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The end of the year signifies balance sheet. The beginning of the year means projects, ideals, resolutions focused on change. Innovative and challenging, this beginning of the year encourages and promises but... the process of becoming and development is based of change. The presented signals at the European and global level causes fears, risks, impatience and even resistance to change. The eco-politic European frame is concentrating, now, on overcoming the crisis in the economic and social field but the decisional tensions regarding the future of the Schengen area become minatory. According to the analysts’ assessments and forecasts the euro zone enters into recession. The fragile protection anti-crisis in the euro zone is threatened. The retrogradation of the European Financial Stability Fund might have serious consequences for the global and European economy. The confrontations and approaches are significant.

Formulating harsh and inadequate decisions for the majority of the E.U. member states start from motivations that are advantageous only for some countries. Endorsement becomes more and more reduced on the part of the countries that experience risks, obstacles, constraints and the inability to find economic resources. The behavior of the European policymakers depends on the identification, correction and application of those measures, which are sufficient and favorable to everyone.

The present politic, economic and social configuration constitutes an experience whose magnitude, depth and consequences are imprinted by the crisis persistence, a crisis that has prolonged and extended, as expected, at a European political level. It is natural that the integration with features and questionable effects at the nations and at the European Communities level to trigger polemics and different apologetic positions due to theoretical and practical confusions; this demonstrates that currently, there is no well mingled and commonly accepted theory of the governance nor an institutional architecture model, convincing enough in terms of advantages and capable to successfully replace the nation-state model fallen into disgrace and considered by some as being anachronistic.

The formulations regarding stability, coordination and convergence in the European Monetary Union requires reinterpretations. These
reinterpretations are determined, rather, by the economic policy of the integration space than by the economic configuration of the member states, or acceding countries.

The negotiations regarding the positions of the member states toward the European internal environment continues to cause multiple debates and disagreements. This “European problem” continues to give trouble to politicians, economists, economic and social policymakers, sociologists, legal people, etc.

It is true that, the existence of a common action space doesn’t also mean a common national interest. And it is normal to be so. Every nation has its own interests and aspirations, being aware of the dimension of the economic force and of the social potential.

The countless regulations, bearing the name of the cities that have hosted the European meetings, have marked the same amount of attempts to reach a consensus of Europe. Not surprisingly, every Community act creates and opens new gaps and opportunities among economic debates. The reality is challenging, it signals the emergence of new problems and compel multiple theoretical reconsiderations: the national interest, the relative-comparative advantage, rationality versus subsidiary, national differences/convergence, community decision, European added value, etc. are interpreted under new terms.

Dealing with this new form of organization under appropriate institutional structures, generates new “waves” of mindset, attitudes, positions, opinions and choices according to the evolutions of perspective, which are most often, difficult to decipher.

Does the Schengen agreement require a new paradigm?

Professor Mariana Iovitu, Ph.D.
Econophysics - related Remarks in Considering the Necessity of a Distribution Adjustment in the Eurozone Real Economy and Re-modeling its Financial System and Markets. Thermodynamics and Statistical Physics Approach

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The term “Econophysics” was used for the first time by Eugene Stanley (physicist) in 1995 and represents the name of a rather new research domain that tries to apply the modeling standards in statistical physics to the more complicated world of economics and finance. This approach seems to be kind of appropriate and that because Economics is about people and refers to individuals. In this kind of respect we have to say that in a certain economic environment there are a lot of individuals existing, working and making commerce, so they may very much be assimilated with a system composed of a really big number of “particles” and obey to the same mathematical laws used to describe the time-behavior of such a system. In this article we use thermodynamics and statistical physics approach to describe some economic processes.
Preliminaries

The term “Econophysics” was used for the first time by Eugene Stanley (physicist) in 1995 and represents the name of a rather new research domain that tries to apply the modeling standards in statistical physics to the more complicated world of economics and finance. This approach seems to be kind of appropriate and that because Economics is about people and refers to individuals. In this kind of respect we have to say that in a certain economic environment there are a lot of individuals existing, working and making commerce, so they may very much be assimilated with a system composed of a really big number of “particles” and obey to the same mathematical laws used to describe the time-behavior of such a system (Stanley, 1996). Assessments concerning the status of an economic environment can be made only by analyzing economic and financial data (and, usually, there are a lot of data) and Econophysics as a quantitative science, actually proposes a refined and sophisticated analysis of those indeed large amounts of data. It may seem kind of surprising but Econophysics represents somehow a return of Physics to its origins: it is well known that the famous J. C. Maxwell was inspired by the immense popularity social statistics had during his researches on the random distribution of molecular speeds in a gas [4]. A little bit later (1905), the also famous L. Boltzmann and J. W. Gibbs found this approach as being correct and gave it the mathematical fundamentals we still use nowadays.

The basis in studying the systems with large number of particles consists in three simple laws:

- The law of defined proportions: in case of whatever compound, the composing basic elements always combine themselves by a rigorously determined mass ratio. Indeed, when two or more individuals get involved in a trade or exchange relation, they are usually backed, besides money (cash currency), by different
amounts of assets. Each and every pair of those asset amounts determines a single and rigorous ratio.

- The law of multiple proportions (J. Dalton, 1803): when two basic elements can make more than one single compound, then, the ratio between whatever two quantities of the second element combining with the same quantity of the first one is a rational number. In economic terms it means that an individual can economically relate only with an integer and rather small number of other individuals which is kind of common sense.

- The law of identical volumes (Avogadro, 1811): a basic element (gas) can combine with himself and materialize this way in a more stable form (molecules). In such a case, two different basic elements but having the same number of molecules and occupying identical volumes will have the same pressure. In economic terms it does mean that in identical economic areas the same number of individuals will economically meet each other with the same random interaction speed.

### Analogies between statistical approaches in studying molecular chaos and Economics

Sophisticated experiments proved that while studying a molecular (molecule is a really stable micro-system) system is not necessary to study the behavior of each and every molecule [18]. When a really big number of molecules reach to form, as a whole, a macroscopic and rather stable system – this system always turns out to be quite different, in terms of physical properties, from its molecules. Such a macro-system simply cannot be studied using classical Mechanics laws but can very well be studied using statistical laws.

In whatever macro-molecular system the molecular motion is proved to be kind of chaotic and this motion can be described using the so called medium average values of the parameters describing this motion. The key issue in studying the properties of the macro-system consists in the fact that a unilateral dependence really exists between the micro-motion medium parameters and the macroscopic parameters of the macro-system.
However, it’s not to play down that – because the statistical laws are sort of probabilistic – any outcome in statistically studying a certain macro-system should be judged as being “the most possible” and not the “only one possible”. In the same kind of respect we have to add that statistical approaches effectively do work only in cases of macro-systems containing a really big number of stable particles. Assessments on the limits in covering the economic phenomena by Econophysics could be found in [5] or [6]. Not the only one ([12], [13], [14]), but the best known physical model that fits all requirements we’ve been mentioned is the so called perfect gas model. Indeed, such a model satisfies the following conditions:

- Such a gas has a really large number of identical molecules.
- The dimensions of each and every molecule are rather small comparing with the distance between whatever two of them.
- All molecules are experiencing continuous and chaotic motions while each and every one molecule is moving under the classic Mechanics laws.
- Inter-molecular forces are present only during the specific time period when whatever two particles clashes; otherwise each and every particle is accepted as being free.
- Clashes (impacts) between whatever two molecules are only of perfectly elastic kind.

Studies like [1], [2], [3], [20], [21] seem to confirm that economic behavior of individuals living in really big economic spaces fits nicely with the conditions we’ve just mentioned. Indeed, a large majority of empirical data analysis concerning wealth and (or) income made on populations living in important economic areas like United States of America or United Kingdom of Great Britain revealed actually two distinct categories of population existing [17]. A vast majority of people belongs to the so called “lower class” and the distribution of wealth and income for this category of population is kind of exponential (thermal), fitting this way quite well with the perfect gas statistical model. The (small) rest of the population represents the so called “upper class” and the distribution at this level is kind of power-law (super thermal). While the “lower class” is rather stable, time-stationary let’s say in its economic behavior, and allowing us to assume
that any process it suffers kind of quasi-static, there is no reason to consider the “upper class” as being in equilibrium.

As we’ll show in this paper, some equilibrium exit of “lower class” might occur and we’ll try to explain why.

The way the thermodynamic pressure is introduced in Kinetic Theory of Gases:

\[ p = \frac{1}{3} n m \bar{v}^2 = \frac{2}{3} n m \frac{m v^2}{2} \]  

(1)

where \( n \) is the molecular concentration, \( m \) is the mass of a single molecule and \( \bar{v}^2 \) is the so called medium squared average velocity (speed) of molecules – the same way we will introduce what we call the “economic pressure” of a certain economic space (area) \( p_e \) having the same calculus formula like (1) but where we will have:

- \( m \) will be the entire quantity of assets of each and every individual. 
  As long as we deal with the “lower class”, this quantity might be considered as being pretty much the same or something close, at individual level. For example we may choose for \( m \) the whole GDP/capita produced in the specific economic area since 1945 and expressed in current money (Euro, for example)
- \( n \) will be the so called population density in the specific economic area, and
- \( \bar{v}^2 \) will be the classic year-measured money velocity (speed)

In the Kinetic Theory of Gases, in order to explain how thermodynamic temperature is related with kinetic molecular energy (meaning with pressure), the following description of an ideal experiment became famous. Let’s consider two different ideal gases (gas 1 and gas 2) having the following medium average molecular kinetic energies:

\[ \frac{m_1 \bar{v}_1^2}{2} > \frac{m_2 \bar{v}_2^2}{2} \]  

(2)
We will make this example even more simple and intuitive considering \( m_1 > m_2 \) and \( v_1 > v_2 \) which make our case even more obvious; indeed we might have the relation (2) still in place with the same order relation between molecular masses and the opposite order relation between medium squared average velocities or vice versa. We will next consider that somehow we manage to get contact between those two gases. This contact will result into a lot of clashes (impacts) between the gas 1 particles and gas 2 particles. This large indeed number of clashes actually means a macroscopic transfer of energy from the gas 1 to gas 2. When the equilibrium will be reached the energy transfer cease meaning that the following equality will be reached:

\[
\frac{m_1v_1^2}{2} = \frac{m_2v_2^2}{2}
\]

We have to pay a lot of attention and that because the equality (1’) only means that those two gases have reached the same temperature \( T \), the way that:

\[
T_1 > T > T_2
\]

This ideal experiment helps us to conclude that the thermodynamic temperature hides a statistic face and, someway, the medium average kinetic energy and temperature could be linked. Indeed, the following relation is in place:

\[
\frac{2mv^2}{3} = kT
\]

Where:

\[
k = 1.38054 \cdot 10^{-23} \frac{J}{K}
\]

Is the well-known Boltzmann constant for ideal gases.

In economic terms all that means that we also have to deal with an “economic temperature” as a status parameter of the studied economic area and with a pseudo-Boltzmann constant which has *to be adapted in terms of*
value and units of measure. Unlike the case of ideal gases where the constant stated by relation (5) is the same for each and every ideal gas, in case of economic environments we have to deal with different pseudo-Boltzmann constants.

Very much like in case of an ideal gas where the well-known internal energy is given by the following relation:

\[ U = N \cdot \frac{3}{2}kT \tag{6} \]

where \( N \) is the number of molecules of the ideal gas that is studied. In economic terms we might interpreted as being the existing potential of creating economic growth while maintaining economic equilibrium – in other words creating economic growth as a quasi-static process; of course \( k \) will be the specific pseudo-Boltzmann constant of the economic area and \( T \) its specific economic temperature.

Since we simply cannot discuss as we can do in Thermodynamics, in economic terms, of an "absolute zero economic temperature", we can adopt a certain one country economic area (Germany for example) as reference and agree for a standard economic value of \( k \). In such a case, the German economic temperature could be considered as reference economic temperature and the economic temperature of each Eurozone country would tell us how healthy its economy is.

For ordinary thermodynamic systems which are composed, of course, of a large number of inanimate small particles, the 1\textsuperscript{st} principle of Thermodynamics is:

\[ dU = \delta Q - \delta L \tag{7} \]

where \( \delta Q \) is the elementary heat exchange and \( \delta L \) is the elementary mechanical work made by the system. The sign convention is “+” for \( Q \) and “-“ for \( L \) when the system receives both of them. For an economic system receiving heat means receiving investments from outside while delivering heat means making investments outside – also, receiving mechanical work means exporting goods and services while delivering mechanical work means importing goods and services. Bottom line is that, accepting the 1\textsuperscript{st}
Thermodynamics principle as working in a certain economic space, we actually accept that this economic space is an open one. Looking at the relation (7) we simply find out that it gives an empirical view on how the gross domestic product (GDP) is formed in a certain economic environment:

$$GDP = C + G + I + TB$$  \hfill (8)

Investment spending $I$ and trade balance $TB$ have been somehow quantitatively explained by (7), but consumption $C$ and expenditures related to the government activities $G$ seem to find no place in (7). The fact of the matter is that relations (1) to (7) are referring, as we’ve mentioned, to systems made of inanimate particles while any economic system means first human beings and, as consequence, means work and innovation. The measure of work is largely accepted as being the so called “labor productivity” which is quite suggestive for rather short periods of time, but innovation is hard to quantify. Relations (7) and (8) are really hard to put together in terms of mathematics despite the fact that, empirically, they tell us the same thing. But a short look at them reveals that the key issue for a healthy economic growth is that both $U$ and $GDP$ are doing far better off when they increase slowly in other words when they are experiencing quasi static processes.

