incorporated into secondary school programme right from the junior secondary. Also, Government and Proprietors of schools should ensure proper funding of schools to enable the provision of functional trade workshops and other facilities for effective teaching and learning of the trade subjects.

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**Keywords:** Curriculum, entrepreneurship education, elective subjects, trade subjects, universal primary education

## Introduction

Nigeria, like other countries in the world, has adopted education as the key to socio-economic transformation, especially in this era of science and technology-oriented Knowledge driven 21st century. No wonder the constant changes and reforms in her educational policy and curricular since the attainment of her political independence in 1960 to meet the reality of modern times. The clamour now is the New Senior Secondary School

Curriculum (NSSSC) which would produce well equipped secondary School graduates for tertiary institutions and for the world of works (Nigeria Education Research and Development Council, NERDC,2011).

However, one is worried by the increasing rate and the supposed "appropriateness" of curricular reviews and reforms that came with much optimism and conviction and disappeared with inverse pessimism and despair. For instance ,since 1960 there were such reviews as Banjo Review, the Taiwo Review, the Ikoku Review (Akinyemi, 2012). According to Fafunwa (2004) the Universal Primary Education(UPE) which was launched with very high hopes by the defunct Western Nigeria in 1955 and by the defunct eastern Nigeria in 1957 and later by the Federal Government of Nigeria in 1976 was later jettisoned for curriculum inadequacy and inadequate planning. The National Policy on Education was launched in 1976, revised in 1981 and 2004, leading to the replacement of the old system, that was 6-5-2-3 of 6 years of Primary education, 5 years of Secondary education, 2 years of Higher School Certificate and 3 years of University education, with the 6-3-3-4 system which is 6 years of primary education, 3 years of Junior Secondary School, 3 years of Senior Secondary School and 4 years of University education. The Junior and Senior Secondary Schools were initially de-articulated and later re-articulated for ease of administration, and efficiency. Presently the 6-3-3-4 has joined the grave yard of the earlier educational programmes and systems for want of relevance (NERDC,2011) and epistemological inadequacy. Indeed, this situation tends to corroborate Raza (2003) assertion in Tillack (2003) that the educational system of the colonial countries tended to promote the "Separation of work from education" and the various educational reforms aimed at redressing the anomaly have been fruitless even after many years of Political Independence. According to Ikediugwu, Nwankwo and Nwanchukwu (2009) in Azikiwe (2009) ed. the major problem that faces education in Nigeria today is lack of congruence between knowledge received in schools and the world of work.

### **Secondary School Curriculum and Entrepreneurship Education in Nigeria**

The introduction of the NSSC in the secondary school in Nigeria is a fresh initiatives which according to NERDC (2011) aims at ensuring that graduates from secondary Schools are, among other things professionally trained in entrepreneurship skills and possess relevant Information Communication Technology (ICT) skill that will equip them for challenges of labour market. Hence every student, irrespective of his or her field of study is expected to study 5 core subjects viz; English Language, General Mathematics, Civic Education, Computer Studies and 1 trade Entrepreneurship subject out of 33 which include: Auto body repair and spray painting; Auto electrical work; Auto Mechanical Work; Air condition/Refrigeration; Electrical installation and maintenance work; Radio, TV and Electrical Work; Block Laying; Brick Laying and Concrete Work; Painting and Decoration; Carpentry and Joinery; Upholstery; Garment Making; Cosmetology; Keyboarding; Leather Goods Manufacturing and repair; Animal Husbandry; Marketing; Tourism; GSM Maintenance and others. The aim is to ensure the attainment of the national policy objective of "preparation for useful living within the society". (National Policy on Education, 2004). It is meant for every Nigeria citizen to be equipped to break the farcade of unemployment through the development of self as a precursor to a meaningful contribution to the development of the society of which he or she is part.

But as Nojimu-Yusuf and Adebessin (2011), observe, the most crucial aspect of curriculum practice is implementation as the actual hatching of the planned curriculum. Moreover Samoff and Assie-Lumumba (2003) asserts that effective reform in education requires initiatives with strong local roots and the broad participation and vigorous implementation by all stakeholders including not only officials but students, parents, teachers

and communities. Hence this study is undertaken to critically examine the level of implementation of the NSSC in Ondo State. The choice of Ondo State been one of the 36 states in Nigeria is precipitated by common understanding in Nigeria that education is the largest industry in Ondo State and invariably the centre of teaching and learning in Nigeria where the light of education is presumed to be shining to other Nigerian States, hence the accolade "The Sunshine State". Also, the Ondo State government appears to have adopted social Demand cum Manpower Planning Approach in the Secondary School Education which has not ensured self employment and private enterprises among youths and thus serious manpower needs outside "White collar" job. Ondo state has the largest number of public schools in Nigeria with over 880 primary schools (Wikipedia) and 304 secondary schools (EMIS 2013), notwithstanding Government funding of the Senior School Certificate Examination fee in all the public Secondary Schools since 2000, the free education policy for pupils right from Primary School to the Senior Secondary School and the adoption of 60:40 admission ratio in favour of science and technology to Arts and Humanities in the Senior Secondary School.

### **Statement of the Problem**

The hues and cries of Nigerians over the inability of Nigerian Secondary education to produce graduates for useful living in their society has been on since 1959 when Ashby identified the misfit of the graduates from Secondary Schools to local rural living except for civil service. Today ,many grandaunts from Nigerian Secondary Schools are unemployed and cannot employ themselves. They are curiously idle because they lack the pre-requisite for job creation despite the secondary education received. They migrate massively from rural areas to urban areas and engage in various forms of social problems, thus bringing the level of development of the country to a ridiculous backward level and the future a mirage.

### **Significance of the Study**

The findings from this study could be of vital importance especially to the Nigerian youths in their quest for self employment, professionalism and self fulfillment which would provide antidote for the mass unemployment problems plaguing the economy.

The state ministry of Education, NERDC, Principals and Teachers of secondary schools could also find the results of the study valuable in policy formulation and implementation.

### **Purpose of the Study**

The main purpose of this study is to examine the level of implementation of the NSSC in Ondo state public and private secondary schools from the perception of the principals and teachers.

Attention shall be focused on:

- i. the views of teachers in rural and urban settings on the level of implementation of the NSSC in Ondo State;
- ii. the views of teachers in public and private senior secondary schools on the level of implementation of the NSSC in Ondo State.

### **Research Question.**

What is the level of implementation of New Senior Secondary School Curriculum in Ondo State?

## Research Hypotheses

Ho:1 There is no significant difference in the perception of teachers in public and private Senior Secondary Schools on the implementation of the New Curriculum in Ondo State.

Ho:2 There is no significant difference in the perception of teachers in urban and rural Senior Secondary Schools on the implementation of the New Curriculum in Ondo State.

## Methodology

### Design

Descriptive research design of survey type was used.

### Population and Sampling Techniques

Ondo State is made up of three Senatorial districts (North, South and central) with 304 Public Senior Secondary Schools and over 280 Government approved Private Secondary Schools (EMIS, 2014) The target population from which the sample was selected consisted of 18 public secondary schools and 18 private secondary schools from each of the 3 Senatorial District in Ondo State, Nigeria selected through a simple random sampling and stratified random sampling methods. One Principal and 5 teachers were randomly selected from each school after stratification into urban and rural areas with equal chances. A total number of 108 principals and 590 teachers were sampled as respondents.

### Instrumentation

Data were collected through the use of a self-developed and validated questionnaire tagged Implementation of the New Senior Secondary Curriculum Descriptive Questionnaire (INSSCDQ). It consisted of 12-items, based on Likert scale format of Strongly Agree (SA)=4 points, Agree (A)=3 points, Disagree (D)=2 points, and strongly Disagree (SD)=1 point with a reliability coefficient of  $r = 0.76$ .

## Results

### Research Questions

The following research questions guided the study:

What is the level of implementation of New Senior Secondary School Curriculum in Ondo State?

Table 1 Mean Responses of the Participants

S/N	Items	Public Mean	Private Mean	Urban Mean	Rural Mean
1	Students are exposed to regular workshop practice in the school	2.89	2.01	3.41	2.11
2	Computer education is now a compulsory subject in my school	2.77	3.01	2.99	1.78
3	The subjects offered by students will prepare them for future self employment.	2.15	2.11	2.53	2.65
4	There are enough qualified teachers to teach the trade subjects in my school	3.45	2.33	3.98	2.04
5	There is adequate instructional materials in my school	3.42	3.00	2.77	2.67
6	Every student must offer an elective, irrespective of his/her field of study	4.50	4.33	3.98	3.88
7	There are functional workshops for different trade subjects in my school	3.56	2.76	3.69	2.10
8	Every student is expected to offer one trade entrepreneurship subject in the school	4.55	4.23	3.89	3.22

9	There are relevant textbooks for the new subjects on the school curriculum	2.10	2.00	2.12	1.98
10	Teachers are properly motivated to be committed to effective implementation of the curriculum	2.21	2.01	2.13	2.01
11	There is effective monitoring of curriculum implementation through the quality assurance agency	3.00	2.34	2.78	2.22
12	The school infrastructure is adequate for proper teaching of the trade subjects	2.66	3.76	2.57	2.13
<b>Ave</b>		<b>3.11</b>	<b>2.82</b>	<b>3.07</b>	<b>2.40</b>

Source: Fieldwork, 2014.