The human nature needs security and predictability in order to innovate. Only innovation keeps $U$ increasing by itself. Far from disrupting economic growth and, in high productivity conditions, innovation is quickly absorbed by system. This quick absorption creates investment ($Q$ rises) while the system is relaxing through international trade due to its competitiveness given by innovation ($L$ also rises) the way that the entire economic growth process remains kind of quasi static. In this respect, we dare to assess that only lack of innovation could lead to loss of competitiveness and to economic stagnation or, even worse, to recessions. Consumption $C$ remains specific only to human kind. It also contributes to the relaxation of system: when innovation does exist the labor productivity
is almost assured and a strong consumption – which is possible due to higher wages – only increases the money velocity.

**Conservation of money and central banks actions**

Any economic space could be considered as being a really huge system of statistic kind and having millions of participants: individuals and agents, as well.

While the central bank of the specific economic area takes no action in printing additional money [8], [9], [10], [11]. Rightfully assessed that money $M$ could be considered as a conserved quantity.

Indeed, at least at local level, some sort of “conservation money law” [11] seems to work. Let’s consider ([8] or [16]) two economic agents or individuals $A_1$ and $A_2$ having at their disposal the quantities of money $M_1$ and $M_2$ respectively. Let’s also consider they make some transaction the way that $A_1$ pays the amount of money $M_3$ to $A_2$ for a corresponding amount of goods and/or services. A transaction of this kind becomes possible without debt [7] only when we have:

$$0 < M_3 < M_1$$

$$0 < M_3 < M_2$$

(9)

At the end of the transaction, $A_1$ and $A_2$ will hold these new amounts of money:

$$M_{1f} = M_1 - M_3$$

$$M_{2f} = M_2 + M_3$$

(10)

It’s easy to see that:

$$M_1 + M_2 = M_{1f} + M_{2f}$$

(11)

So, the money behaves really conservative at least at “local level”.

We have also to tell that relation (11) is to stay even when transactions take place in a wide open economy with the local currency having undoubted international status (USA and US Dollar, for example).
Relation (11) is also enforced by the fact that money today is purely fiat money [10]. It is to be said that relation (11) keeps the track of money and keeps not the track of goods and services provided for the specific money. The reason, according to the specified authors consists, beside that services are not kind of tangible, in the fact that many goods, like food for example. Far from denying in any respect these affirmations, we have to add to the picture that, in any transaction, someone win and the other one lose and that because it’s not possible to get measured the quantity of work, innovation and risk of investment a certain sold good is actually carrying.

Relation (11) works properly only in a closed economy and this kind of common sense. Extending relation (11) to an entire economy means actually that we’ll have, considering (8), that $C = I$. In other words, all that means that debt is, somehow, unavoidable.

In our days, the existing money is fiat, meaning that money carries no intrinsic value. This money is declared to be money by central banks and is asset-backing guaranteed by governments. So, any central bank has a monopolistic power – and behaves this way – in printing money. The main reason why a central bank does print money is to increase its velocity during recessionary times, but that creates debt, also. In fact, under the existing fiat money regime debt has become a living-way, and relation (8) simply cannot work. The fiat money regime simply biased the trading balance in favor of sellers and decreased the saving propensity.

Under this kind of state-centralized monopoly in printing money regime, the only solution seems to consist in re-thinking the role the work and innovation are really playing in modern economies and how much the risk directly related with them is prized. And this means politics and regularization.

Conclusions

Let’s cover once again the Physics-related example involving the relations (2), (2’) and (3) and let’s further consider that $m_1 >> m_2$ and $v_1 >> v_2^{-2}$. It becomes easy to figure out that all the particles of the gas 2 will be tremendously accelerated and its temperature will increase sharply while
the particles of the gas will experience only small decrease in their velocities and its temperature will decrease only by a small fraction. A process of this kind could imply heat transfer or mechanical work or both. In economic terms we may consider as a good example Germany as being gas 1 and Greece as being gas 2. The example is not tendentious at all: Germany’s citizens are rich indeed and enjoy a nice money velocity while Greece’s citizens experience quite the opposite. When the Euro currency started to circulate de facto (2002), those two economies (“gases”) got actually contact. The outcome was that the money velocity (molecular velocities) increased sharply in Greece [15] while its citizens simply weren’t able to get rich (molecular mass remain small) instantaneously. Adding to the picture the fact that Germany was and still is a big exporter and Greece was a big importer, the energy transfer was actually consumption-based: Greece received new strong Euros on its capital account (received “heat”) and, of course, its imports accelerated (loss of “mechanical work”) and, simultaneously, got worse in terms of competitiveness of their produced goods and services. In real economies, as in thermodynamic systems, increasing consumption (receiving heat) and deteriorating trade balance (delivering mechanical work) is the most natural (irreversible) way to rich equilibrium [7]. Also, the efficiency has to be taken into consideration: no natural system in this world can increase its internal energy receiving heat without delivering mechanical work. In this specific economic case (and many others like that) the mechanical work delivering (deteriorating the trade balance due to sharp increase in consumption – the human nature being the way it is)) reached to become far much faster than heat (investment) receiving. In terms of Physics all that means, in the aftermath, a sharp decrease in $U$, meaning, in economic terms, a sharp slowdown in $GDP$ (recession) and a lot of debt due to the withdrawal of money from the capital account.

Everybody, right now is very much aware that situation has become really serious. What the cure could be? Two distinct situations seem possible. The first one could be that Greece will drop the Euro. A situation like this will lead to a complete loss of economic equilibrium in the whole Europe and, according to politicians, does not seem likely.
The second situation consists in keeping the Euro in the whole so called Eurozone. In this respect we have to remind that introducing Euro was nothing but a political decision. All reasons found by European governments, concerning exchange and customs costs are simply not consistent. If, in early 2000, governments would have been accepted competition in paying for goods and services in no matter where (in Europe) issued currency, then the re-distribution would have been made by itself and the European economic transformation would have been a process of quasi static kind. Of course, one currency would have been prevailed (Deutsche Mark, probably). A process of this kind could have been adjusted, by itself and out of “beggar-thy-neighbor” policies, trade (im) balances and investment and could have been lead to more pressure on governments in realizing some sort of fiscal unification. Of course, in such a case the redistribution of wealth would have been naturally reached and, probably, a situation of this kind simply wouldn’t have been agreed by the “big ones” of Europe. Introducing Euro wasn’t an economic mistake, or a political one. But it was mostly a political decision and haven’t had yet benefited from political support of any kind. A simple centralized budgetary planning from the very beginning would have been enough to prevent the actual mess. But this is history.

The urgent need for the Eurozone consists in a rapid resumption of investment and trade in Europe (in Physics terms to raise $U$). And the first step is monetizing the Greece (and, eventually, all so called PIIGS) debt (in Physics terms to add energy to the system). Choosing austerity to create cash (energy) was not a choice for European leaders – in fact was the only choice.

Here is an example to understand. Technically speaking, the fundamental problem is that the euro does not qualify for a sufficiently high worldwide demand so that the ECB does not have the possibility to operate some sort of “European quantitative easing”. See the opposite side of the dollar. The dollar is the main reserve currency worldwide, and precisely for this reason the Fed can print trillions, with minimal effect on the Forex market and inflation in US. Europeans feel frustrated that they cannot make the same thing like US. The solution is to increase global demand for euros finding new clients, public or private. China, for instance. Or Brazil. Or
admitting new European countries to join the Eurozone – even the poorer ones – they will bring their low cost labor. Any of these solutions could be successful in igniting some redistributing process “without tears”, the same way US enjoys “budget deficits without tears”.

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Investigation of External Audit’s Good Practices in the Context of Corporate Governance - Evidence from Romania

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The main objective of this study is to develop an investigation based on an empirical survey over the auditors’ perceptions about the external audit good practices that should be applied or at least recommended in the context of corporate governance. This present study also aims to detect the current applicability of the proposed external audit practices tested through this survey. In order to achieve the proposed objectives, a statistical analysis was conducted based on data obtained from questionnaires submitted to a significant sample of Romanian auditors, all respondents having the quality of members of Chambers of Financial Auditors of Romania, which is the main

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professional body that has responsibilities in coordinating the audit activity in Romanian context. In spite of the lower response rate, the value of the paper is argued by the fact that the findings are relevant for both academics and practitioners, because it could represent a relevant starting point in developing an integrated framework of good audit practices, including external audit practices and offering, in the same time, potential suggestions for enhancing external audit practices in the corporate governance’s area, an area which has grown very fast in the last years, since the collapse of Enron in 2001 and the financial scandals of other companies from different countries, which strongly affect the investor confidence in the reliability of its investments.

**Keywords:** Romanian auditors, external auditors, auditors’ perception, corporate governance, external audit practices, integrated framework of good practices.

### Introduction

Starting with the end of 20th century and the beginning of 21st century there have been a significant number of corporate collapses with significant adverse effects over the economy of developed countries, in spite of the fact that the information presented through the financial statements and the annual reports were so far from showing the preventing signs of the forthcoming financial disasters. All these negative effects had been generated a lot of questions about the corporate governance effectiveness, starting from the premises that “a lack of effective corporate governance meant that such collapses could occur; good corporate governance can help prevent such collapses happening again and restore investor confidence” (Mallin, 2010).

The adverse effects of these various corporate collapses had been determined many pressures from public who became increasingly less confident about the real effectiveness of different corporate governance mechanisms, such as external audit and internal audit. *External auditors and internal auditors started to be more and more questioned about their*
effectiveness, being also criticized for their weaknesses in detecting and identifying the warning signals that could prevent such negative phenomena (Fraser & Pong, 2009; Leech, 2008). Another negative consequences over the audit function was the perpetuation of the idea that audit activity is on the verge of losing its reliability, the achievement of the audit activity starting to be perceived more as a requirement disposed by legislative regulations, in the same time, stopping to be perceived as a service that could provide real added value to the entities, the investor trust in the reliability of financial statements and annual reports being strongly reduced, a major question mark being also determined by the concerns about the real independence of auditors in fulfilling their responsibilities (Healy & Palepu, 2003).

The global economic crisis which started in 2007 and whose negative consequences are still being felt and probably will be felt for many years from now has determined many international professional bodies, but also both academics and practitioners to shed the light over the corporate governance weaknesses. A report over the major causes of this global crisis issued by Association of Chartered Certified Accountants (ACCA, 2008) ranks among the top list of these casual factors the corporate governance failures determined by the conflicts of interests between the principal (the owner - shareholders) and the agent (managers) that were not accordingly solved, the need for ensuring the professionalism and ethics starting from the top level of the company becoming more and more imperative, same opinion being also expressed by other researchers (Kirkpatrick, 2009; Reddy, 2009; Brennan and Solomon, 2008).

In this context, the audit function had been started to receive a lot more attention, as one of the significant corporate governance mechanisms, being developed some researches and studies that will influence more and more the next audit function’s evolution. In this way, the studies developed by Porter (2009) and Sikka (2009) will argue the approaching of the audit function into a more large area, being highlighted many links and connections that should exist between corporate social responsibility, corporate governance and audit. Moreover, Porter (2009) had developed the idea that a trilateral approach of the audit function (external audit, internal audit, audit committee) would represent the key element in improving the soundness of corporate responsibility and corporate governance, too.
At European level, there are some real concerns about the role of the external audit in the context of reforming the financial markets and rebuilding the investors’ confidence. In this way one significant proof is represented by the green paper issued in the last part of last year by European Commission, through there is emphasized the imperative need to ensure the soundness of the audit function, in this paper being issued that “robust audit is key to re-establishing trust and market confidence; it contributes to investor protection and reduces the cost of capital for companies” (EC, 2010). Another important consideration of this report is the highlighting of the significant role that auditors should play especially for conducting statutory audits. In the light of the latest financial and economic events, auditors had a significant “societal” role in providing an opinion on the reality and the fairness of the financial statements of audited companies.

Also, this paper issued the importance of ensuring the appropriate independence for the auditors, their independence being considered as “the bedrock” of the audit environment (EC, 2010). A major goal of this green paper issued by European Commission is to open a debate with respect to the role of the audit, especially in the context of governance, the independence of audit firms, but also the supervision of the audit services provided by the auditors. Relevant feedback that will be received to this green paper will be useful for enhancing audit activity at European level, thus creating the necessary premises for ensuring so much desired financial stability.