Table 1 revealed that the average mean score for the public secondary schools on the level of implementation was 3.11 which is higher than that of private secondary schools that stood at 2.82. Also, a cursory look at the average mean score for urban secondary schools reveal a higher average mean of 3.07 as against the rural secondary schools with an average mean of 2.40. Decision rule in this study stands at 2.50 for acceptance. Thus, any mean below this is negative.

Table 1 is also depicted with figure 1 below which shows the variations in the mean responses to the instrument.

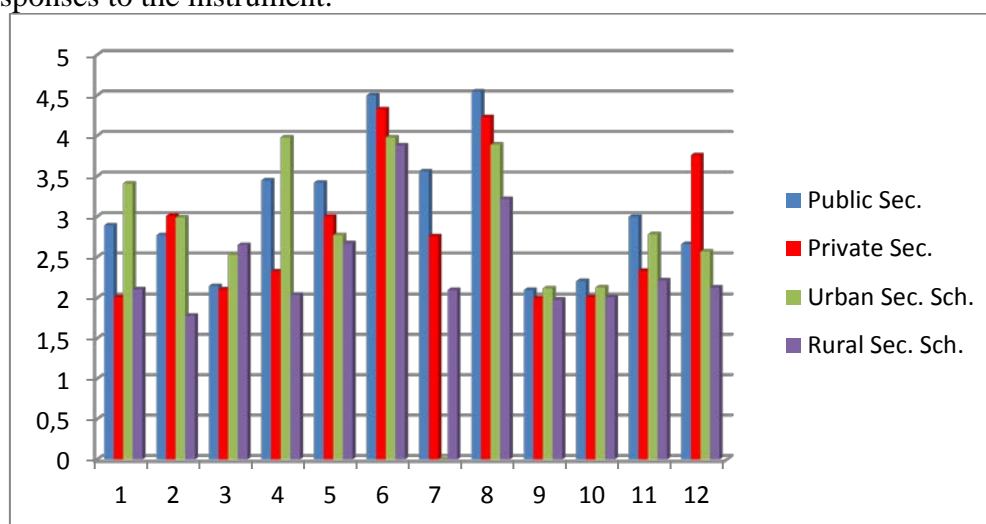


Figure 1: Mean Responses to Items on the Instrument by Participants

## Hypotheses Testing

The data were analyzed electronically with the use of Statistical Package for Social Sciences (SPSS) to statistically determine the difference between the dependent and independent variables, with t-test statistics.

### Hypothesis One

There is no significant difference in the perception of teachers in public and private Senior Secondary Schools on the implementation of the New Curriculum in Ondo State.

In an attempt to test the first hypothesis, t-test analysis was employed.

Table 2 Summary of Difference in the Perception of Teachers in the Implementation of New Senior Secondary School Curriculum between Public and Private Secondary Schools in Ondo State

Source	Mean	SD	SEM	df	t-cal	t-val	Sig.
<b>Public Sec. Sch.</b>	265120.13	1962.10	3201.09				
	697	.667	.564	P<.05			
<b>Private Sec. Sch.</b>	22421.08	3321.01	3142.50				

\*Significant at 0.05 level.

In order to test this null hypothesis, t-test statistic was performed. This involved the treatment of responses of sampled participants from public secondary schools and private secondary schools in Ondo State, Nigeria. The result shows that there is a significant difference in the Perception of Teachers in the implementation of New Senior Secondary School Curriculum between Public and Private senior secondary schools in Ondo State ( $t\text{-cal}=.667 > t\text{-val.} = .564; P < .05$ ).

### Hypothesis Two

There is no significant difference in the perception of teachers in urban and rural Senior Secondary Schools on the implementation of the New Curriculum in Ondo State.

In an attempt to test this hypothesis, the preliminary descriptive computation of responses was subjected to t-test statistics to arrive at table 3.

Table 3 Summary of Difference in the Perception of Teachers in the Implementation of New Senior Secondary School Curriculum between Urban and Rural Secondary Schools in Ondo State

Source	Mean	SD	SEM	df	t-cal	t-val	Sig.
<b>Urban Schools</b>		13619.10	2837.20		1359.18		
	697	.256	.804	P>.05			
<b>Rural Schools</b>		13323.33	2342.21		1049.80		

Not Significant at 0.05 level.

In order to test this null hypothesis, t-test statistic was performed. The test performed showed that with means of 13619.10 for urban and 13323.33 for rural. Thus, the differences was not statistically significant ( $t\text{-cal}=.256 < t\text{-val.} = .804; P > .05$ ). See table 3.

### Discussion of Results

The findings of this study reveal that variation exists on the perception of teachers in the implementation of the New Senior Secondary School Curriculum between public and private secondary schools in Ondo State. The level of implementation is perceived as significantly higher in public than in private secondary schools. Most private schools used for this study have no functional trade workshops hence, students are not exposed to regular workshop practice, this could be attributable to the high cost of building and ineffective monitoring of the curriculum implementation in the private schools by the Government as revealed in the study. This position is in line with the submission by Orialu and Ebhomen (2009) that lack of tools and equipment and the non-challant attitude of the government are challenges facing the implementation of Basic Technology curriculum.

Also, the study reveals that there is no significant difference in the level of implementation of the new curriculum in the urban and rural secondary schools. Findings however reveal that there is inadequate relevant textbooks for the new subjects on the curriculum. The findings of the study underscore the need for continual and effective teaching of entrepreneurship education in Ondo State secondary schools ( Hassan and Olaniran, 2011).

### Conclusion

Entrepreneurship education, is no doubt an interventionist approach to solving the unemployment problem plaguing Ondo State. The youths are decaying in joblessness despite the purported secondary education which ought to prepare them for useful living in the society. This is why it is germane that an effective implementation of the new curriculum should be put in place in Ondo State senior secondary schools.

## Recommendations

The following recommendations were suggested:

1. Entrepreneurship education should be incorporated into secondary school programme right from the junior secondary school in order to instill the spirit of job creating in the mind of the students at their formative stage of life.
2. Government and Proprietors of schools should ensure proper funding of schools to enable the provision of functional trade workshops and other facilities for effective teaching and learning of trade subjects.
3. Educational planners should consider the issue of newness of the new subjects on the curriculum and the need for mass production of relevant textbooks for the use of teachers and students.
4. Government should ensure effective monitoring of the implementation of the programme in both public and private secondary schools.
5. Efforts should be made to give financial and managerial assistance to those entrepreneurs who may wish to establish their businesses after secondary education.

## Implication of the Study

This study exposes the deficiencies in the implementation of the newly introduced senior secondary school curriculum in Nigeria with a particular focus to Ondo State which has a similar representation from other parts of the country. The outcome of the study is an eye opener to the implementation of the curriculum and thus, pointing at the gray areas to be monitored in the implementation processes of the said curriculum.

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# **AUTO-EVALUATION OF UNIVERSITY TEACHER AS A BASIS FOR QUALITY AND PROFESSIONALISM IN THE UNIVERSITY EDUCATION**

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## **Abstract**

The author of the submission studies some general patterns in the transformation processes and the processes of internationalization in the higher education, which started with the adoption of Bologna Declaration and the Lisbon Strategy. The author pointed out the quality and professionalism of higher education as well as the opportunities for improving its quality, which are currently the most pressing issues concerning a teaching profession. The results of the questionnaire survey, which was carried out in 2009, 2010 and 2011 and in which 114 future pre-primary and primary school teachers participated, form part of the university teacher's auto evaluation. The auto evaluation is one of the elements that determine the improved quality of higher education and enhanced professional competencies of future pre-primary and primary school teachers. The aim of the survey was to gather opinions on the quality of higher education and on the educational needs of students in the field of Pre-school and elementary pedagogy. The survey became the starting point for solving of the research task<sup>1</sup>.

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**Keywords:** Autoevaluation, university teacher, the quality of higher education, professional competencies, teacher training graduate

## **Introduction**

Resolution of higher education issues and intensification of transformation processes have begun in the Italian Bologna in June 1999 at the meeting of 29 ministers from signatory states who adopted *Bologna Declaration* on establishing the *Higher Education Area - EHEA* by 2010 and on improving the overall system of European higher education.

The Bologna Declaration sets basic areas of long-term purposes:

- *to improve* international transparency of studies and to recognise qualifications through gradual convergence toward general framework of qualifications and educational levels;
- *to divide* higher education to three levels: bachelor, master and doctoral;
- *to propose* a general system of degrees for graduates in bachelor level and for graduates of master and doctoral level (EACEA, 2009);
- *to unify system of higher education in order to allow smooth transition from one university to another and to enable students to get education in all of Europe without restrictions*;
- *to introduce a uniform credit system* (ECTS) as a tool enabling comparison of achieved study results in all Central European countries and to allow transfer and recognition of earned credits and experience from one institution to another both at home and abroad ([www.euroactiv.sk](http://www.euroactiv.sk));
- *to facilitate* student and teacher mobility within the European area and their integration into the European labour market.



The creation, reinforcement, provision and implementation of Bologna process purposes have been supported by European national and supranational organisations, by governments of all 47 signatory countries, national rectorial conferences, educational institutions, colleges, universities, centres, associations as well as by trade unions. The Council of the European Union is one of very important institutions organising regular meetings of the highest representatives of countries and European Union Member States' governments. The Educational Committee regularly deals with issues of education, science, research and development at the European level and measures adopted by the Committee are transferred to national levels.