**Role and practices of external audit in the context of corporate governance – a literature review**

Referring to the corporate governance mechanisms, a significant role is assigned to the external auditor, which because of the increasing public’s pressure is called to prove that the significance of external audit in testing the reliability of financial reporting process. In order to achieve this objective, external audit should have a full knowledge of the complexity of accounting and financial rules, starting from the premise that external auditor is the person authorised that should be able to properly assess the effectiveness of the way the directors are managing the financial health of the companies (Sikka et al, 2009).
According to the International Standards on Auditing issued by International Auditing and Assurance Standards Board (IAASB)\(^2\), the external audit should enhance the degree of confidence of various users in the financial statements, by expressing an opinion “on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework... and financial statements give a true and fair view in accordance with the framework” (ISA 200).

The significance of external audit as a corporate governance mechanism is given the fact that an auditor is focused mainly on the entity’s financial reporting process and by fulfilling properly its responsibilities the auditor could stimulate the executive management to adopt appropriate accounting systems and internal controls (Chambers, 2003). Starting from his professional experience, knowledge and skills, the auditor could provide really valuable information and recommendation for improving financial reporting process, but he does not have the ability to direct management to action so (Chambers, 2003). This ability is assigned to the bodies within the companies playing the role of governance bodies, which in almost of the cases is represented by the audit committee, positioned most likely under the supervision of Board or Supervisory Board\(^3\).

Lawrence (1992) cited by Braiotta et al (2010) realised a study focusing on the effectiveness of audit committee from both external auditors and audit committee members of 34 publicly held companies. His findings showed that the audit committee practices were not quite uniformly effective and in some cases the auditors assess committee members significantly lower than members do. Lawrence’s study revealed since almost twenty years the necessity of improving the relationships between audit committee, management and auditors, concluding over the imperative need to find the right balance “of the committee’s involvement with audit fees, audit scope, audit results and internal controls”.

Same idea is also promoted by Braiotta et al (2010) who states the activity of audit committee and external auditors are very closely related

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\(^2\) The IAASB is one of the standards-setting of International Federation of Accountants (IFAC). Its main objectives are developing auditing and assurance standards, other pronouncements, and guidance for use by professional accountants (www.ifac.org/iaasb/)

\(^3\) It depends on the type of leadership structure adopted by the company (one-tier or two tiers).
because of the common objectives referring to financial reporting process that both groups should have. Based on their knowledge and experience, external auditors must provide recommendations that could enhance the quality of financial reporting process, but in the same time, the audit committee members must fulfil their responsibility of assuring that the financial statements and the systems of internal accounting controls are implemented based on appropriate accounting principles, policies and procedures.

Also, there should not be ignored the cooperation that should exist between external audit and internal audit, their good working relationship being considered as a good practice which could provide a significant contribution to the achievement to the company’ governance objectives. In this way, a relevant study was realised by the Principal Institute of Internal Auditors. The Netherlands (IIA) and Royal Dutch Institute of Chartered Accountants – NIVRA (2010) which tries to emphasize the good practices for both internal and external audit that could improve the corporate governance effectiveness. Regarding the external audit, it’s important the role assigned to it in the context of corporate governance. Thus, indeed the basic responsibility of external audit is to provide an opinion with respect to the reliability of financial statements, but also, external audit may play another important role in corporate governance system by providing to the stakeholders other supplementary services, but of course limited to the extend allowed by the achievement of necessary criteria of independence for external audit function. The relevancy of the study realised by NIVRA (2010) is argued by the significant number of good practices identified for external and internal audit in the context of corporate governance. A synthesis of best practices identified by NIVRA (2010) study is presented below in the Figure 1.
Investigation of External Audit’s Good Practices in the Context of Corporate Governance – Evidence from Romania

Figure 1: Best practices for external and internal audit for a more powerful contribution to corporate governance

Source: a synthesis of best audit practices recommended by NIVRA (2010)
In order to provide the necessary premises for determining so much desired financial stability which became rather uncertain in the light of the latest years events, it’s absolutely imperative to developed good practices that have the main goal to ensure the full responsibility in achieving the governance tasks by all the persons implied in. Developing good practices for auditors in the context of corporate governance could provide them the possibility to act within a more ethical business atmosphere proving their real added value for the enhancing of the financial reporting process.

Research methodology

1. Type of scientific research

It has been adopted a fundamental type of research, under the auspices of mainstream research approach based on combining the quantitative with qualitative elements. The relevant literature was reviewed with a focus on main studies and research papers that discuss the best practices of external audit that could be adopted for a more powerful contribution to corporate governance. Starting from this premise it was developed a synthesis of the main good external audit practices in the context of corporate governance. Next step was dedicated to test these selected external audit practices based on empirical study whose main objective was to emphasize the Romanian auditors’ perception over the good practices that should be included into an integrated framework of best audit practices for good corporate governance. The construction of this survey was leaded by next two criteria as presented below in Figure 2.

2. Goal and objectives in development the study

The main goal of this study is to stimulate further research debates in this area by becoming a relevant starting point in the process of identification the good audit practices, including the ones referring to external audit practices. The significance of this kind of research is argued by the stringent latest requirements for enhancing corporate governance, including all mechanisms that could contribute in this direction.
The specific objectives followed to be achieved through this study are represented by:

- To investigate the Romanian auditors’ perception over the external audit practices that should be taken into account for an integrated framework of good practices for ensuring the soundness of corporate governance.
- To test the real applicability of the proposed external audit practices from the respondents’ perspective.

The selection of the external audit practices tested through this survey and included in the questionnaire used for this study is presented below in Table 1, all these practices following to be tested from a dual perspective: their proposal but also their current applicability.

**Figure 2:** Criteria used for testing the proposed external audit practices

*Source: author’s projection*
**Table 1:** External audit practices tested through this survey

<table>
<thead>
<tr>
<th>No.</th>
<th>External audit good practices selected and included in this survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>External auditor is proposed / recommended by audit committee and satisfies the criteria of independence and professional competence required.</td>
</tr>
<tr>
<td>2</td>
<td>External auditor must attend the General Meeting of Shareholders to inform and to answer to the various questions expressed by shareholders and investors.</td>
</tr>
<tr>
<td>3</td>
<td>External auditor must achieve its objectives and activities in terms of protecting the interests of owners (shareholders).</td>
</tr>
<tr>
<td>4</td>
<td>External audit should develop a good-working relationship with the entity’s internal audit department</td>
</tr>
<tr>
<td>5</td>
<td>External audit should consider the results of internal audit reports with respect to the internal control system functionality in terms of accounting.</td>
</tr>
<tr>
<td>6</td>
<td>External audit should take in consideration the risks identified by internal audit within financial and accounting area, proceeding to the appropriate adjustments of audit procedures and objectives.</td>
</tr>
<tr>
<td>7</td>
<td>External auditors discuss with audit committee members and management about the accounting policies adopted by organization, the quality of professional judgments and accounting estimates made by management.</td>
</tr>
<tr>
<td>8</td>
<td>External audit makes proposals to the audit committee for enhancing the effectiveness of internal control system in terms of financial and accounting function.</td>
</tr>
<tr>
<td>9</td>
<td>External audit inform the audit committee and the management about the results of its activities, presenting also the arguments that justify its audit opinion with respect to the reliability and true and fair view of the audited financial statements.</td>
</tr>
<tr>
<td>10</td>
<td>External audit is consulted about the effectiveness of the entity’s internal audit function.</td>
</tr>
</tbody>
</table>
External audit should allow the access of internal audit department to relevant working files that the audit opinion is based on.

External audit reviews the implementation of internal audit recommendations within the activities implied in the process of financial reporting.

Source: author’s projection based on relevant literature review

3. **Sample and tool used**

The research tool used for developing this study was represented by the emailed questionnaire sent to a sample formed by active members of Chambers of Financial Auditors of Romania (CFAR). The Chambers of Financial Auditors of Romania is the main body assigned with the necessary authority for building the public recognition of the financial audit profession in Romania, by adopting the International Standards on Auditing and the Code of Ethics issued by the International Federation of Accountants (IFAC). At the IFAC Congress in November 2004 the Chambers has been recognised as associate member of IFAC. Thus, our statistical population targeted in this study included the active members of CFAR, whose contact details were available on the CFAR’s website. The period for sending and collecting the questionnaires was February – May 2011.

Even if the number of disadvantages of using such a research tool is obviously, still the decision of using this kind of research tool is argued by the imperative necessity of including in the sample a larger number of respondents, while an alternative direct approach would be quite difficult to realise. The questionnaire used in this survey was organised on next sections:

- **Part I – General Information**
- **Part II – Perceptions over internal audit’s role and practices in corporate governance**
- **Part III - Perceptions over external audit’s role and practices in corporate governance**
- **Part IV - Perceptions over audit committee’s role and practices in corporate governance**
The goal of this paper is to analyse the results of Part I and Part III\textsuperscript{4}, in other words, the respondents’ perceptions about the external audit’ role and good practices that should be taken into account for ensuring a more powerful corporate governance. The structure of the sample of respondents used in this survey is presented below in Table 2.

Unfortunately, from the first sample, a quite big numbers of selected contacts proved to be invalid due to the failures messages received at the mail delivery. After the questionnaire was sent there were some respondents that honestly admitted they have the quality of member CFAR, but they don’t have enough or not at all audit experience (67 respondents). From the total of 44 received questionnaires, a significant number of 20 questionnaires were considered invalid due to some errors in proper fulfilling of questionnaires. The first part was included general information about the respondents, especially about their professional experience. In the final lot of validated questionnaires there were not included the questionnaires completed by the respondents with no audit experience, starting from their statement about their professional experience.

Table 2: Sample used and response rate obtain in the present study

| Sample of members CAFR selected | 1 | 924 |
| Invalid email contacts | 2 | 386 |
| Valid contacts | 3=1-2 | 538 |
| Respondents with no audit experience | 4 | 67 |
| Final sample | 5=3-4 | 471 |
| Questionnaires received | 6 | 44 |
| First response rate | $7 = \frac{6}{5} \times 100 \text{ } 9.34\%$ |

\textsuperscript{4} The other parts (Part II and Part IV) of this questionnaire were developed and discussed in other papers.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Invalid questionnaires</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Final number of valid questionnaires</td>
<td>9=6.8</td>
<td>24</td>
</tr>
<tr>
<td>Final response rate</td>
<td>10= 9/5*100</td>
<td>5.10%</td>
</tr>
</tbody>
</table>

**Source:** author’s projection

**The analysis of results**

The lower rate of response obtained was not so high as it would have been expected and our common sense can’t allow us to accept this response rate as being one of the most relevant one, but in the author’s opinion, the value of the results is still argued by the possibility to consider those findings as a reason for stimulating further researches and constructive debates in such an area, being considered as a starting point in developing other more complex studies based on using of other research tools that are able to determine the increasing of the relevancy of the results. In spite of its disadvantages, survey based on emailed questionnaire seems to have a lot of advantages that couldn’t be ignored. Flaherty et al (1998) proved that email surveys represent an easier and more accessible means of response.

Also, using the email surveys helps to cost savings, which also have been highlighted by other researchers, the cost of an email survey being estimated to be between 5% and 20% of a paper survey (Sheehan, 2001; Sheehan and McMillan, 1999; Weible and Wallace, 1998). Another advantage of this tool of research is the possibility to better estimate the number of undeliverable email, the time the email was opened, replied to or deleted (Sheenan, 2001) which could determine the enhancing of sampling procedures. Also, there have been proved that the respondents tend to provide longer open-ended responses to email surveys than to other types of surveys and responses seems to be more objective than the responses to postal mail or phone surveys (Sheenan, 2001; Bachmann et al, 1999).

Speaking about the disadvantages of email surveys Shih and Fan (2009) developed a meta-analysis of comparing response rates in email and paper surveys and their findings show that email survey obtain generally lower response rate than traditional mail survey regardless of other survey
characteristics (e.g. target population, use of reminders for non-respondents, use of incentives). In the same time, Shih and Fan (2009) show that lower response rate in email survey might partially be the result of prevalent junk/spam e-mails nowadays, which may have caused many potential respondents to ignore legitimate e-mail surveys. Anyway, in spite of these disadvantages, Shih and Fan (2009) are agreed that this does not necessarily mean that e-mail survey should not have its place in the repertoire of survey researchers. There shouldn’t be ignored the advantages of e-mail survey like:

- A shorter response time,
- Considerably lower survey cost,
- Capability of targeting a large sample of respondents,
- Knowledge about whether an e-mail survey has been delivered to the correct e-mail address.

Shih and Fan (2009) argue that these unique characteristics of email survey make relevant and useful this tool for some kind of survey where the using of other research tools is quite difficult.

First part of emailed questionnaire was dedicated for the respondents’ professional experience. The professional experience of our respondents seems to be significant accordingly to the results presented in the Table 3. More than 70% of our respondents have a professional experience on the audit activity over 5 years and more than 12% state a professional experience between two and five years.