March 2000 presented a significant milestone for *transformation processes*. 47 members from signatory countries met in Lisbon, Portugal. **Lisbon Strategy** has been adopted at the meeting. The European Council representatives have agreed on an ambitious goal to "make Europe, by 2010, the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010" (<http://vedomostnaspolocnost.vlada.gov.sk>).

The Lisbon Strategy for Growth and Jobs defines several priorities. Two basic priorities have been set for issues related to **education, research and development**:

- *better education and acquisition of skills* which means that the educational system needs to be adapted at all levels in order to make creation of knowledge society possible;
- *to invest in research and development*, that is to emphasise education, science and research as the basis of a knowledge society which can ensure competitiveness of a country.

As for research and development, the Lisbon Strategy builds on the idea of creating the European Research Area (ERA) enabling free movement of researchers, scientific knowledge and technologies. The creation of the European Research Area was influenced by recognising the lack of appropriate environment for stimulating research and development and for applying their results in practice, recognising the fragmentation of activities and deficiencies in funding with diffused resources. The idea in Lisbon Strategy from January 18 2000 became the foundation for developing new global projects and global policy.

The second half of 2008 was unfavourable for Europe as we began to see effects of the world economic and financial crisis in great intensity. Measures to overcome the effects were proposed at a meeting of Member States' and governments' representatives. Despite anti-crisis measures all Member States confirmed their interest to continue in common strategy even beyond 2010. Ideas on how to continue in the Strategy and what should be its content beyond 2010 have been included in the *proposal for continuation of the Lisbon Strategy in 2010-2020* entitled **Europe 2020**. The new strategy defines common objectives for all Member States, however, implementation of objectives and the way of reaching them has been left in the competence of each EU Member State.

### **Internationalisation of Higher Education**

Higher education is currently becoming more and more international. Educational institutions are being internationalised and there is an emphasis on the need to increase quality and professionalism both at national and international level. It is *sine qua non* for ensuring competitiveness of universities and at the same time it is the way to increase international acceptance.

Internationalisation is one of the tools for increasing quality, not only of higher education but also of scientific and research activity. Higher education institutions need to cooperate on research tasks in international projects, exchange knowledge and experience, apply educational methods considering the international dimension and develop common

international high quality curricula. Mobility of students, teachers and scientists should enable development of language and intercultural competences. International cooperation, extending creative and innovative capacities should be mutually beneficial for human resources, it should increase the quality of education, research and development and encourage employment. Reinforcement and support of cooperation between European higher education institutions and their global partners plays a significant role in promoting quality and excellence (Official Journal of the European Union).

The aim of the internationalisation of higher education is to reinforce social, cultural and economic development and support active citizenship of individuals and organisations, create moral values and increase requirements for ensuring quality higher education at the same time. To ensure quality of higher education across borders, the whole of university sector requires in-depth restructuring, modernisation and correspondence between tools and objectives of international classification systems in order to achieve transparency and comparability.

Internationalisation of higher education in Slovakia has not yet become the focus of politicians' attention because the strategy for development and support of internationalisation in higher education or the strategy for integrating Slovak universities in international cooperation has not been yet developed. There is also lack of methodology for quality assessment and when issuing accreditation teachers in higher education should be assessed not only on the basis of their involvement in research tasks but also on the basis of their *international educational activities*. Therefore, there is need to develop methodology for preparation and accreditation of common international study programmes (Conclusions from national seminar, 2010).

Internationalisation, support of international cooperation in higher education according to the Bologna process means creation and implementation of common study programmes, joining projects and networks for international educational and research cooperation, support for international research and last but not least increase in number and quality of mobility, not only of students but especially of researchers and educators. This is the only possible way of reinforcing professionals with higher education in their educational and training efforts and of reinforcing principles contributing to shaping such graduate profiles which are in line with the current requirements of the labour market.

### **Quality and Professionalism in Higher Education**

Professionals have already been dealing with issues of quality and professionalism in EU countries with more or less success for several years. According to Bednaříková (2011) many world experts (Elton 1992, Váňová 1995, Honzík 1996, Hausenblas 1997, etc.) focus on quality of teaching in higher education and connect quality of teaching with professionalism of teachers.

Professionalism of teachers means that teachers should be educated professionals in the field of training and education and equipped with competences enabling them to perform their work with high level of autonomy and responsibility for those being trained.

In September 2003 ministers from 47 signatory countries urged the European Association for Quality Assurance in Higher Education (ENQA) by means of the Berlin Communiqué to develop a set of standards, procedures and guidelines for quality assurance and peer review system. Efforts have been made to create generally acceptable set of basic values and best practices aimed at quality assurance of higher education institutions in the European Higher Education Area (EHEA). For this reason the European Association for Quality Assurance in Higher Education developed *Standards and Guidelines for Quality Assurance in the European Higher Education Area* in 2003 which were to serve as the basis for each EU Member State developing own quality assurance system in higher education.

European standards and guidelines have been proposed in such manner so as to be applicable for all European higher education institutions regardless of their structure, size or national system. They recognise the significance of institutional autonomy and primary responsibility for ensuring quality of higher education which lies with the particular higher education institution itself.

Pursuant to Act No.131/2002 Coll. on Higher Education Institutions which had been amended several times prior to 2011 and to currently effective Act No. 363/2007 Coll. schools are responsible for ensuring quality of higher education. Considering the fact that higher education institutions publish only such information in their reports which they find appropriate, measures have been taken to establish external quality assurance bodies. Besides schools themselves, accreditation commission also deals with quality of education. However, the commission is only interested in quantifiable indicators and educational activities of teachers, the teaching process and its quality as well as qualification or teaching skills of teachers are not the focus of attention.

Since 2008-2009 and pursuant to Act No. 131/2002 Coll. on Higher Education Institutions as amended, Slovak universities have been conducting a sociological survey among students focusing on assessment of teachers and evaluation of study programmes at their faculties. Results of the survey are discussed by the Rectorial board and forwarded to deans of faculties who are responsible for passing the results to heads of departments and for adopting measures in order to improve quality of teaching. The results of both student surveys can be found at the university website.

However, to discuss quality of education today is, to say the least, inappropriate or even impossible. Considering the analysis by Kosová (2011) who states that the number of students at Slovak higher educational institutions has increased **fourfold**, volume of academic activities have increased **sevenfold** and the number of students per one teacher has increased almost **threefold** since 1989. Moreover, since 1999 public expenditures from GDP decreased from 5.49% to 3.59% by 2008, which is the lowest percentage of all European Union countries (Kosová, 2011, pp. 105 – 106).

The European Research Area was established in 2000 based on the recognition of the lack of appropriate environment for stimulating research and development and for applying their results in practice, recognising the fragmentation of activities and deficiencies in funding with diffused resources (EHEA, 2011). We can say that Slovak higher education in 2011 is doing worse than in 2000. I believe that this is the result of non-critical adoption of Bologna Process purposes and tasks based on the Lisbon Strategy without respecting the state of the art and traditions and without observing the principle of harmonisation of accepted changes and the current state of affairs in education, science and especially in economy in Slovak school system.

Based on the above I can make an observation that to discuss quality or efforts to achieve quality of higher education is impossible unless legislative provisions are adopted in order to ensure funding from public resources in the first place just as we see it in surrounding EU and OECD countries. This will be equally impossible unless measures are adopted to restrict the constantly increasing volume of activity of teachers in higher education and of researchers as well as measures restricting the increasing number of students per teacher. Teachers in higher education are responsible for applying results and knowledge from own research activity in practice but especially for sharing them with students in order to train competent professionals for practice and to raise own successors. With *sevenfold increase in the volume of activities* which they must perform with *500 – 700 students*, teachers can hardly pursue quality science, research or apply teaching mastery which requires sufficient time for each student, being their advisor, counsellor, guide and support in their studies, etc.

To raise the status of teachers, to raise their salaries which are currently the lowest among EU countries is another important measure (see Kosová, 2011). Other discouraging and socially destructive aspects include absence of male teachers, outflow of qualified professionals from school services, outflow to foreign countries, reluctance to work as teachers, the burnout syndrome, stagnation in self-development, innovation, etc., which can threaten the existence of school and the teaching profession, as I have mentioned in the beginning.

I believe that besides quality assessment forced upon us in a controlling way by European institutions – this includes threats of non-acceptance and alleged incapability to succeed in competitive environment – it is also important to consider quality of life of teachers in higher education and of researchers. This quality means meeting social and cultural needs, material welfare, social acceptance, physical health as well as feeling good about performed work, good working climate, contentment, autonomy in scientific and pedagogic activities and other. Such quality of life of teachers in higher education presents the basis for the quality of education, scientific and research activity and shaping their personality.

In its report (2005) ENQA states that all higher education institutions should strive to increase quality of higher education, research and development in so that their *“staff are ready, willing and able to provide teaching and learner support that will help its students achieve those outcomes; and that there is full, timely and tangible recognition of the contribution to its work by those of its staff who demonstrate particular excellence, expertise and dedication”*. However, systemless and directive implementation of bureaucratic provisions and control measures, the constant increase in volume of activities of teachers, the rise of number of students and insufficient funding do not contribute to presented efforts for increasing quality, responsibility and improvement of higher education, research and development.