As it was mentioned above, there have been followed two main criteria in the construction of this survey: the proposal of these practices (agreement/disagreement) and their current applicability. The investigation of auditors’ perception over the external audit practices included in the study was developed by using Likert Scale as it follows:
Table 3: The professional experience of respondents

<table>
<thead>
<tr>
<th>The respondents’ position</th>
<th>Professional experience</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>under 2 years</td>
<td>between 2 and 5 years</td>
</tr>
<tr>
<td>Internal auditor</td>
<td>8,3%</td>
<td>12,5%</td>
</tr>
<tr>
<td>External auditor</td>
<td>8,3%</td>
<td>0,0%</td>
</tr>
<tr>
<td>Total</td>
<td>16,7%</td>
<td>12,5%</td>
</tr>
</tbody>
</table>

Source: author’s projection by using SPSS 16

• **Their proposal** for inclusion into a set of good practices for external audit activity. Thus the respondents had the possibility to express their agreement or disagreement about the proposals of external audit practices by using Likert Scale where:
  1) Strongly disagree;
  2) Disagree;
  3) Not sure;
  4) Agree;
  5) Strongly agree.

• **Their actual applicability** was also tested by using Likert scale, where:
  1) Unknown;
  2) Known, but never applied;
  3) Known, but rarely applied;
  4) Known and often applied;
  5) Known and always applied.

Next, in Table 4 and Table 5 there will be presented statistical frequencies resulted from testing those external audit practices proposed from two points of view: their proposal and their applicability.
Table 4: Proposals for external audit practices

<table>
<thead>
<tr>
<th>No.</th>
<th>Proposals for external audit good practices</th>
<th>Response options</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(1) (2) (3) (4) (5)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>External auditor is proposed / recommended by audit committee and satisfies the criteria of independence and professional competence required.</td>
<td>0% 4,2% 16,7% 16,7% 62,4%</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>External auditor must attend the General Meeting of Shareholders to inform and to answer to the various questions expressed by shareholders and investors.</td>
<td>0% 0% 20,8% 25% 54,2%</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>External auditor must achieve its objectives and activities in terms of protecting the interests of owners (shareholders).</td>
<td>0% 8,4% 20,8% 8,4% 62,4%</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>External audit should develop a good-working relationship with the entity's internal audit department</td>
<td>0% 0% 12,5% 16,7% 70,8%</td>
<td>100%</td>
</tr>
<tr>
<td>5</td>
<td>External audit should consider the results of internal audit reports with respect to the internal control system functionality in terms of accounting.</td>
<td>0% 0% 12,5% 20,8% 66,7%</td>
<td>100%</td>
</tr>
<tr>
<td>6</td>
<td>External audit should take in consideration the risks identified by internal audit within financial and accounting area, proceeding to the appropriate adjustments of audit procedures and objectives.</td>
<td>0% 0% 16,7% 25% 58,3%</td>
<td>100%</td>
</tr>
<tr>
<td>7</td>
<td>External auditors discuss with audit committee members and management about the accounting</td>
<td>0% 4,2% 8,4% 25% 62,4%</td>
<td>100%</td>
</tr>
<tr>
<td>8</td>
<td>The audit committee is consulted about the effectiveness of the entity’s internal audit function.</td>
<td>0% 0% 12,5% 25% 62,5% 100%</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>External audit inform the audit committee and the management about the results of its activities, presenting also the arguments that justify its audit opinion with respect to the reliability and true and fair view of the audited financial statements.</td>
<td>0% 0% 12,5% 20,8% 66,7% 100%</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>External audit is consulted about the effectiveness of the entity’s internal audit function.</td>
<td>4,2% 8,4% 25% 33,2% 29,2% 100%</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>External audit should allow the access of internal audit department to relevant working files that the audit opinion is based on.</td>
<td>12,5% 0% 29,2% 20,8% 37,5% 100%</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>External audit reviews the implementation of internal audit recommendations within the activities implied in the process of financial reporting.</td>
<td>0% 4,2% 16,7% 29,2% 50% 100%</td>
<td></td>
</tr>
</tbody>
</table>

*Source: author’s projection by using SPSS 16*
### Table 5: Current application of external audit practices proposed

<table>
<thead>
<tr>
<th>No.</th>
<th>Current application of external audit practices proposed</th>
<th>Response options</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>1</td>
<td>External auditor is proposed / recommended by audit committee and satisfies the criteria of independence and professional competence required.</td>
<td>8.4%</td>
<td>4.2%</td>
</tr>
<tr>
<td>2</td>
<td>External auditor must attend the General Meeting of Shareholders to inform and to answer to the various questions expressed by shareholders and investors.</td>
<td>4.2%</td>
<td>16.7%</td>
</tr>
<tr>
<td>3</td>
<td>External auditor must achieve its objectives and activities in terms of protecting the interests of owners (shareholders).</td>
<td>0%</td>
<td>8.4%</td>
</tr>
<tr>
<td>4</td>
<td>External audit should develop a good-working relationship with the entity's internal audit department</td>
<td>0%</td>
<td>8.4%</td>
</tr>
<tr>
<td>5</td>
<td>External audit should consider the results of internal audit reports with respect to the internal control system functionality in terms of accounting.</td>
<td>0%</td>
<td>4.2%</td>
</tr>
<tr>
<td>6</td>
<td>External audit should take in consideration the risks identified by internal audit within financial and accounting area, proceeding to the appropriate adjustments of audit procedures and objectives.</td>
<td>0%</td>
<td>8.4%</td>
</tr>
<tr>
<td>7</td>
<td>External auditors discuss with audit committee members and</td>
<td>4.2%</td>
<td>8.4%</td>
</tr>
</tbody>
</table>
management about the accounting policies adopted by organization, the quality of professional judgments and accounting estimates made by management.

8 External audit makes proposals to the audit committee for enhancing the effectiveness of internal control system in terms of financial and accounting function.

9 External audit inform the audit committee and the management about the results of its activities, presenting also the arguments that justify its audit opinion with respect to the reliability and true and fair view of the audited financial statements.

10 External audit is consulted about the effectiveness of the entity’s internal audit function.

11 External audit should allow the access of internal audit department to relevant working files that the audit opinion is based on.

12 External audit reviews the implementation of internal audit recommendations within the activities implied in the process of financial reporting.

Source: author’s projection by using SPSS 16
Proceeding to an analysing of the data presented in the above tables, it could be noticed for many of these external audit practices proposed, significant differences between the respondents’ agreement for the proposals of external audit practices and their actual applicability. Some relevant examples in this way are: the external audit practice number 1 (External auditor is proposed / recommended by audit committee and satisfies the criteria of independence and professional competence required) for which more than 62% are strongly agreed to be included as a good external audit practice into an integrated framework, while only 29.2% stated they are known and always applied, 33.2% recognising that even if this practice is known, it is quite rarely applied. Same discrepancies could be observed also for external audit practice number 4 (External audit should develop a good-working relationship with the entity’s internal audit department) for which more than 70% are strongly agreed with this proposal of good practice for external audit, while 41.6% states that even if this practice is known it is quite rarely applied. Same differences between the agreement of their inclusion within an integrated framework of good external audit practices and their real applicability at this moment could also be noticed for practices no. 3, 5 and 8 from the tables presented above.

There were only few practices for which the results obtained for their proposals are somewhat close and there could be mentioned external audit practice number 7 (External auditors discuss with audit committee members and management about the accounting policies adopted by organization, the quality of professional judgments and accounting estimates made by management) for which 62.4% are strongly agreed with its proposal and, in the same time, more than 58% agreed that this practice is often and almost always applied. Same situation is also available for external audit practice number 9 (External audit inform the audit committee and the management about the results of its activities, presenting also the arguments that justify its audit opinion with respect to the reliability and true and fair view of the audited financial statements).

The practices that were not quite well received by the respondents neither from their proposal’s point of view, neither from their applicability’s point of view are number 10 (External audit is consulted about the effectiveness of the entity’s internal audit function) and 11 (External audit should allow the access of internal audit department to relevant working files
that the audit opinion is based on), which somewhat contradict the findings of NIVRA (2010) where it is recommended that both internal audit and external audit to allow one to each other the access of their working files and report, stimulating a better cooperation between external audit and internal audit. In the vision of Romanian respondents, it’s not so well received the idea of the possibility that external and internal audit to assess one to each other their effectiveness, some respondents giving some interesting comment, saying that “it would be like internal audit is subordinated to external audit, and this is not the truth”. In our opinion, giving the possibility to the external audit and internal audit to assess one to each other their effectiveness wouldn’t necessarily meant a relationship of subordination, but rather the certain premises that would ensure the increasing of effectiveness of both external and internal audit in fulfilling their objectives.

A general observation is that for many of those practices tested through this study there seems to be relevant differences between the respondent’s agreement over their proposals and their real applicability at this moment. In the author’s opinion, these significant differences between their proposal and their applicability could be seen as a strong signal that it’s time to pay a lot more attention to the process of reviewing the external audit practices in the context of corporate governance, and more over to realise a consistent analysis in order to identify appropriately the imperative changes required by the difficult economic context that all we are living nowadays.

Next, in tables number 6 and number 7 for each of the external audit practices tested there are presented the basic statistical parameters, from both perspectives (proposal and application), mentioning that the display order will be descending means.
### Table 6: Statistical parameters for proposals of external audit practices

<table>
<thead>
<tr>
<th>Proposals of external audit good practices</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. External audit should develop a good-working relationship with the entity’s internal audit department</td>
<td>24</td>
<td>3.00</td>
<td>5.00</td>
<td>4.5833</td>
<td>1.71728</td>
<td>2.884</td>
</tr>
<tr>
<td>2. External audit inform the audit committee and the management about the results of its activities, presenting also the arguments that justify its audit opinion with respect to the reliability and true and fair view of the audited financial statements.</td>
<td>24</td>
<td>3.00</td>
<td>5.00</td>
<td>4.5417</td>
<td>1.72106</td>
<td>2.896</td>
</tr>
<tr>
<td>3. External audit should consider the results of internal audit reports with respect to the internal control system functionality in terms of accounting.</td>
<td>24</td>
<td>3.00</td>
<td>5.00</td>
<td>4.5417</td>
<td>1.72106</td>
<td>2.896</td>
</tr>
<tr>
<td>4. External audit makes proposals to the audit committee for enhancing the effectiveness of internal control system in terms of financial and accounting function.</td>
<td>24</td>
<td>3.00</td>
<td>5.00</td>
<td>4.5000</td>
<td>1.72232</td>
<td>2.958</td>
</tr>
<tr>
<td>5. External auditors discuss with audit committee members and management about the accounting policies adopted by organization, the quality of professional judgements and accounting estimates made by management.</td>
<td>24</td>
<td>2.00</td>
<td>5.00</td>
<td>4.4583</td>
<td>1.83297</td>
<td>3.354</td>
</tr>
<tr>
<td>6. External audit should take in consideration the risks identified by internal audit within financial and accounting area, proceeding to the appropriate adjustments of audit procedures and objectives.</td>
<td>24</td>
<td>3.00</td>
<td>5.00</td>
<td>4.4167</td>
<td>1.77553</td>
<td>2.809</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>External auditor is proposed/recommended by audit committee and satisfies the criteria of independence and professional competence required.</td>
<td>24</td>
<td>2,00</td>
<td>5,00</td>
<td>4,3750</td>
<td>92,372</td>
</tr>
<tr>
<td>8.</td>
<td>External auditor must attend the General Meeting of Shareholders to inform and to answer to the various questions expressed by shareholders and investors.</td>
<td>24</td>
<td>3,00</td>
<td>5,00</td>
<td>4,3333</td>
<td>8,1650</td>
</tr>
<tr>
<td>9.</td>
<td>External auditor must achieve its objectives and activities in terms of protecting the interests of owners (shareholders).</td>
<td>24</td>
<td>2,00</td>
<td>5,00</td>
<td>4,2500</td>
<td>1,0733</td>
</tr>
<tr>
<td>10.</td>
<td>External audit reviews the implementation of internal audit recommendations within the activities implied in the process of financial reporting.</td>
<td>24</td>
<td>2,00</td>
<td>5,00</td>
<td>4,2500</td>
<td>8,9685</td>
</tr>
<tr>
<td>11.</td>
<td>External audit is consulted about the effectiveness of the entity’s internal audit function.</td>
<td>24</td>
<td>1,00</td>
<td>5,00</td>
<td>3,7500</td>
<td>1,1316</td>
</tr>
<tr>
<td>12.</td>
<td>External audit should allow the access of internal audit department to relevant working files that the audit opinion is based on.</td>
<td>24</td>
<td>1,00</td>
<td>5,00</td>
<td>3,7083</td>
<td>1,33447</td>
</tr>
</tbody>
</table>

Source: author’s projection by using SPSS 16
Table 7: Statistical parameters for current applicability of external audit practices