### **Professionalism in Higher Education, Research and Development**

Improvement, refining of higher education, research and development can be achieved through professionalisation of teaching. In her publication, Vašutová (2004) discusses issues of training for teachers in higher education and defines the term teacher educators referring to highly qualified professionals educating future teachers during their institutional training phase as well as practicing teachers in further or continuous education (Vašutová, 2004, s. 53).

Highly qualified professionals providing education to students should be experts not only in their field but especially in professional sharing of scientific expertise. In order to be capable of sharing this expertise, to develop creative capacities of students, their abilities to study in a rational way, to develop their critical thinking and key competences during the teaching process, these educators must be competent higher education teachers. This competence can be achieved through completing a course in higher education pedagogy and through years of own teaching experience.

Prior to 1989, higher education pedagogy was included in teacher studies and it was not necessary to integrate it in other fields of study. For this reason, the quality in higher education is widely discussed today and the requirement to graduate from higher education pedagogy applies for all teachers in higher education. Turek (2010) says that this is why higher education institutions offer opportunities for acquisition of pedagogic competence in higher education pedagogy courses, which – although not accredited – have become popular (Turek, 2010, p. 4).

However, I believe that if a teacher in higher education should acquire pedagogic competence and knowledge of higher education pedagogy which is the basic tool of

professionalisation, it should be done through an accredited study programme, most appropriately through doctoral studies. There is one simple reason for this. Only persons with tertiary education and PhD degree can currently aspire to become teachers in higher education. According to Sirotová (2000), higher education pedagogy should be one of the criteria for continuing in habilitation and inauguration. I believe this will be true only temporarily until a quality study programme of higher education pedagogy becomes an integral part of doctoral studies.

Accredited educational programmes in higher education pedagogy should become a part of continuous education of teachers in higher education and should be a component of increasing and achieving professionalism of teaching. Such professionalisation should include acquisition of the latest knowledge in pedagogy, psychology, ethics, sociology, innovation strategies in higher education teaching, in the area of use and application of the latest multimedia technologies in teaching process, especially acquisition of knowledge on developing interactive educational programmes, online questionnaires, information on developing online didactic tests, online interactive textbooks, information on organising online conferences and other information which will keep changing with changing social, scientific and technical development at home as well as world-wide.

Bednaříková (2011) says that Professor Lewis Elton (1992) questioned whether a teacher in higher education can be considered a real professional. Lewis Elton makes a link between quality of higher education and professionalism which is based on quality teaching and scientific and research work of a teacher. He says that to assess quality and professionalism of scientific and research work is easy, but to assess quality and professionalism of teaching which includes what a teacher should know, be capable of and what he or she needs to be is difficult (Bednaříková, 2011, p. 13).

According to ENQA report, teachers in higher education should not only mediate scientific knowledge in their field of expertise but should also guarantee satisfaction of students in the teaching process, support them in learning, be their adviser, counsellor and guarantor of high quality information which they acquire in order to place themselves in the labour market. Teachers in higher education should therefore have profound knowledge and understanding of the developing field and should be able to share this information, knowledge and experience effectively and in broad context. They should receive regular feedback regarding their performance which should become a part of their self-reflection, self-evaluation and an opportunity for further development of teaching mastery. Such view of professionalism of teachers in higher education is in line with European standards and rules for internal quality of tertiary education assessment (ENQA, 2005, p. 6).

Mobility presents another tool of professionalisation and world experts associate it with quality of higher education, science and research. Just as student mobility is considered one of the tools to enhance their competences, mobility of teachers in higher education and of researchers should become one of the basic instruments for developing and enhancing competences for performance of their professional career. Quality and professionalism of teachers in higher education and of researchers can be assessed and evaluated on the basis of achieving the highest level of performed activities referred to as professional competences.

### **Professional Competences of Teachers in Higher Education**

Educating teachers in higher education aimed at acquisition of professional competences and especially at continued improvement of their teaching activity should prevent mediocrity of teaching in higher education and lead to real quality of teaching in higher education institutions. Competent teachers are persons who can master what is expected of them. Several authors discuss professional competences (Průcha 1998, Walterová, Mareš 2003; Turek 2006, Bednaříková 2011, Kosová 2011, and many others) and

describe them as a set of professional abilities, skills, knowledge and dispositions which teachers need to have in order to perform their profession effectively.

Competences of teachers in higher education are generally divided to *personal* competences (responsibility, creativity, problem solving capacity, team work, social responsiveness and reflection) and *professional* competences (knowledge of subjects taught, communication, diagnostic, management, planning, organizational, advisory and counselling competences).

Professional competences of teachers in higher education are equally presented by Průcha (1996, 1997) and Turek (2001) who later divides them to three basic areas of competences: *specialised – subject oriented* (knowledge of subject content taught), *scientific* (ability and competence to perform scientific and research activity in own field) and *pedagogic* (psycho-didactic knowledge, communication, diagnostic, planning, organizational, counselling and self-reflective abilities) (Turek, 2008, p. 4).

It is not always true that “an excellent expert and scientist is also an excellent teacher and that an excellent teacher is also an excellent expert and scientist”.

Developing of competences means enabling individuals to mobilise, apply and combine acquired knowledge not only in standard situations but also in complex and unpredictable situations. These capabilities are based on knowledge as well as on experience, values and dispositions which an individual develops by actively participating in education (Kučírková, 2010).

All teachers in higher education should pursue professional competences through continuous education by means of formal, informal as well as non-institutional education which fulfils various functions and objectives and forms a subsystem of lifelong learning (Rosa, 2000). Personal initiative of teachers, need of professional self-development and need of self-reflection form the basis for effective functioning of a continuous learning system.

Effective enhancement of professional competences of teachers in higher education assumes substantial change in teaching style, applying of new teaching methods and strategies and this already begins during the training phase to become a teacher in higher education (doctoral studies and continuous education). This requires awareness of the whole complex of professional competences, so called profессиogram of teachers in higher education who are also researchers with high level of personal autonomy. For the sake of self-improvement and improvement in own professional field, teachers should keep pursuing higher degree of professionalism and continuously enhance and develop their professional competences:

- *Specialised* – teachers must have profound knowledge of disciplines which they teach and which shape their field in higher education.
- *Scientific and research* – they distinguish teachers in higher education from other teachers. They must be erudite in their research field and in the field of own research work methodology.
- *Pedagogic* – teachers should meet all expectations necessary for effective performance of teaching activities, be successful in them while maintaining necessary level of authenticity. They must have certain knowledge of psychology, sociology, social communication, rhetoric and management. They should also have knowledge needed for problem solving and for guiding students during their studies. Being qualified in pedagogy and having personal teaching experience is the basis. Being competent in enhancing own teaching assumes capability to activate students to learning, to motivate them and develop their abilities, to diagnose work of others as well as own work (self-reflection).
- *Didactic* - teachers must be able to communicate the content taught in a clear, intelligible and logical way, to adapt it to individuals, to make difficult concepts

easier and less clear concepts more comprehensible. They must be capable of using appropriate methods, forms and instruments in teaching, to be able to adapt teaching styles, time and pace to abilities and opportunities of students.

- *Communication* - teachers in higher education need to know how to deal with students, need to be able to find the right approach, to establish ethical relationships, to have pedagogic tact, to be able to sense the level of pedagogic action (reward, praise, admonition). They must be able to communicate with their colleagues, supervisors and research partners.
- *Diagnostic* – to be able to ascertain approach of students to learning, school and life; to know how to evaluate their learning performance and results in an objective and fair way.
- *Planning* – teachers must be capable of planning own teaching and research work as well as planning work of others. They must be especially able to plan for teaching and learning activities of students, to be orderly and systematic in own activities.
- *Management and organizational* – teachers must be capable of giving advice and of leading team of colleagues and students, they need to know how to perform control, administrative, conceptual and evaluation activities, to organise learning, pedagogic and research activities.
- *Advisory and counselling* – teachers must be good advisors to their colleagues and students in their educational activities, in problem solving, in recognising and searching for many answers related to their future profession.
- *Self-reflective* – they must be capable of diagnosing or evaluating own pedagogic and research activities and pursue their enhancement based on this evaluation.

Requirements for specialised, pedagogic, research and management activities call for high level of professionalism. However, these activities are not the only ones included in professional competences. According to Kosov (2011), the volume of activities of teachers in higher education has recently *increased sevenfold*. Therefore, I believe that the requirement of competence must also go hand in hand with these activities and each teacher must be able to adapt and change own activities in line with requirements, time in which they are applied and thus show own creativity, flexibility and effort for self-enhancement.

Based on the above, I add that it is necessary to support development of such set of activities which enable use of the latest digital technologies and which mediate learning and perfecting of at least two foreign languages as these are needed for quality international pedagogic and research cooperation. I include these activities among other complementing competences:

- *Technological* – teachers must be qualified in basic information technologies, must be able to create platforms for electronic learning and communication in order to approach new forms and possibilities of self-learning and educating others, be interested in managing the latest multimedia.
- *Language – foreign language* – teachers in higher education must know at least two foreign languages and should be capable of and interested in learning more foreign languages at communication level.

Today there is demand for education which integrates content and language and emphasises mobility of teachers in higher education and of researchers. For this reason it is important to improve training for language teachers as well as training of all teachers in higher education. With regards to continuous learning wider range of languages including those less used and languages spoken in neighbouring countries should be offered. Mobility should be enhanced and facilitated for the purpose of language learning. It should aim at helping learners overcome initial language barriers and motivate them to gain competences in several foreign languages. It is obligatory to support efforts in foreign language teaching and

learning. Acquisition of language competences enhances and supports mutual mobility which contributes not only to understanding of various cultures but also to developing high quality international cooperation between teachers and researchers.

Unfortunately, the Committee for Education at the Council of the European Union has not discussed these issues yet. However, representatives from the Netherlands and Belgium proposed at the meeting in Brussels in September 2011 that it would be desirable to discuss *teacher mobility* focusing on *language training* and improvement in at least two foreign languages in the future. They believe that each higher education institution should support mobility of those teachers for whom it is an inevitable part of their professional training (Council of EU, 2011).

For the sake of self-improvement and improvement in own professional field teachers should keep pursuing the highest possible degree of professionalism. Through developing the above-mentioned competences each teacher should aim to make his or her competences:

- motivational - leading to enhancing own professional career in line with expectations of their employer which should be attainable and clear;
- tools for improving activities in the field of teaching and research work and for improving self-improvement;
- tools for self-reflection of teaching and research activities.

Self-evaluation, creating a portfolio, self-reflection based on assessment received from students are an integral part of my own effort to improve higher education teaching. For this reason I would like to briefly point out outcomes from a questionnaire which was part of my own self-reflection. The survey was carried out with the aim to establish opinions and insights of students focusing on some aspects related to quality of teaching in higher education. The purpose of this activity was to get information which would form the basis for increasing effectiveness in own teaching in higher education and own research work.

### **Methods, Subjects, Outcomes and Discussion**

In 2009/2010/2011 a survey was carried out by means of questionnaires, interviews and reflection of students. 144 students, future teachers of pre-primary and primary school participated in the survey. A lot of information had been collected from students in both study programmes by means of interviews and reflections and these were later included in the questionnaire. Questions in the questionnaire for students focused on general opinions and insights regarding higher education and included questions about acquisition of didactic, language (foreign language) and informational competences during the learning process as well as questions regarding composition of subjects in their study programme and many others.

Based on my own empirical knowledge compared with many aspects of current reforms and results of the questionnaire survey among students of pre-primary and primary education, we observe a need of changes and a need of innovation which will be discussed during the interpretation of findings.

When we add values 4 and 5 we see that 84.71% of respondents pointed out the need of innovation and change in the composition of subjects in pre-primary education study programme. As for the primary education study programme, 93.04% of respondents expressed an opinion that it is necessary to innovate or change their study programme. The results confirm “uncritical adoption of reform measures” discussed earlier which, in this case, led to the division of undergraduate training for future teachers in pre-primary and primary education to a two-level educational model. The first level (bachelor) offers general basis and the second level (masters) specialises in pre-primary and primary education. As we can see



from the outcomes, the good idea has not proved effective because students lack long-term didactic and practical training in chosen specialisation.

This is confirmed by the following data closely related to the above. Individual questions focused on suitability of teaching approaches and methods. The general need of innovation in approaches, methods and strategies used in higher education.

The necessity of ongoing changes in approach and the need of introducing innovative methods in higher education is seen in the sum of values 4 and 5. Almost 65.27% of students in pre-primary education study programme and more than half, i.e. 61.01% of students in primary education study programme call for changes and innovation.

Unless students are satisfied with the composition of study disciplines in levels of study because these are not proportionally (theoretically and didactically) divided between five years of studies, they will obviously, as shown in the outcomes, request changes in educational process.

Selection and application of educational approaches, methods and strategies affect the ways and possibilities of students in acquisition and development of competences during their studies. If students lack long-term didactic and practical training in their specialisation, then acquisition of competences used by a future teacher in didactic development and mediation of educational content is insufficient.

The need of changes and innovation in procedures used in acquisition and development of competences during studies with special emphasis on communication and didactic competences has been pointed out by 76.38% of pre-primary education students and 69.44% of primary education respondents who rated their answers 4 and 5.

Deeper analysis of outcomes and their comparison with other data shows certain congruence. Findings from interviews and reflections show that up to 50% of students are apprehensive of expressing themselves and therefore keep their thoughts to themselves, 41% of students are concerned about using wrong wording, 31.81% fear that they will not be able to articulate necessary ideas, 13% are nervous or fearful about their ideas not being fitting for the course of discussion and up to 45.23% are afraid of being mocked by their colleagues. This suggest an obvious need of changing not only approaches, of innovating methods but also of developing new perhaps common and tried and tested international study programmes. We need to know that there is no universal method or approach, therefore it is necessary to keep seeking new possibilities or ways how to meet educational objectives set in a way that would be interesting to students and would motivate them to obtain not only basic knowledge but to pursue ongoing self-improvement.

Other related issues include modernisation and equipment of higher education institutions with the latest multimedia technologies which help enhance the work of teachers in higher education and achieve quality in higher education. Current dynamising trends in the society cannot do without reformative measures the aim of which is to enhance educational level of population because, in the period to come, we will be ruled by modern technologies and will need educated population. This must be recognised at each level of social life and especially in training of future teachers who prepare new generation for practical life.

The need to add, improve and extend the equipment used in higher education institutions preparing future teachers for work by means of the latest multimedia technologies was expressed by 61.10% of pre-primary education respondents and by 63.88% of primary education respondents.

However, the problem lies in insufficient support and funding for higher education institutions from public resources and in continually decreasing participation of GDP in education. Universities oriented on humanities do not have a possibility to gain financial support from other resources as is the case with technical universities.

When asked whether current level of IT technologies use in the educational process is sufficient, 69.43% of pre-primary education respondents rated their answers 4 and 5 and as many as 72.21% of primary education respondents would welcome the opportunity to work with the latest multimedia technology directly in the educational process.

For the sake of modernisation and improvement of higher education it is necessary to create specialised classrooms, research laboratories equipped with the latest multimedia technologies which offer several options for increasing quality of education and preparation of future teachers for practical work.

To conclude the interpretation of outcomes related to selected surveyed areas, it is appropriate not to forget a possibly very substantial issue of the most topical and burning problem of this time related to internationalisation, development and direction of higher education. The issue is acquisition and development of language competences of students and teachers in higher education.

By one of the many questions included in the questionnaire for students we wanted to find out whether students of teaching will be sufficiently prepared to apply foreign language competences. As many as 77.77% out of all students of pre-primary education and 87.49% of primary education students replied that they have not acquired these competences and have not had an opportunity to develop them. In time of globalisation and internationalisation process only very little attention is paid to this issue at highest levels where measures are being adopted in a non-systematic way and without reflecting practice.

We believe that unless teachers in higher education are supported financially, materially and technically in long-term mobilities which would give them an opportunity to acquire and develop own foreign language competences, they will not be capable of creating opportunities for acquisition and development of student competences at the necessary and sufficient level. Graduates of teaching who have not been equipped by necessary competences will not be able to develop these in their pupils and students either. This creates a vicious circle of problems which are not being solved systematically.

## **Conclusion**

The aim of this part of paper presenting findings from a survey was to point out the necessity of evaluating activities of all teachers in higher education interested in enhancing quality of university education.

Systematic self-evaluation of pedagogic and research activity, survey of student opinions and needs, development of evaluation portfolios, very critical and sensitive adoption of reformative measures, systematic development of professional competences, continuous evaluation of teachers in higher education – all of these participate in creation of a complex system of quality assessment of pedagogic and research activity.

Quality assessment of pedagogic and research activity in higher education also includes quality assessment of new teachers in higher education. Their work in the academic field with respect to pedagogic and research activities often goes without any guidance, direction, supervision or tutoring by a senior lecturer, docent or professor. They become teachers, researchers without experience in pedagogic and research work. As this is often the reason for reducing rating of higher education institutions, management of faculties and universities should discuss these issues intensively.

All teachers in higher education must be capable of changing their teaching styles, of applying modern and effective strategies. They will be able to search for new approaches, methods, forms and arguments only if they are continuously educated and make full use of knowledge of higher education pedagogy. The main reason for this is that students are very sensitive to teaching styles and have strong tendency to carry them along with knowledge over to their own work. For this reason teachers in higher education should know how to

innovate teaching strategies, how to offer high quality study programmes and curricula to students and how to apply such methods and forms which take international dimension into consideration.

Application of suitable teaching methods depends on methodical and didactic capabilities and creative abilities of a teacher, on his or her teaching mastery. According to Turek (2008) *“knowledge and skills of students should result from their own thinking, their pro-activity directed by a teacher”* (Turek, 2008, p. 23). According to this, teaching students must focus on partnership interaction, on activating teaching which ensures progressive activity, initiative and creativity of students in learning process.

We need to know that there is no universal method, therefore it is necessary to keep seeking new possibilities for meeting educational objectives in a way which would be interesting to students and would motivate them to obtain not only basic knowledge but to pursue ongoing self-improvement. It is necessary to innovate methods and forms ensuring that the educational objectives are met when teaching particular subjects. Each subject has a characteristic format – lecture, seminar, exercises. It is therefore necessary to apply activating educational strategies in teaching of subjects, pursue team work and adapt teaching to individual needs so that students feel confident when completing the study of the subject, so that they gain as much knowledge, practice, skills and experience as possible and carry as much as they can over to their practice.