<table>
<thead>
<tr>
<th>Current application of external audit practices</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. External audit inform the audit committee and the management about the results of its activities, presenting also the arguments that justify its audit opinion with respect to the reliability and true and fair view of the audited financial statements.</td>
<td>24</td>
<td>2,00</td>
<td>5,00</td>
<td>3.9583</td>
<td>1.08264</td>
<td>1.172</td>
</tr>
<tr>
<td>2. External auditors discuss with audit committee members and management about the accounting policies adopted by organization, the quality of professional judgements and accounting estimates made by management.</td>
<td>24</td>
<td>1,00</td>
<td>5,00</td>
<td>3.8333</td>
<td>1.20386</td>
<td>1.449</td>
</tr>
<tr>
<td>3. External audit should take in consideration the risks identified by internal audit within financial and accounting area, proceeding to the appropriate adjustments of audit procedures and objectives.</td>
<td>24</td>
<td>2,00</td>
<td>5,00</td>
<td>3.7917</td>
<td>.97709</td>
<td>.955</td>
</tr>
<tr>
<td>4. External auditor must achieve its objectives and activities in terms of protecting the interests of owners (shareholders).</td>
<td>24</td>
<td>2,00</td>
<td>5,00</td>
<td>3.7083</td>
<td>.95458</td>
<td>.911</td>
</tr>
<tr>
<td>5. External audit should consider the results of internal audit reports with respect to the internal control system functionality in terms of accounting.</td>
<td>24</td>
<td>2,00</td>
<td>5,00</td>
<td>3.7083</td>
<td>.85867</td>
<td>.737</td>
</tr>
<tr>
<td>6. External audit should develop a good-working relationship with the entity’s internal audit department</td>
<td>24</td>
<td>2,00</td>
<td>5,00</td>
<td>3.7083</td>
<td>.99909</td>
<td>.998</td>
</tr>
</tbody>
</table>
7. External auditor is proposed/recommended by audit committee and satisfies the criteria of independence and professional competence required.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>5.00</td>
<td>3,6250</td>
<td>12,0911</td>
</tr>
<tr>
<td>1.462</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. External audit makes proposals to the audit committee for enhancing the effectiveness of internal control system in terms of financial and accounting function.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>5.00</td>
<td>3,4167</td>
<td>10,0007</td>
</tr>
<tr>
<td>1.210</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. External audit reviews the implementation of internal audit recommendations within the activities implied in the process of financial reporting.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>5.00</td>
<td>3,3750</td>
<td>11,7260</td>
</tr>
<tr>
<td>1.375</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. External auditor must attend the General Meeting of Shareholders to inform and to answer to the various questions expressed by shareholders and investors.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>5.00</td>
<td>3,3333</td>
<td>10,9014</td>
</tr>
<tr>
<td>1.188</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. External audit should allow the access of internal audit department to relevant working files that the audit opinion is based on.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>5.00</td>
<td>2,8333</td>
<td>11,2932</td>
</tr>
<tr>
<td>1.275</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. External audit is consulted about the effectiveness of the entity’s internal audit function.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>5.00</td>
<td>2,6250</td>
<td>10,6552</td>
</tr>
<tr>
<td>1.114</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: author’s projection by using SPSS 16

Based on the above tables, it was developed a ranking for the good practices, from both their proposal and their application, starting from the display order by descending means (first 5 means).

From the point of view of their proposals, the good external audit practices that should be taken into account for an integrated framework
from the respondents’ point of view are (their statistical mean is around 4.5000 - 4.4583):

- External audit should develop a good-working relationship with the entity’s internal audit department
- External audit inform the audit committee and the management about the results of its activities, presenting also the arguments that justify its audit opinion with respect to the reliability and true and fair view of the audited financial statements.
- External audit should consider the results of internal audit reports with respect to the internal control system functionality in terms of accounting.
- External audit makes proposals to the audit committee for enhancing the effectiveness of internal control system in terms of financial and accounting function.
- External auditors discuss with audit committee members and management about the accounting policies adopted by organization, the quality of professional judgments and accounting estimates made by management.

From the point of view of their application, the good external audit practices which are more applied, taking in consideration their statistical mean (around 3.7083 - 3.9583, which means these practices are known and rather often than always applied):

- External audit inform the audit committee and the management about the results of its activities, presenting also the arguments that justify its audit opinion with respect to the reliability and true and fair view of the audited financial statements.
- External auditors discuss with audit committee members and management about the accounting policies adopted by organization, the quality of professional judgments and accounting estimates made by management.
- External audit should take in consideration the risks identified by internal audit within financial and accounting area, proceeding to the appropriate adjustments of audit procedures and objectives.
- External auditor must achieve its objectives and activities in terms of protecting the interests of owners (shareholders).
External audit should consider the results of internal audit reports with respect to the internal control system functionality in terms of accounting.

The statistical parameters resulted for the external audit practices tested through this study allows us to observe, at a general view, the statistical mean obtained when speaking about their application is lower than the one resulted in case of their proposal, which could reflects the respondents’ position about their agreement for inclusions of those practices into an integrated framework of good external audit practices in context of corporate governance, in spite of the fact that actually these proposed practices seem to be more rarely and less often applied.

Limits of current study and suggestions for improving further research

Of course, our study is far from being perfect, that’s why we have to be fully aware and to admit there are some limits of this study. One significant disadvantage is represented by the lower response rate, which even is over 5% (the minimum response rate recommended by statistical literature), still our common sense can’t afford us to consider this response rate as being the most relevant one. But, in spite of this great disadvantage, we do still believe the value of this paper is argued by its possibilities to be considered as a good starting point that will stimulate further researches and constructive debates in this area, taking in consideration the pressure of the actual economic context over the external auditors, that all are called to rebuild the investor trust in the reliability of financial reporting process.

The nature of our research tool used in developing our study (email survey) also had influenced the number of external audit practices that could be included in the questionnaire. The greater number of external audit practices would be included in the study, more likely it would be the increasing of risk of lower response rate. For these reasons, there were selected only 12 external audit practices in order to be tested, even if we agree that there could a lot more external audit practices that should be tested. For example, one significant practice should be related to the remuneration of external auditors and the monitoring of audit fees by the governance bodies within the company. In this area, one significant practice
that could be tested would be represented by the necessity of monitoring if the external auditors are receiving large fees for non-audit services which might exceed the audit fee for audit services, because in this cause the independence of external auditor would be seriously affected.

Also, another limit is given by the fact that probably it would be better to include in our study only auditors with experience in financial audit, excluding from our sample the internal auditors, given the nature of audit practices tested. But due to the small final dimensions of our sample we decided to include the responses completed by the internal auditors also, starting from the premises that external auditor interact with internal auditor, and internal auditors’ vision over the external audit practices would contribute at the objectivity of the results obtained. Most likely, it would help more if this kind of research would be extended at international level, where the information available would certainly be more consistent.

**Conclusions**

Our findings allow us to draw a general conclusion represented by a general agreement of Romanian auditors about the need of developing an integrated framework of good audit practices, including external audit practices, most of the proposed practices being positive evaluated by our respondents. Some of the respondents had been provided besides their answers, also, some useful comments revealing the discrepancies between theory and practice, between what it should be and what is actually.

For example, one kind of this situation is referring to the communication between external audit and audit committee members, because, in some entities where the respondents are activating, the meetings between audit committee members and external auditors are only formal, due of some factors like: insufficient financial and accounting expertise of audit committee members or the audit committee members are not perfectly aware about their responsibilities in the context of corporate governance. Some respondents state that their recommendations as external auditors could be effectively accepted and implemented by management only with the audit committee’s real support, and when this support is actually missing, external auditors have no other way to act.
In this context, it’s obviously an imperative necessity for developing further researches and debates on such a research area with more practical added-value for the entities. More likely, developing studies in this area by using more complex statistical analysis applied at international level, also being interlinked at the current realities of economic context, could provide significant value that would help to the increasing of the real effectiveness of the external audit as a relevant corporate governance mechanism.

Acknowledgements

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[15] Principal Institute of Internal Auditors The Netherlands (IIA) and Royal Dutch Institute of Chartered Accountants – NIVRA (2010), "Impact on governance: internal and external auditor, together an even more powerful contribution to governance", Institute of Internal Auditors The Netherlands, Naarden and Royal NIVRA, Amsterdam, accessible at www.nivra.nl;


The Impact of National Currency Instability and the World Financial Crisis in the Credit Risk. The Case of Albania

Author: Dr. Anila MANÇKA, Department of Finance-Accounting University Fan S. Noli, Korçë, Albania, arapi_anila@yahoo.com

My research paper aims at analyzing the relationship which exists between macroeconomic situation and the indicators that measure the quality of the credits in the Albanian bank system for the period 2002-2010. The results of the research work have proved the raised hypothesis that the instability of the national currency, in relation to Euro and the American Dollar, and the world financial crisis have influenced upon the systematic credit risk in Albania. First, we would like to express our evaluation about the credit portfolio characteristics and the tendency of the credit risks in our bank system, evidencing some very important moments which have affected sensibly the tendency of problematic credits. Further, we have investigated the relationship between the credit risk, which is measured by the ratio non-performing loans to total loans and some of the main macroeconomic indicators.

Keywords: macroeconomic factors, financial crisis, credit risks, exchange rate, instability, national currency

JEL Classification: G01, G11, G21, F31
Introduction

A lot of efforts have been made for the construction of empirical models which assess the influence of the different macroeconomic factors upon the indicators that measure the quality of the banking system. That is the ratio of the credits with problems to total of credits. The problematic credits are caused by the borrowers, who can’t pay or can turn back in delay.

These borrowers belong to different economic groups which carry out their microeconomic activity in a certain time and certain space. Their behavior depends and is influenced by the performance of basic indicators which characterizes the macroeconomic development of a certain country. If such indicators display an unfavorable performance for the borrowers, this would influence, in a way or other, upon the level of loan repayment and the latter will influence upon the quality of the bank system, as a whole. Tom Wilson and McKinsey & Company developed “Credit Portfolio View” in 1997, a multiple regression model to measure the credit risk. This model may be useful for evaluation the probability distribution of default and assessment of probability of deterioration of the type of credits in different industrial sectors in certain countries. “Credit Portfolio View” takes into consideration the dependency which exists between the probability of default loans and the deterioration of the credit class to the economic situation.

When the economy doesn’t work properly, the possibility of default of companies and the deterioration of the credit class increases, and it happens otherwise, when the economy is developing normally. The quality of the bank system is influenced by certain macroeconomic factors, and every one of them has an important influence upon the credit risks.

This depends on the characteristics of the country, on the economic sector and on the period that we have undertaken the research work. Kern/Reitzig, [2000] pointed out that in seven out of eight important sectors in the German economy, three macroeconomic factors, influenced systematically in deterioration of the credit quality. These factors were: the change of the gross domestic production, the rate of the unemployment and the exchange rate of national currency with the American dollar. Bostjan Aver [2007] defined that the systematic credit risk in the bank portfolio in
Slovenia was greatly influenced from the short term, medium or long term interest rate of the bank institutions at that country, from the rate of unemployment and stock index trading. The quality of the bank system was less influenced by the imports, exports, the exchange rates, the change of the gross domestic production or by the inflation rate.

As the credit portfolio consists of different currency then the exchange rate risk will be present. The credit portfolio according to the currency depends on the available funds and the market demand. Banks manage their funds in different currency through their open positions.

The level of the open positions defines the level of exposure to assessment or devaluation of currencies. The negative changes of the exchange rates damage the structure of the active and the passive of the bank, getting worse their paying ability, the liquidity situation and their profits. Kaminsky, Lizondo and Reinhard [1998], in one of their reviews concerning the bank crisis, concluded that five of seven researches gave evidence to the increase of the credits as basic fact of the bank crisis and its currencies. At the same paper they found out that three out of four credit booms are connected with the bank crisis and seven out of eight of them have to do with the currency crisis. Kaminsky and Reinhard [1990], named it as twin crisis. One currency will worsen the financial bank situation because of its open established positions. Also, the financial situation of the borrower will deteriorate together with the currency crisis which he generates incomes. It is a real fact that many borrowers in Albania have an incompatibility between the credit currency and currency of the entering flux of the money. So, the depreciation of the currency from which they provide incomes put them in difficult liquidity situations and brings them across the way of the increase of problematic credits. If there is a fast lending credit then their effect will be much greater.

**Portfolio credit characteristics and the analysis of credits with problems in Albanian bank system**

The Albanian bank system activity has increased sensibly. The total weight of the bank system activity to GDP at the end of 2010 was 80.9% %. The development of the credit basis shows evidence as one of the most
Impetuous activities and exercises a great influence not only upon the banking activity, but also upon the entire economy of the country. In 2011, the total of the distributed credits by our banking system was 40% of GDP.

In spite of the high rates of growth, Albania is one of the countries with the lowest ratio of the credits in the private sector to GDP, 36.6%. The commercial banks have used a conservative business strategy. The funds collected by the people, in the form of deposits have mainly been invested in Treasury Bonds or in similar instruments of them, with low possible risk and low rate of return. The credit for the economy, not only for the businesses but also for the individuals has been limited; the interest's rates have been very high and the procedures too extended and very careful. The demand has been sustainable, high and constant by the borrowers, with an increasing tendency.