Continuous increase in professionalism of teachers in higher education is central to the quality of higher education. Teachers in higher education have always been dominant elements of the system of higher education. To maintain this dominant position and their inherent mission in university educational process it will be necessary that they remain ready – from the professional, pedagogic and research point of view – to perform activities at a representative university level.

Quality selection of new, beginner teachers in higher education and their pedagogic training will require long-term supervision or tutoring by a competent docent or a professor who is competent to advise, consult and evaluate their pedagogic and research activity and decide on whether they are capable of and suitable for working in this career for a longer period of time.

When searching for procedures, various models, seeking ways to solve issues of quality enhancement in higher education it is necessary to discuss a lot, to seek constructive solutions which will meet not only regional and national quality criteria but also international criteria.

In this context I would like to make several suggestions which, I believe, deserve due attention:

- to ensure that share of GDP in the field of education is increased,
- to ensure that higher education pedagogy will become a part of an accredited doctoral programme,
- to make quality selection of new teachers in higher education,
- to provide four-year-long tutoring by a docent or a professor to new teachers in higher education,
- to evaluate quality of teacher results by submitting portfolios of own activity,
- to ensure continuous innovative teaching of accredited higher education pedagogy not only for new teachers but also for senior teachers in higher education,
- submit evaluation of own activity and a project of further personal development during recruitment process,
- to publish results of assessment of faculties and teachers in a transparent way at home pages under “RATING”,

- results of questionnaires, student reflections and surveys should be included in a self-evaluation portfolio of teachers in higher education.

Dynamics of the life style today requires an ongoing improvement and enhancement of not only higher education institutions but also improvement of work performed by teachers in higher education. However, this requires quality and consistency in political decisions, support by governmental department in allocation of funding and resolution of complex problems which more and more often occur in higher education.

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## **FUNDAMENTAL PRINCIPLES OF THE MODEL OF PARTICIPATORY, PAYABLE, PROFITABLE, POTENT, INSURED EDUCATION SYSTEM (IESM)**

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### **Abstract**

In the educational field, there is a need for a system which should become effective, useful and easily affordable and should include user participation. This need was the main reason; the author has designed the model named “Insured Education System Model - IESM”. The IESM is based on the principal which expenditures of education in each expenditure entry level will not be paid by the person itself. The insurance foundations are established to cover the educational expenditures of the buyers. Suggested model brings an auto-control to the mechanism and from the cycle IESM generates, the educational insurance foundations, educational institutions, buyers and households get benefits. Furthermore, IESM will increase the quality of service, educational system, employment and numbers of students. The result will be the decrease of the cost of the service.

In this article, the fundamental principles of the model explained and frequency analysis used to determine the potential participation to IESM. The participation to IESM survey was more than % 50. The result of frequency analysis shows that IESM is an applicable model.

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**Keywords:** Insurance, education, user, competition, auto-control, profit

### **Introduction**

Before presenting the subject matter model, it is important to outline the factors which necessitated such a model.

According to Census 2000, the total number of households in Turkey is 15 070 093, and the average household size is 4, 50. The Family Structure Survey of 2006 shows that nuclear families make up 4/5 of all households, whereas extended families make up 1/10, and one-person households make up 1/20 of all households in Turkey. The poverty rate in Turkey rises with household size; nuclear family category has the lowest poverty rate (%8.27), whereas extended family category (families with 7 or more persons) has the highest (%41.83). The poverty rate for the total population is recorded as %13, 98; for families with 1-2 persons, it is %10,95, and for families with 5-6 persons, %17,54 .

According to the Employment Data of the Turkish Statistical Institute, the ratio of employed to the total population is %31.3 in 2007. The labor force participation rate is %48, 4, and the unemployment rate is %9,3. According to the Population Data of the same institute, the average value of youth dependency ratio for 0-14 age group is %46.27, which vary by provinces from % 28.19 to % 94.35. The ratio of the youth (ages 15 or less) to the total population is % 29. In 2005, annual disposable income from the principal occupation of the employed household members is 150.372.474.526 YTL for the population ages 15 and more. It can be calculated from these figures that average per capita annual disposable income from the principal occupation in a household is 2074,25 YTL. .

According to the data of 2002, %64.96 of all educational expenditure in Turkey is paid by the central government, and the remaining %32,68 by the households. The average expenditure per student by education levels are: 171\$ for preschool, 488\$ for elementary school, 962\$ for high school, 1325\$ for vocational and technical school, and 2254\$ for university. The educational expenditures in private schools are 23 times more than that of public schools at preschool level, 4 times more at elementary school level, 2 times more at high school and university level. The average expenditure by education level, each level requires 2 or 3 times more spending than that of the previous level.

The statistical information set out before illustrates that the average household size is greater than the size of a nuclear family; that one out of 20 families is an extended family; that youth dependency ratio and the poverty rate in extended families are higher; that the share of the central government in education expenditure is 2/3; and that the educational expenditure in private schools is higher than that of public schools. Given per capita annual disposable income of households, under normal circumstances without any financial support, there is a very slim chance for a household to send their child to university or private school. And it seems very hard for children in various education levels who come from average income families with many children to receive the quality of education they wish.

## I.

### ▪ **Insured Education System Model (IESM)**

- The Insured Education System Model lean upon the principle that the educational expenses in al level of education to put forward to households (or students) in insurance package deal and for insurance package deal fulfilled persons, by choice level, the insurance instalments at the education time or if to get into debt in the future to pay.
- In the Insured Education System incoming al the public and private educational promotional (kindergartens, primary education schools, high schools, vocational and technical high schools, universities, high technology institutes) and financing founding which meet all the minimal standards in point of capital, service and equipment.
- In the event of putting IESM into practice it is suitable following happenings:
- Public Schools in the IESM has been privatized or in parallel bars of IESM has been operated by the Government. Households or Students with respect to the purchased educational package outline can choose desirable private or public school according to the level of education. The payment for educational expenditures of students let to be made from the arranged by agreement financing founding to the arranged by agreement public or private educational promotional. The financing founding to increase the number of his client need a lot attractive offers; public or private educational promotional to be more desirable must to raise his educational Standard, to make an agreement with more financing founding must to constrain the limits to give higher discount.
- The Insured Education System by bringing down to minimum the difference of quality between the public or private educational promotional, eliminate the distinction between the social grade of public by the education via management of credit and fund, provide equivalent using the constitutional educational right dealing for poor students with the rich students. The students who remain out of this System need to pay self the educational expenditures.
- It is can be to brief the advantage of The Insured Education System like in the following:
  - - -Because the educational expenditures will be met in installments, the installment plan will be prepare on the households budget, the payments might meet least in one year, the burdensome of educational cost on the budget will be get lighter.
  - - - Because all the educational expenditures will be met by the financing founding, the financing founding could be lessen the educational expenditures which become definite

from the educational promotional, There is no surprise interim educational expenditures, households or students don't concern oneself with the educational expenditures.

- - -Preprimary Education will become prevalent; students can study to desirable level of education and in desirable School. There will be equality in the education; social and financial diversity in education will lose its impression.
- - -Financing founding, households and students, will be effective on the improvement of educational standards. Educational utility will evolve, educational plan will be made, quality and effectiveness of education will heighten.
- - -Private schools and financing founding will grow up, in the educational and financing promotional the employment will increase, unemployment will become less, financing potential of households will grow.
- Households and students both control and profit by IES. This Model in addition to provide benefit to the participants, produce both competition and auto-control between participants like households, financing founding and educational promotional oneself and with each other and create high in quality, easily acquired, efficient, contributor and sustainable educational service, and increase the number of students employee and fee. Thus the welfare of society will accrue.

#### **Fundamental Principles of the Model of Participatory, Payable, Profitable, Potent, Insured Education System (IESM)**

- 1. Public or private financing companies whose legal frameworks are defined by the law shall prepare financial schemes in the form of education investment packages which provides alternatives for the types of payment of the investment, or repayment options (annual, multi-year, total), as deemed appropriate for students enrolled in schools at different stages of education, and in consideration of education cost demanded by educational institutions.
- 2. Households, or natural or legal persons who would like to be a sponsor of education, or the student him/herself shall sign contract with the public or private financing company of their choice for the chosen education investment package through a Joint Education Investment Account or Education Investment Partnership.
- 3. The cost of education, for which a contract has been signed shall be paid by the parents, or the sponsor individuals or institutions (by installments or as immediate payment); the student, who has received bursary or loan shall pay back when he/she graduates based on the credit value of that year in terms of compulsory service or interest free money depending on the circumstances.
- 4. The student shall enroll to a school of his/her choice among those which conforms the conditions of the education investment package he/she has signed for, then shall submit documents of school enrollment to public or private financing company, which has offered the education investment package in question.
- 5. The public or private financing company, which has offered the education investment package, shall pay for the education cost of the student in accordance with the conditions set out by the contract signed by the both parties.
- 6. Educational institutions, which receive Quality Certificate shall prepare price lists for payment packages of financing companies and shall sign contract with any financing company of their choice.
- 7. The government shall prepare legal framework for the IESM model.
- 8. There will be competition among financing companies; a parent/ student, individual or institution (investor) will choose to sign a payment contract through the most reliable Joint Education Investment Account or Education Investment Partnership which offer better payment scheme and various combinations of education package; whereas an

educational institution will opt for signing a contract with the most reliable Joint Education Investment Account or Education Investment Partnership, which has the highest capital and ability to pay top prices.