Most of the credit portfolio is the credit which is granted to the businesses, 67.3% to the businesses and 30.1% to the individuals. In the Albanian economy, the use of the foreign currency, especially the use of Euros and of American dollars, is widely spread and effective. Until 2001, the American dollar was considered as one of the most important currency and has been used in most of the commercial activities as a tool for the protection against the risks of the depreciation of the National currency on one hand, and for facilitating the transactions with foreign companies on the other. The American dollar, gradually, began to lose its domination, after entering the Euro in the Euro zone in the year 2001.

This changing tendency is reflected in the deposit structure, which before that year they were mostly in American currency. The banks have considered it as quite reasonable the use of these two currencies in their credit activity, in order to avoid the exchange rate risk and the interest’s norm. The business and the individuals have preferred their credits in Euro because of the low interest’s norm of credit in Euro, the long term stability tendency of the Euro, compared with the national currency, but at the same time, because of the fact that the incomes from the business and individuals has been in Euro. The reduction of the interests’ norms of the credit in ALL caused the increase of the interest of the credit in ALL and that credit represents a considerable part of the total credits offered by our bank system.
The data to draw the graph from Albanian Bank

Figure 1: The tendency of exchange rate ALL/EUR and ALL/$

Figure 1 show clearly the greater stability of Euro in comparison with the American dollar for the period which is taken into consideration. The exchange rate of ALL with Euro has fluctuated within the terms: ALL 120.91 to 140.38 for one Euro. This exchange rate has varied from time to time with increase or decrease. On the other hand, the exchange rate for the American dollar has fluctuated One ALL for 77.24 to 144.06. But, starting from third quarter of the year 2008 Euro began to assess sensibly towards the ALL. This sort of tendency is present up to March 2011, where the Euro catches the highest quote in ALL, from the time of its existence in Euro zone. For the year 2010, 75% of the Credit Portfolio has been in foreign currency, where 84% has in Euro and 15% in American dollars. After it, it is the credit in ALL and a small part is represented by the American dollar credit. The total amount of the credit in foreign currency, where the incomes of the borrowers are in ALL, represents 35.6% of the total credit and 51% of the credit in foreign currency. The credit in Euro, where the incomes of the borrowers are in ALL, represents 45.3% of the credit in foreign currency. This part of the loan represents a potential channel of
negative impact on the banking sector to adverse changes in exchange rate that can be accompanied with increase in indirect credit risk as a result of the difficulties of borrowers for the payment of the loan obligation.

![Graph showing the tendency of bad credits](image)

*The data to draw the graph from Albanian Bank*

**Figure 2**: The tendency of bad credits

The credits that have to do with real properties have been rising sensibly and rapidly. They represent 14.6% of the GDP. The main features of the credit process concerning real properties that have been evidenced during the last years are: predominance of the credit for real properties granted to individuals and predominance of the credits for real properties granted in foreign currency. Regard the purpose of use the credit for business is focused for the “overdraft”, “purchase of equipment”, “real properties” and less for working capital.

Figure 2 shows the quality of the bank system, respectively credits with problems to total of the credit for the period January 2002 until December 2010. Comparison of key indicators that measures the quality of loans portfolio in the region a test to the quality of loans portfolio in the banking system in Albania, at relatively good, compared to several regional
countries such as Bulgaria, Romania, Lithuania etc. Lithuania presented with the highest ratio of non-performing loans to total loans, with 19.2 % and the lowest level keeps Turkey with 4.9 % Table 1.

<table>
<thead>
<tr>
<th>Country</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>2.3</td>
<td>3.1</td>
<td>3.4</td>
<td>6.6</td>
<td>10.5</td>
<td>12</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>5.3</td>
<td>4</td>
<td>3</td>
<td>3.1</td>
<td>5.9</td>
<td>7.1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>2.2</td>
<td>2.2</td>
<td>2.1</td>
<td>2.5</td>
<td>6.4</td>
<td>7.8</td>
</tr>
<tr>
<td>Croatia</td>
<td>6.2</td>
<td>5.2</td>
<td>4.8</td>
<td>4.9</td>
<td>7.8</td>
<td>8.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>0.2</td>
<td>0.2</td>
<td>0.4</td>
<td>1.9</td>
<td>5.2</td>
<td>5.6</td>
</tr>
<tr>
<td>Hungary</td>
<td>2.3</td>
<td>2.6</td>
<td>2.3</td>
<td>3</td>
<td>6.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.6</td>
<td>1</td>
<td>1</td>
<td>4.6</td>
<td>19.3</td>
<td>19.2</td>
</tr>
<tr>
<td>FYR Macedonia</td>
<td>15</td>
<td>11.2</td>
<td>7.5</td>
<td>6.8</td>
<td>8.9</td>
<td>9.9</td>
</tr>
<tr>
<td>Montenegro</td>
<td>5.3</td>
<td>2.9</td>
<td>3.2</td>
<td>7.2</td>
<td>13.5</td>
<td>14.9</td>
</tr>
<tr>
<td>Romania</td>
<td>2.6</td>
<td>2.8</td>
<td>4</td>
<td>6.5</td>
<td>15.3</td>
<td>17.5</td>
</tr>
<tr>
<td>Turkey</td>
<td>5</td>
<td>3.9</td>
<td>3.6</td>
<td>3.8</td>
<td>5.6</td>
<td>4.9</td>
</tr>
</tbody>
</table>

*Source: IBM “Global Financial Stability Report”, October 2010*

**Establish hypothesis and the research methodology**

1. **Establish hypothesis**

   Based on the research work done by the scientists and foreign experts, we are trying to find out whether the instability of the national
currency comparing with Euro and American dollar and the world financial crisis have had an important influence upon the systematic credit risk in Albania. Hypothesis set up for this case are:

- **H1:** The exchange rate of the Euro with the National currency has had an important influence upon the systematic credit risk in the Albanian bank system.
- **H2:** The exchange rate of the American dollar with the National currency has had an important influence upon the systematic credit risk in the Albanian bank system.
- **H3:** The World financial crisis has had an important influence upon the systematic credit risk in the Albanian bank system.

The suggested model takes into account a relationship between the variable which expresses the quality of the credit portfolio and the other variables which are thought that they are its determinant. The model forms are expressed as it follows:

\[ y = \beta_0 + \beta_1 \times \text{Euro} + \beta_2 \times \text{$$} + \beta_3 \times K + \epsilon \]

Variables used are quarterly frequency. More concretely, the equation expresses the relationship between the dependent variable, the systematic credit risk which is measured by the ratio of the credit with problems to total credit and the other independent variables which are:

- The exchange rate of the Euro with the national currency, “Euro”
- The exchange rate of the American dollar with the National currency “$$”
- The World economic and financial crisis, “K”

The above described model, on the right hand space, expresses the combination of some of the main macroeconomic indicators which taking into account their instability, have influenced upon the general economic situation where the borrowers have carried out their activity. The left side gives the value of the credit with problems to total credit, the quality of the bank system, or, the probability of not paying off the credit taken which depends to the concrete case of the macroeconomic environment. This means that the value of the macroeconomic indicators in a certain period of time determine this report. Hypothesis that are to be proved are:

- **H_0:** \( \beta_1 = \beta_2 = \beta_3 = 0 \)
H₁: At least one of the above-mentioned parameters is different from zero.

2. Collecting the data and processing the variables.

The instability of the National currency towards the Euro and the American dollar is measured by the exchange rate of All with Euro and All with American dollars. Besides the exchange rate of Euro and American dollars with the ALL, in this model, we have included the World economic and financial crisis. The crisis had negative effects on the macroeconomic situation in Albania which was reflected in the credits with problems. Three different macroeconomic factors were selected to test the above mentioned hypothesis. The selected factors, with effect on the systematic credit risk, represent the entering variables of the model which is used to define their important influence on the value of credit risk in the Albanian bank system.

Here are the following data of the resources that have been taken under analysis.

- INSTAT, the Statistical Office.
- The database of the Albanian Bank (archives with the financial data picked up from the Albanian Bank Bulletin, statistical time series).
- Different published materials from the Albanian Bank.

The realized analysis of the Albanian bank portfolio is mainly quantitative analysis, as the two independent variables that were used to describe the systematic risk factors of the Albanian bank portfolio credit are quantitative and only one of them that is the crises, is a qualitative variable. The qualitative variable, “Dummy” gets the value of “0” and “1”.

More concretely, it gets the value of “0” when our bank system is influenced by the economic and financial crisis and gets “0” when it’s vice versa. For the period from the third quarter of the year 2008, a period when our bank system was affected by the crisis effects, until the fourth quarter of the year 2010, qualitative factor “Dummy” gets the value “1” and for the other period of time it gets the value “0”. The influence of the macroeconomic special factors in the value of risk of the credit in the Albanian bank system has been tested with the support of the software SPSS and other statistical methods, such as the multiple linear regression. The applied model is based on the different data of the macroeconomic factors of the credit risks, collected on quarterly periods, and the quarterly data of the credit risks.
from January 2002 until December 31, 2010. The chosen period of the Albanian bank system after the year 2002 was the best for making a suitable analysis, as the period before 2002 makes the results quite complicated.

- First: For the lack of data. The data series for the variable “the exchange rate of ALL/Euro” taken into analysis was rather impossible for the period before the year 2002, as the Euro currency entered in Euro-zone in 2001.
- Second: Methodology changes. Up to the year 1998, the classification according to the categories and sub-categories of the credits with problems was done on some criteria which are quite different from those nowadays. In this way, their value can’t be comparable for this respective period of time.
- Third: The change of the credit policy. Before the year 1997 the credits were granted on non-professional, and not competitive basis. This form created a lot of credits with problems for the Albanian state banks. The credits with problems of the privatized Albanian state banks were transferred to the Credit Treatment Agency.

The qualitative indicator of the credit portfolio is measured by the ratio of the credit with problems to total amount of credit offered by the Albanian bank system for the period: January 2002- until December 2010.

3. The results of the multiple linear regression

So, we get a multiple linear regression model for three macroeconomic variables, with the coefficient of determination 0.924, and the corrected coefficient of the determination of 0.854. This means that, 85.4% of the credit systematic risk variability in the Albanian bank system is explained by the established model, by the instability of the national currency in comparison with Euro and the American dollar, and by the world economic and financial crisis. The calculated results are presented in the Table 2.

Table 1 presents the results of the test “t”, testing the impact of the independent variable in the credit risk.

- Control the importance of the relationship: The value of Fisher, “F”, is 62.278, which is higher than the critical value. This fact refutes
the hypothesis \( H_0: \beta_1 = \beta_2 = \beta_3 = 0 \) and automatically accepts as a true hypothesis \( H_1: \) At least one of the above-mentioned parameters is different from zero. So, according to the test of Fisher, we proved that between the dependent variable, the credit risk, and the independent variables, three macroeconomic variables, there is an important relationship, at least one of the parameters, \( \beta \), is different from zero.

**Table 2: Results of multiple linear regression**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.924(^a)</td>
<td>.854</td>
<td>.840</td>
<td>1.292544</td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), Crisis, Dollar, Euro

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3</td>
<td>104.046</td>
<td>62.278 (.*00)</td>
<td>.000(^a)</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>32</td>
<td>1.671</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35</td>
<td>365.600</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), Crisis, Dollar, Euro

b. Dependent Variable: Risk
<table>
<thead>
<tr>
<th>Coefficients&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Unstandardized Coefficients</th>
<th>Stand. Coefficients</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-16.168</td>
<td>5.492</td>
<td></td>
</tr>
<tr>
<td>Euro</td>
<td>.131</td>
<td>.052</td>
<td>.259</td>
</tr>
<tr>
<td>Dollar</td>
<td>.035</td>
<td>.018</td>
<td>.182</td>
</tr>
<tr>
<td>Crisis</td>
<td>5.634</td>
<td>.649</td>
<td>.766</td>
</tr>
</tbody>
</table>

Criterion “t” for the evaluation of the importance of individual parameters and verification of the three raised hypothesis. The equation that we have taken is:

\[ y = -16.168 + 0.131 \times \text{euro} + 0.035 \times \text{dollar} + 5.634 \times \text{K} + \epsilon \]

The regression coefficient signs are in accord with the economic logic, which in our case means:

- An increase of the exchange rate of ALL/Euro with a unit, influence in the increase of the credit risk with 0.131 per unit, when all the other variables remain constant.
- An increase of the exchange rate of ALL/American dollar with a unit, influence in the increase of the credit risk with 0.035 per unit, when all the other variables remain constant.
- An economic and financial crisis, influence in the increase of the credit risk with 5.634 per unit, when all the other variables remain constant.
In order to determine which of the parameters is more important, it is used as statistical method the criterion “t”. By comparing the values of “t” critical for 36-2-1=33 degrees of freedom and α=0.05 shows that the three “beta” coefficients are statistically significant. So the coefficients before the independent variables are different from zero, because there is an important relationship between them and the systematic credit risk. So, the three raised hypotheses are true:

- **H1**: The exchange rate of the Euro with the National currency has had an important influence upon the systematic credit risk in the Albanian bank system.
- **H2**: The exchange rate of the American dollar with the National currency has had an important influence upon the systematic credit risk in the Albanian bank system
- **H3**: The World financial crisis has had an important influence upon the systematic credit risk in the Albanian bank system.