- 9. There will be competition among educational institutions; a parent/ student will enroll to a school which offers higher quality of education, whereas a financing company will opt for signing a contract with an educational institution which the highest capital capacity, and offer the best quality of service at the lowest price.
- 10. There will be interaction among actors of the IES model, such as parent/student, financing company, and educational institution.
- 11. Actors of the model will create self-control mechanism over one another.
- 12. All of the actors who take part in the IES model will benefit from the system at the highest level.
- 13. Through this model, a sustainable service system which is high quality, affordable/expensive, participatory and effective is encouraged.
- 14. The Model system is open to improvement on requests of the actors (to increase quality, to lower/increase price, to increase number of students, to increase employment, to grow capital, to enlarge service area).
- 15. Education payment packages shall offer different alternatives and shall cover all education levels, (kindergarten, compulsory education, high school, university, graduate school, and to Doctorate program), and all schools (public or private schools, universities and higher technology institutions).
- 16. Public schools shall be privatized within the IES model, or shall be managed by the state within the framework of the IES model.
- 17. Household/student will be both the controller and the beneficiary of the system.
- 18. The quality gap among educational institutions will diminish.
- 19. There will be no social class differences in education; students coming from low income or poor background will exercise their constitutional right of education on equal setting as those of higher income.
- 20. Household/ student who choose not to sign a payment contract through a Joint Education Investment Account or Education Investment Partnership will pay education cost to the school on their own.
- 21. The IES Model is encouraging in its core.
- 22. The system is subject to the relevant open market rules.
- 23. The system provides education opportunity at any level in any condition.
- 24. This model promotes institutional cooperation amount financing companies, educational institutions and household/students.

## Method

This study has been made by descriptive and quantitative method with the prediction that “The Insured Education System Model is acceptable by the majority of households, because of this it is practicable”. Close-ended question has been used. By 5 parameter of scale it has been surveyed the degree of share of households to the descriptive questions of IES. The degree 5 points the highest acceptance of units. Unit represents the households and teachers in the schools like preprimary education, primary education, high school and vocational and technical high schools. The units are grouped according to variable (category) as number of child, state of profession, income and education in ascendant parameter and as the county and public or private schools.

The survey contain the preprimary education, primary education, high school and vocational and technical high schools in the ancient settlement like Kadıköy, Beyoğlu, Fatih,



Adalar and new developed Tuzla county. It has been predicted that mentioned previously countries represent target mass in İstanbul with regard to social and economic.

For reliability and validation testing the question of inquiry, it has been applied on 15 person in Gebze Yüksek Teknoloji İnstitüte and eventually to the claim some expression has been changed. On the one side of inquiry form typed the explanation of IESM and on the other side the variables and 42 questions which define the IESM.

The inquiry questions which has been approved from National Educational Directorship, has been conveyed to the schools of counties through country National Educational Directorship. The 13 inquiry forms have been delivered for each school, 3 for every category as the number of child, state of profession, income and education and 1 for a teacher. The number of the inquiry forms which turned after to be answered is 2369. The statistical analysis of the inquiry questions has been made with SPSS package program.

## Frequency Analysis

### 1- Frequency Analysis of Categories

For The Insured Education System Model it has been made 2369 inquiry. The number of private school is 1/21 of all (See Table 1).

Table 1-Distribution of İnquiry as To Type of School

İlçe Adı	Adalar	Beyoğlu	Fatih	Kadıköy	Tuzla
%	2,2	19,1	27,9	37,7	13,0

The distribution of school in counties change to the number of school in the counties. For assign the influence of reciprocal meeting on parent it have been made the inquiry only in one School of Gebze County. The highest number of school is in Kadıköy County (See Table 2).

Table 2- Distribution of İnquiry as To Ratio of School in Counties

İlçe Adı	Adalar	Beyoğlu	Fatih	Kadıköy	Tuzla
%	2,2	19,1	27,9	37,7	13,0

The ratio of households with two children is double higher than the ratio of households with one and three children (See Table3).

Table 3- Distribution of İnquiry as To Ratio of Children in Households

Number of Child	Childless	1 Child	2 Children	3 Children	4 Children	5 and over Children
%	16,0	18,0	34,0	16,3	9,2	6,5

Whereas the educational level of more than half of the households in inquiry is High School and Higher Education, approximately 1/4 of the households is primary education and under (See Table 4).

Table 4- Distribution of İnquiry as To Ratio of Households by Educational Level

Level of Education	Under Primary School	Primary School	Junior High School	High School	University and more
%	6,0	18,4	22,6	27,7	25,2

While more than half of participants in inquiry are in low income level, approximately 1/4 of them in the middle level, 1/15 of them in the top level (See Table 5).

Table 5- Distribution of İnquiry as To Ratio of Households by Income Level

Income Level	Unknown	150-1000 YTL	1100-2500 YTL	2600-5000 YTL	5001+ YTL
%	11,1	55,9	26,5	2,4	4,1

Professional state of households in inquiry point out that approximately 1/4 of households is Self-employed, 1/5 is laborer, 1/6 is housewife, retired, student, 1/8 is educator and 1/7 is employer (See Table 6).

Table 6- Distribution of İnquiry as To Ratio of Profession

State of Profession	Housewife, Retired, Student	Laborer	Employee	Educator	Self-Employed	Employer
%	15,5	21,4	17,0	12,0	27,8	6,3

## 2-Frequency Analysis of Inquiry Questions

- The participating ratio of Households to every inquiry question has been showed below in table 14. High degree of ratio has been pointed as bold. For first tow questions of inquiry are disagreeing answers more. Only this questions have been asked in negative form, so the disagree answers strengthened the estimation of questions. For the other 40 questions of inquiry the ratio of households which answer as agree and definitely agree is over 50% .If join together the ratio of answers as ambivalent and as agree, so the ratio of strengthened the estimation of questions of the IESM is more than 70%.
- If By 5 parameter of scale the number of answers in each parameter have been added together in percent, by the index value of 4200 for 42 questions, the sum of share of definitely disagree is 400,3, the sum of share of disagree is 615 and the sum of share of this tow together is 1015,3. Furthermore the sum of share of agree is 1624,4 the sum of share of definitely agree is 723,1 the sum of share of this tow together is 2347,5. The sum of share of ambivalent is 836, 9. If the sum of share of ambivalent have been added to the share of sum of disagree then it is 1852, 2. If the sum of share of ambivalent have been added to the share of sum of agree then it is 3184, 4. This results showed, that the sum of share of agree with question of IESM is 2,3 time higher than the share of sum of disagree. Additionally if by 5 parameters of scale the number of answers have been averaged the mean value for first two answers average value is under 3 and for other 40 questions the average value is more than 3. This result showed, that the IESM had been agreed by the households in inquiry.

## Conclusion

In this survey for the first time in literature confessed and from the author builded up "The Insured Education System Model" by descriptive and quantitative method analysed. The inquiry made on 2369 person In Tuzla, Kadıköy, Adalar, Beyoğlu ve Fatih countys. After the result of frquency analysis manifested that the IESM had been agreed by majority of households, thereof it is enforceable. It has been seen by practice in Gebze Bilgi Kollege, if the model present and explain to people face-to-face the number of agree will be increase.

As conclusion it can be said, that the Insured Education System Model will be the solution to the problems of education for all communities in the world and it is useful.

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## **USING CONCEPT MAPS TO ASSESS SCIENCE KNOWLEDGE OF PRE-SERVICE ELEMENTARY METHODS STUDENTS**

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### **Abstract**

The purpose of this study was observing the initial state of the pre-service elementary students' content knowledge in science. Concept maps are designed to demonstrate the prior knowledge students have acquired around a variety of topics (Ruiz-Primo & Shavelson, 1996) as well as providing a valid assessment tool that is respectful of nontraditional learners who may have previously avoided the topics being assessed due to lack of understanding (Hough et al. 2007). Pre-service students were given a blank sheet of paper and asked to make a concept map with science as the central node. The results indicate that elementary pre-service students have less breadth and less organized science content knowledge than their secondary counterparts.

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### **Keywords:**

### **Introduction**

As a Science Educator concerned about the current state of science teaching at the elementary level and in charge of the science teaching methods classes in the School of Education, I am interested in how to evaluate the level of conceptual understanding in science that my students enter the course with. Most of my students are in the master's program for teacher certification and so have previously received their BA or BS degree from another institution of higher education. Some students enter the course with masters' level or higher degrees and considerable experience in the world of work outside of academia. This also means that they have taken their science classes somewhere else and more often than not, it was years ago. (the state requires that aspiring K-8 educators need only take 2 science classes with no labs. The 2 classes can be any random non-related courses, that may or may not have anything to do with the subject matter children in elementary school need to study.) To my way of thinking, this is not an adequate preparation for the needs of our elementary children, who are growing up in a world that is more and more driven by science and a society that requires a more scientifically literate public to make the choices that will guide us into a sustainable future.