**Conclusions**

The results of the analysis of the credit risk of the Albanian bank system for the period: January 2002-December 2010 shows that the instability of the National currency in comparison with Euro and the American dollar and the world economic and financial crisis had an important influence on the credit risks of the Albanian bank portfolio. The risk of the credit is influenced by:

- Instability of the exchange rate of ALL/Euro. For the period January 2002 until December 2010 the National currency has been evaluate and underestimated many time compared with euro, within an interval of 120.91 to 140.38. The underestimation of the National currency and the evaluation of euro has negatively influenced on the borrowers who have taken loans in euro. This means much more ALL to liquidate the loan payments. As a result of this, the possibility for paying off the credit is increased and consequently the number of credits with problems is greater. Most of the credit which has been offered by the Albania bank system has been in euro. For the year 2010 the total amount of the credit in foreign
currency, where the incomes of the borrowers are in ALL, represents 35.6% of the total credit and 51% of the credit in foreign currency. 89% of this loan is in euro. Consequently, the increase of the credits with problems as a result of the increase of the exchange rate All/euro is evident. After the crises, the value of the exchange rate of ALL/Euro is sensibly greater than the average of the above mentioned period. The financial and economic crisis influenced on the underestimation of American dollar towards the Euro, in the reduction of the incomes from the remittances and in the reduction of exports. These factors brought up a sensible evaluation of Euro against the ALL.

- Instability of the exchange rate of ALL/American dollar. Having observed the Figure no.1, it is noticed that the exchange rate of ALL/$ has been much more instable than the exchange rate of ALL/Euro. The values are included within the limits: 77.24 to 144.06 per dollar. But the greatest influence in the systematic credit risk has had the instability of the Euro. This, because of the fact that, the credit in American dollar makes up a small amount of the total credits offered by the Albanian bank system.

- The credits with problems increased greatly because of the negative effect of the world economic and financial crisis. The world economic and financial crisis explains 84.2% of the variability of the systematic credit risk.

The world economic and financial crisis influenced on the reduction of increasing rhythm of the granted credits, in the existing situation with an continuous uncertainty in the world financial trade markets, trust crisis among the main operators in these markets, lack of liquidity and the dreary prospect for the global economic growth. The reduction of increasing rhythms of the credits brought up an increase of the ratio of credits with problems to total of the credit offered by our bank system.

The crisis influenced on the deterioration of the macroeconomic indicators which affected negatively the microeconomic environment, where the individuals and businesses carried out their activities. The increase of the exchange rate of the ALL/Euro, the increase of the number of
unemployed, the reduction of the remittance incomes brought the deterioration of the financial situation of the individuals and their families, and this situation was reflected in the increase of the probability of default.

On the other side the businesses had marked difficulties which were accompanied by the fall of their profits and sometime by a number of bankruptcies. Many of the businesses had problems for being financed by the bank system, because of the crisis, and many of them coped with a reduction of the foreign demand and consequently because of the fall of exports, the increase of the financial cost and because of the public debt. All this brought about a growth of the non-payment of the received credits. Another element which ought to be stressed is the fact that the economic crisis influenced upon the reduction of the incomes of remittances.

The credits concerning the real properties occupy an important part of the GDP, and that makes up the overwhelming part of the granted credits to individuals. The reduction of the remittances influenced directly on the aggravation of credits with problems.

- The results show that the instability of the national currency in relation to Euro and the American dollar, the world economic and financial crisis had an important influence in the value of the credit risk on the Albanian bank system. But, we can’t avoid and not take into consideration the influence of the other factors that do not appear at this analysis. This shows the restriction of the research model. These factors represent those which might have influenced upon the credit risks for the period that is made this analysis.

**Recommendation**

Having reviewed the correlating coefficient of the multiple regression model, Figure no.1, it shows that the instability of Euro has influenced much more than the instability of the American dollar in the credits with problems in Albania during the period: 2002-2010. The instability of Euro explains 40.7% of the variability of the credit risk, while the instability of American dollar explains 32.25% of the variability of the credit risk. This can be explained by the fact that the greatest part of the granted credits from the bank system are in Euro, and it is evidently that part of the Albanian
borrowers have a discrepancy between the credit currency and the entering flow of the incomes. The Albanian borrowers have preferred this alternative because of the low rate of interest in the credits of euro and their trust in the stability of Euro. This brought up the greater influence of the instability of the Euro in the deterioration of the quality of the Albanian bank system portfolio. That’s why we do conclude that the Albanian bank system is rather exposed on the instability of the national currency toward the Euro and the American dollar, which influence straight to the quality of the credit portfolio of our bank. For this reason, the banks must follow more equilibrium policy of credits, aiming at increasing the credit in ALL. The banks may offer even credits in Euro to the individuals that have current incomes in Euro. It is of great importance the management of the net currency position of the banks’ balance, which actually is in low levels, restricting the possible loss amounts.

Another very important factor which may influence upon the quality of the bank credit portfolio is the instability of the immovable properties prices. A reduction of the price of the real properties influences on the reduction of the value of the credit collateral for immovable properties, exposing the banks to great losses. The credit crisis in the USA must serve as a good lesson for our bankers. They must pay attention to the qualitative analysis of the borrowers, estimating the future flows of the money and they must not be based only to the physical collateral. The increase of the credit for the real properties and their domination towards the total of the credit expose the banks on the risk of devaluation of the real properties.

Based on the macroeconomic forecasting indicators, it is predicted the deterioration of the bank qualitative portfolio. Therefore, the bank ought to create enough reserves for the possible losses from credit risk. Based on the portfolio of loans, as well, the bank must identify their clients who have temporary problems, establishing supporting policies for them and increasing their possibility for payment. As for clients who are assessed with low chance of repayment of the loan, banks must follow legal procedures for the execution of guarantees and collateral to recover a greater amount of the loan. As for the new credits, based on the experience gained by the banks with problems, it is necessary to plan a better
distribution and to have a reasonable equilibrium between the public and private projects; between the business entrepreneurs and the families; between the ways of granting credits in ALL and foreign currency, etc., managing lending activity in such a way as to minimize the exposure of the banks toward the problematic forms and to reduce centralization, as a whole.

The results of our analysis may be applicable in other financial institutions such as: insurance company, pension funds, etc., when taking into consideration the management of the risk of their financial investments. They may be applicable in special economic sectors, e.g. may be realized empiric analysis of the influence of macro-economic factors in the credits with problems at the trade sector or at the construction sector, etc. The results of our analysis may be applicable in the credit portfolio according to the purpose of use, e.g., may organize empiric analysis of the influence of the macroeconomic factors in the credit with problems for the immovable properties and finally, the results of our analysis, may be applicable in the credit portfolio by the subject, business or individual, according to the schedule, etc.

As the Albanian bank system, displays positive reactions toward the macroeconomic situation of the country, the banks must organize the stress-test analysis. This analysis estimates the different scenario of the main macroeconomic indicators and based on the probability of occurrence of these scenarios must take immediate reaction and response, in order to avoid the different losses of the bank portfolio. Banks should strive to be the analysis more accurate, more frequent and performed on more advanced forecasting programs.

References


Managing Knowledge Assets in Project Environments

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Knowledge, as the main source of competitive advantage in today’s knowledge-based society, is often a fuzzy concept, with no direct referent in the real world. In order to conceptualize it people use the metaphor of knowledge assets, assets that can be managed, evaluated, invested in, and that became the main source of value creation within the organization. The paper’s main purpose is to present an overview of the perspectives on knowledge assets for a better identification of what they comprise and stand for, and addresses the management challenges of managing these assets by presenting some strategies that can be applied in project environments.

Keywords: knowledge assets, knowledge assets dynamics, project environment

Introduction

The concept of knowledge has drawn multiple debates in the last decades. The society is now facing a shift from an information era to one of knowledge. We are now living in a knowledge-based society, where individual and organizational knowledge, as well as brainpower, have replaced physical assets as critical resources in the corporate world (Drucker, 1993). The shift made both managers and management scholars reconsider the sources of competitive advantage. Therefore, knowledge and
the ability to create and manage it, represents the main source of sustainable competitive advantage within the business environment (Nonaka, Takeuchi, 1995; Teece, 2000; Davenport, Prusak, 2000).

Despite the fact that knowledge is now perceived as one of the most powerful sources of competitive advantage (Teece, 2000, Schiuma, 2009a, 2009b), in itself, knowledge is a fuzzy concept that has no direct referent in the real world. According to Andriessen (2006), at unconscious level, people use metaphors to conceptualize abstract phenomena. The metaphors are used in order to provide both cognitive and emotional structures to help us conceptualize the way we see things. In a systematic metaphor analysis of the three most cited publications on knowledge management, Andriessen (2006) proved the existence of six broad categories of metaphors for conceptualizing knowledge:

1. knowledge as something physical;
2. knowledge as a wave;
3. knowledge as a living organism;
4. knowledge as thoughts and feelings;
5. knowledge as a process;
6. knowledge as a structure;

Also, the study indicates the existence of two approaches, the Eastern and the Western perspective, on conceptualizing knowledge.

Thus, in the Western knowledge management literature, the dominant way to conceptualize knowledge is through the treatment of the phenomenon as something outside the human being, that can be managed, manipulated.

On the other hand, in the Eastern knowledge management literature, the dominant metaphor is *knowledge as thoughts and feelings*, where knowledge is seen as wisdom, as truth (Nonaka, Takeuchi, 1995), with a subjective nature. Because of the large number of publications in the West, the perspective of knowledge as something that can be controlled, *knowledge as capital*, has gained numerous supporters. Capital is considered valuable, of great importance, it is an asset for the future, asset that can be invested in, it is additive, it allows for returns and most important can and must be managed and measured. The positive connotations of the word capital are therefore translated to knowledge, indicating that knowledge is something important, of great value, an asset of the owner.
Knowledge as capital metaphor not only underlines the possibility of control, but also adds the notion that a proper return on knowledge is to be expected (Andriessen, 2006), hence giving birth to the concept of knowledge assets.

Unfortunately, due to the relative novelty of the attention channeled towards the concept of knowledge assets, there is a lack of effective systems and tools for evaluating and managing them. Knowledge assets must be built and used internally in order for their full value to be realized, because they cannot be readily bought and sold (Teece, 2000).

Arguably one of the main challenges with knowledge assets is their dynamic nature. They are both inputs and outputs of the organization’s knowledge creating activities, and as a direct result of that they are constantly changing (Nonaka, Toyama, Konno, 2000). In order to govern knowledge-based value creation mechanisms, an organization must measure and manage knowledge assets dynamics (Schiuma, 2009a).

Hence the importance for managers to understand what knowledge assets are, how they are interlinked, how they can be increased and evaluated. In the following sections we consider how the concept of knowledge assets can be managed in project environments, first by properly identifying what knowledge assets are and second by introducing some strategies for their management.

Knowledge assets

The concept of knowledge assets is not something new; it has been long used by the sixteenth-century alchemists that were undertaking precise measures to protect the secrets of their craft. What is new in the late twentieth century is that knowledge assets are coming to constitute the very basis of post-industrial economies (Boisot, 1998).

The new perspective on knowledge assets has raised multiple discussions among management scholars. According to Boisot (1998) knowledge assets are stocks of knowledge from which services are expected to flow for a period of time that may be hard to specify in advance.

For a better understanding of the concept the author has classified knowledge assets in two dimensions. On one hand the knowledge assets are classified according to how far they can be given form.
For example, knowledge embedded in artifacts has to be more systematically formalized and codified than knowledge embedded in text. In the end, it comes down to the distinction that Polanyi (1983) introduced with regard to knowledge. There is explicit knowledge; knowledge that can be found in books, rules, procedures, having as main characteristic the ease of codification; and there is tacit knowledge, knowledge embedded in experience, values, beliefs, that is very difficult to articulate and to codify.

The second dimension of knowledge assets in Boisot’s (1998) vision is as a function of their degree of abstraction. Knowledge that is embedded in artifacts, for example, of necessity has to be more concrete than knowledge that is set out in documents or in people’s heads, even if it incorporates quite abstract principles. A crucial difference between concrete and abstract knowledge is that the first type is confined to specific applications in space and time whereas the second type is more general and less restricted in its scope.

Continuing Boisot’s intercession, the Japanese authors Nonaka, Toyama, Konno (2000) define knowledge assets as firm-specific resources that are indispensable to creating value for the firm. Knowledge assets are regarded as having moderating character in the knowledge creation process. Developing Boisot’s classification on knowledge assets, Nonaka, Toyama and Konno (2000) introduce two more dimensions, thus categorizing them as four types: experiential knowledge assets, conceptual knowledge assets, systemic knowledge assets and routine knowledge assets (Table 1).