With this in mind, educators need to find out what these pre-service teachers know or even think about science without giving them a tedious initial assessment that they will see no value in. Subjecting pre-service elementary teachers to a multiple choice, short answer, fill in the blank type of rote recall test that limits the possible responses they can give or constricts the breadth of their answers to just spewing out memorized terms is not the answer. It is important to know what the students think about when they hear the term science and at the same time get some insight into how deeply they know science concepts and how well these thoughts are organized. Educators need to be responsive to the fact that they are teaching adults, many of whom are second-career professionals, and deserve to feel that they are being respected as experienced learners. In addition, because most students at the

graduate level are highly motivated to learn the practical aspects of teaching science and not a lot of extraneous material, it is important to use a type of assessment that is not often taught in science methods classes but would be of use to the students in their profession. There is only one science methods class for all of the pre-service secondary or pre-service elementary students, so an assessment is needed that is flexible enough to allow students from any of the science disciplines to demonstrate their content knowledge and at a range of levels of understanding. Greene et al (2013) had a similar set of criteria and settled on the use of concept maps as the assessment method that would meet all of these needs. Concept maps combine assessment and learning that is also applicable to many domains (Beaudry & Wilson, 2010). Concept maps are designed to demonstrate the prior knowledge students have acquired around a variety of topics (Ruiz-Primo & Shavelson, 1996) as well as providing a valid assessment tool that is respectful of nontraditional learners who may have previously avoided the topics being assessed due to lack of understanding (Hough et al. 2007).

The next question is how to evaluate or score the concept maps that the students have produced. There have been many articles written about how this might be accomplished, many of which use mathematical formulas that give weight to the various components of the concept map. (see for example: (Besterfield-Sacre et al. 2004 ; Van Zele et al. 2004 ; Yin et al. 2005) Many of the studies provided the mappers with a list of concepts to be filled in and linked, and many used a rubric to assess the constructions. For this study a blank sheet of paper was provided to the students and they were asked to construct a map without a list of prompts. Yin et al. (2005) suggest that these open format type of concept maps may be better at demonstrating partial knowledge and revealing misconceptions. Greene et al (2013) used a simple method of counting concepts (or nodes), links, and “chunks” (nodes that were grouped together by at least two connections (Greene et al 2013, Hough et al 2007) ), calculating the mean and comparing the means pre and post treatment. The overall number of nodes and links closely paralleled each other and were used to demonstrate the changes in content knowledge. Greene et al. (2013) found these factors (counting nodes and links) to be appropriate evidence to compare the participants content knowledge when assessing a professional development program, and so this is the basis of the current study using concept mapping and counting concepts as a way of evaluating the initial knowledge of the students entering the elementary science methods classes. Since these two parameters paralleled each other in the Greene et al (2013) study the current study also used the counting of the concepts or nodes as a basis of comparison between the elementary pre-service teachers and their pre-service secondary science counterparts.

The purpose of this study was observing the initial state of the pre-service elementary students' content knowledge in science. It would not be appropriate to compare the elementary pre-service students' knowledge to that of an expert as we are not expecting them to be experts in science, but there is another group that this study could readily compare them to, the secondary pre-service science students. The secondary pre-service students have a bachelor's degree with a major in a science field. Both sets of students have gone through the same admissions process including a transcript review and a personal interview. The elementary pre-service students must also have a bachelor's degree but it may or may not be in a science-related field.

The question that this study desired to answer was: What is the initial state of science content knowledge of pre-service elementary students? In order to answer this question the study compared the pre-service elementary student concept maps to concept maps made by secondary science pre-service students. The study hypothesized that the elementary pre-service students would have less science content knowledge than the secondary pre-service students and that the knowledge would not be as well organized.

You would not expect the elementary pre-service students to have the same degree of depth of knowledge as their secondary counterparts, but you would expect them to have the same breadth of knowledge as elementary teachers need to be able to teach a wider range of science topics (for example: see NGSS Lead States 2013, in Physical Science, Life Science, Earth Systems Science, and Engineering Design) where as the secondary pre-service teachers only need to teach or be knowledgeable about one subject in depth. This makes the counting of the nodes, links and “chunks” a good measure of comparison between the two groups which looks at the big ideas that the pre-service students thinks of.

## Methodology

The concept mapping approach that met the requirements of the study was to give the pre-service students a blank sheet of paper and ask them to make a concept map with science as the central over-arching concept. Ruiz-Primo et al (2001) describe this type of concept map construction to be appropriate for evaluating the participant’s knowledge structures and their prior knowledge. The pre-service students are first asked if they know what a concept map is and how to make one. The instructor then demonstrated how to make a concept map by completing an example with them before having the pre-service teachers start their own maps. The students are allowed to make a free flowing map that can start at any point on the paper and go in any direction. By not requiring the participants to make a hierarchical concept map, it allows them to quickly and easily demonstrate their thinking about the general topic of science without the distraction of getting the map right.

On the first day of class, the pre-service teachers are provided with a brief description of what a concept map is, starting with a concept such as dog or frog as the central node to build off of. The class did a brainstorm of ideas/concepts and the instructor demonstrated how to organize them around the starting node. (This was done either on the board, computer, or overhead) Without any further emphasis on the process of making a concept map, the instructor distributed a blank sheet of white paper and instructed the group to make a concept map that has science as its central node. The pre-service teachers were given approximately 15 minutes to work on this map, or until they seemed to reach a plateau of writing. The papers were then collected.

Table 1 below explains the factors that were analyzed on each of the concept maps produced by the students during the first week of class. 54 elementary pre-service and 22 secondary pre-service student concept maps were collected and analyzed for this study.

**Table 1: Definition of factors (adapted from Greene, et al)**

Factor	Definition
Nodes	Concepts on the map not including the given starting concept
Links	Connecting words or phrases
Chunks	Nodes with two or more connected nodes leading from them

## Results and Discussion

Table 2 shows the means and standard deviations for the concept maps made by the elementary and secondary pre-service teachers who were enrolled in the science methods classes. The individual scores were analyzed using excel to find the mean and standard deviation for each group and the t-test function (1 tail, type 3) was used to find the p-value for the comparisons of the elementary to the secondary group means.

Table 2: means and standard deviation between Elementary and Secondary entry maps and t-test, p value.

Factor	Certification Level	mean	SD	t	p
Nodes	Elementary	21.3	9.3	4.09	.0001
	Secondary	35.7	14.9		
Links	Elementary	3.13	5.53	2.36	.0211
	Secondary	8.86	11.71		
Chunks	Elementary	3.66	2.88	4.96	.000004
	Secondary	8.48	3.71		

The idea of counting “chunks” as a way of assessing how the pre-service students organize their understanding of the concepts was an approach taken directly from Greene et al, 2013. Their work demonstrated how this was a valid approach to looking at student conceptual understanding through the use of concept maps, and how to evaluate those maps (Greene, et al, 2013). Novak & Canas (2008) in discussing the theory behind concept maps, describes how meaningful learning requires well-organized knowledge that would lead us to interpret concept maps with more chunks to mean that the author of the map has experienced more meaningful learning in science. Students whose knowledge is more highly organized also allows them to more easily recall this knowledge at a later time (Turns et al, 2000). One of the central conclusions of “How People Learn” (Bransford et al 2000) in regards to teachers and teaching is that teachers need expertise in subject matter content. Further, How People Learn goes on to discuss that “subject matter expertise requires well-organized knowledge of content” p. 242. We would hope therefore, that all of our pre-service teachers would have their concept maps organized in chunks indicating that their concept knowledge is well organized and can be easily recalled when needed. This would be true for both elementary and secondary pre-service teachers.

Being able to utilize such a straight-forward method of evaluating concept maps, such as counting nodes and chunks, makes them all the more valuable as a means of observing participants’ concept knowledge and how well it is organized. In our study, all three factors show a significant difference with  $p < .03$  between the secondary science pre-service teachers and the elementary pre-service teachers, with chunks and nodes significant at  $p \leq .0001$ . This would indicate that the elementary pre-service teachers have a lower command of science content knowledge than their secondary science counterparts, as seen in the lower mean of the number of nodes on their concept maps (21.3 vs. 35.7,  $t=4.09$ ,  $p \leq .0001$ ). This would be expected as many elementary teachers tend to shy away from math and science. Elementary teachers in grades K-8 however are expected to be able to teach a wide variety of science concepts (see for example NRC 1996, NRC 2011, & NGSS Lead States 2013) covering topics such as energy, force and motion, earth and space science and life science (NRC 2011, NGSS Lead States 2013). The significantly lower mean in the score for chunks (3.66 vs. 8.48,  $t=4.96$ ,  $p \leq .000004$ ) indicates that the content knowledge that the elementary pre-service teachers do have is much less organized and therefore less well understood (Greene et al, 2013). When content knowledge is not well organized, it is more difficult to recall (NRC 2005, Bransford et al, 2000) and would make the teaching of that knowledge also more difficult. With limited depth and breadth of science knowledge, it is not surprising that many if not most elementary teachers are reluctant to take on the teaching of science in their classrooms. Many elementary schools in the area have all but eliminated science from their curricula in favor of teaching more math and literacy. With the increasing need of STEM educated workers in the United States, it is imperative that we start teaching our students science at an early age by teachers who have a solid science background.

These findings indicate that we need to provide increased meaningful professional development in science for our pre-service elementary education students. It would reasonably follow that meaningful professional development in science content should also be available for in-service practicing elementary teachers as well

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