In the first category of knowledge assets, experiential, the authors (Nonaka, Toyama, Konno, 2000) introduced the skills, know-how acquired by individuals in experiences at work. Also emotional knowledge, care, trusts, loves are categorized as experiential knowledge assets. In this category are included the shared tacit knowledge of members of the organization and because the experiential knowledge assets are tacit they are difficult to evaluate, manage and trade. Conceptual knowledge assets, on the other hand, have tangible forms, and include explicit knowledge articulated via images, symbols, language. The systemic knowledge assets consist of systematized explicit knowledge, where manuals, product specifications, stated technologies are just some of the examples. The fourth category of knowledge assets, routine knowledge assets, includes organizational routines, organizational culture in carrying out the daily
business. The third perspective on knowledge assets (Schiuma, 2009a) considers them as cognitive artifacts, that is organizational resources made of knowledge or representing knowledge that define the knowledge domains of an organization. Metaphorically knowledge assets can be depicted and analyzed as the “roots of a tree”, where the tree denotes the business model of and organization including capabilities, processes. The development, deployment, exploitation, protection and acquisition of knowledge assets influence organizational capabilities but also core competencies. Once the managers have identified what are the knowledge assets within the organization the challenge is to determine how to manage them. The next section focuses on the management of knowledge assets in project-based environments. Project-based work is a part of the wave of ‘new organizational forms’ that has entered most industries during the past two decades. Project business denotes the activities of a company that carries out project deliveries to its customers.

<table>
<thead>
<tr>
<th><strong>Experiential knowledge assets</strong></th>
<th><strong>Conceptual knowledge assets</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacit knowledge shared through common experiences</td>
<td>Explicit knowledge articulated through images, symbols, and language</td>
</tr>
<tr>
<td>• Skills and know-how of individuals</td>
<td>• Product concepts</td>
</tr>
<tr>
<td>• Care, love, trust, and security</td>
<td>• Design</td>
</tr>
<tr>
<td>• Energy, passion, and tension</td>
<td>• Brand equity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Routine knowledge assets</strong></th>
<th><strong>Systemic knowledge assets</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacit knowledge routinized and embedded in actions and practices</td>
<td>Systemized and packaged explicit knowledge</td>
</tr>
<tr>
<td>• Know-how in daily operations</td>
<td>• Documents, specifications, manuals</td>
</tr>
<tr>
<td>• Organizational routines</td>
<td>• Database</td>
</tr>
<tr>
<td>• Organizational culture</td>
<td>• Patents and licenses</td>
</tr>
</tbody>
</table>

**Table 1: Categories of knowledge assets**

*Source: Nonaka, Toyama, Konno (2000)*
Managing Knowledge Assets in Project Environments

Managing knowledge assets

One of the main problems with knowledge is that, if trapped inside the minds of key employees, in filling drawers, databases, is of little to no value to the company or the project undertaken. It has to be supplied to the right people at the right time in order to be of full value. As knowledge is boundary less, the management has to redefine the project on the basis of the knowledge it owns (Nonaka, Toyama, Konno, 2000). Without a proper administration in a project it is very difficult to know exactly what that the team knows. In order to overcome this situation the management has to constantly read the situation, to determine what kinds of knowledge assets are available for them. One possible solution to the problem would be to undertake an inventory of knowledge assets and on this basis to construct the strategy in order to effectively utilize the available knowledge assets.

Another solution was proposed by Nonaka and Takeuchi (1995). The solution consists of creating an environment where knowledge assets can flow freely from the people who own them to the people who are in need. In order to create the environment the leaders have to supply the necessary conditions: autonomy, creative chaos, redundancy, requisite variety, trust. Autonomy is considered to increase the chances of finding valuable information and motivating the members to create new knowledge. Autonomous individuals set task boundaries for themselves in the pursuit of the goal set by the organization, customer etc. In project environments, autonomy is a prerequisite condition. An autonomous team can perform many functions, amplifying and sublimating individual perspectives to higher levels (Grant, 1996). Closely connected with autonomy is creative chaos, which stimulates the interaction between the team and the external environment. The main purpose of creative chaos is to impose a sense of crisis among the members of the team by proposing challenging goals, thus breaking routines, habits and cognitive frameworks and transcending existing boundaries. One of the biggest problems in any team, organization is knowledge inertia (Liao, Fei, Liu, 2008), and the difficulty to diverge from the course set by previous experience. The main problem with creativity is that it lies on the thin border between chaos and order. In order to maintain the balance between the two, requisite variety is a helpful instrument.
One possible way to realize requisite variety is by developing a flexible structure with multiple interlinks, thus giving fast and equal access to information, or by a redundancy of information. Redundancy is regarded (Nonaka, Takeuchi, 1995) as the intentional overlapping of information about business activities, management responsibilities. The main purpose of using redundancy in project environments is to speed up the process of knowledge creation, because, team members can easily understand their role in the team, which in turn, functions to control the direction of their thinking and actions, thus leading to a self-control mechanism for achieving the desired goal. The existence of trust in teams has been highly underlined in the literature (Daveport, Prusak, 2000; Holste, Fields, 2010).

For knowledge to be shared and created there should be strong love, caring, trust among the members of the team. It is very important for them to feel that there is an atmosphere in which they are safe to share their knowledge.

As mentioned earlier, groups, organizations continuously develop, update, lose, and acquire knowledge assets in order to improve their capabilities, actions that, in turn, imprint to knowledge assets a dynamic character. To analyze and manage the knowledge assets dynamics within an organization Schiuma (2009a, 2009b, Carlucci, Schiuma, 2005) identified three managerial processes (as depicted in figure 1): knowledge assets identification, knowledge assets mapping and knowledge assets flow.

**Figure 1:** The managerial foundations of knowledge assets

*Source:* Schiuma, 2009
According to the model the first step in managing knowledge assets is the identification of key organizational knowledge assets. In this step the project manager becomes aware of the knowledge and intangible assets domains that are to form the basis of project value creation mechanisms.

Through knowledge assets identification is located the knowledge resources held, and available for the project, which can be further employed, developed. The second step, knowledge asset mapping allows an investigation of the relationships linking the different knowledge assets between them and among them. A knowledge map, whether it is an actual map, knowledge “yellow pages” or a cleverly constructed database, points to knowledge but it does not contain it (Davenport, Prusak, 2000).

Just as an organizational chart, where spatial relationships are communicated, the knowledge maps point out the relationships in the effort to utilize knowledge (Wexler, 2001). Having a dynamic character, knowledge assets interact with each other affecting, thus, the transformation and the development of capabilities (Schiuma, 2009a). Whereas, studying the flow of knowledge assets determines how they are functionally linked, developed and renewed over time.

Unfortunately, if the first two steps proposed by Schiuma (2009a) in order to manage the knowledge assets have established methods of implementation within the project environment (knowledge inventories, knowledge maps), the third step, the study of knowledge assets flow, is facing a lack of mechanisms of implementation. There are not many research contributions in this regard, thus, proving a gate for further research in the field of knowledge assets dynamics.

Conclusions

The shift towards a knowledge-based society made knowledge as the center stage of obtaining the sustainable competitive advantage within every aspect of the human life. Nowadays, knowledge is perceives as being of great value, of great importance, as an asset for the future, asset that can be invested in, it is additive, it allows for returns and most important can and must be managed and measured, thus, reinventing the concept of knowledge assets. Despite the multiple perspectives on knowledge assets,
the management scholars all agree on the fact that knowledge assets are the basis for value creation within any organization, project.

The present article’s main purpose was to present an overview of the perspective on knowledge assets for a better identification of what they comprise, and addressing the management challenges of managing these assets by presenting some strategies that can be applied within the project environments. The dynamic character of knowledge assets is a relatively new field of research and there is an obvious lack of mechanisms and tools of addressing this dynamics, thus, proving a gateway for further research in the field.

References

Forecasting the Success of Governmental "Incentivized" Initiatives: Case Study of a New Policy Promoting the Replacement of Old Household; Air-conditioners

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Governments often use budget so as to provide incentives for citizens to adopt new policies, especially when these are promoting eco-friendly technologies e.g. to subsidise the price of a hybrid-car. The public money spent on each policy, is considered to be value-for–money only if many citizens do adopt the proposed policy. This is also known as the ‘cost-effectiveness’ or the ‘economic success’ of a new policy. The latter should not be confused with the ‘economic impact’ of the new policy, as this is usually referred to the respective macro/micro socio-economic impact. This study reports on a experiment with semi-experts using Structured Analogies (SA) forecasting the success of a new policy promoting replacing old household air conditioners with energy saving units under a new environment and technology initiative implemented by a European government. The findings shows evidence that Structured Analogies (SA) is a useful forecasting tool for policy making, however all methods

¹ Corresponding author
predicted results that were considerably off the mark, indicating the difficulty of the forecasting task under examination.

**Keywords:** Government, Incentives, Subsidies, Policy Implementation, Group forecasting, Structured Analogies

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**Introduction**

Forecasting is a vital tool for any government seeking to implement a medium or long term strategic initiative or policy. Governments very often use their budget so as to provide incentives for citizens to adopt new policies, especially when these are promoting environmental friendly technologies. The public money spent on each policy (e.g. Subsidising the price of a hybrid-car, or reducing the cost of road tax for such vehicles), is considered to be value-for-money only if many citizens do adopt the proposed policy. This is also known as the ‘cost-effectiveness’ or the ‘economic success’ of the proposed policy, and is usually measured via the adoption rate of this new policy implementation (Savio and Nikolopoulos, 2009). The latter should not be confused with the ‘economic impact’ of the new policy, as this is usually referred to the respective macro/micro socio-economic impact (e.g. increase of the competitiveness of an economic sector benefiting from the new policy).

This study reports on an experiment with semi-experts, designed to evaluate the utility of judgemental forecasting approaches including Unaided Judgement (UJ), Structured Analogies (SA) as performed by individuals as well as groups of forecasters. The task involved forecasting the success of a new environmental policy promoting the replacement of old household air conditioners with energy saving units under a new environment and technology policy implemented by a European government.
The Case

The forecasting problem concerned the cost-effectiveness of a new policy promoting the replacement of old household air-conditioners. Under the auspices of the Ministry of Development, the Greek government agreed to subsidise 35% of the costs of purchasing and installing new energy saving air-conditioning units and the withdrawal of older models. It was announced that the total cost of the program, which was to be rolled out across Greece, would amount to 15 million € and that the measure would be in place for a period of six months. A ceiling of 500 € was set and residents of Greece could withdraw up to two 9,000-24,000 BTU air-conditioners. To qualify for this initiative, consumers had to purchase an energy class A or B inverter air-conditioning system at a retail outlet of their choice and were also required to provide a copy of their ID or passport number for identification purposes and a recent copy of their electricity bill to ensure that the air-conditioner was being purchased for use in a residence rather than a place of business. The initial budget figure of 15 million € was revised to account for excess public demand, the eventual relative public expense came to 46.9 million €. The initiative was thus ‘abandoned’ after only 2.5 months duration, due to the shortage of funding resulting from the unexpected success.

Forecasting with semi-experts

Forecasters were trained in forecasting techniques, however were not necessarily versed in the specific forecasting context i.e. forecasting for the public sector, and were thus considered semi-experts. The participants were randomly divided into two separate groups of 32 members per group. To avoid contamination of ideas and techniques, each group was then introduced to only one method of judgmental forecasting. Group A learnt how to use UJ and Group B learnt how to use SA. Both groups have already been trained in the whole spectrum of quantitative techniques.

In phase one of the experiment, each participant was asked to provide forecasts on their own. In phase two, Groups A and B were subdivided into smaller groups of five or six students per group. These subgroups were then asked to provide group forecasts, thus to do so in a
collaborative fashion. Appendix A provides an example of a completed questionnaire that was submitted by a forecaster using Structured Analogies.

In UJ, forecasts are made without the provision of instructions and without recourse to a formal or structured methodology. Forecasters rely on their own judgement, taking into account situation-specific variables, and may also draw on the judgemental predictions of others who know of the situation. Research has shown that experts using UJ, often ignore key evidence and avoid potential help, at the expense of forecasting accuracy. Consequently, such forecasts usually tend to be over-optimistic (Green, 2002). SA was initially applied for conflict forecasting (Green and Armstrong, 2007). Experts studying a particular forecasting problem select as many situations as possible (the ‘Analogies’), that are similar to the target situation, describing the similarities and differences of each case. Subsequently, an overall similarity rating is produced for each analogous situation. These outcomes are then used to forecast the outcome of the target situation.

The use of multiple experts to forecast the outcomes of a particular problem via a traditional group meeting is another common approach. However, group meetings are often hindered by a lack of effective behaviour and collaboration and groups can also be overconfident. Here, we intend to study the effect of collaboration in groups when participants use UJ or SA so as to make their final forecasts.

**Results**

Semi-experts were asked to forecast two outcomes for the new policy:

- **Question 1** concerned the percentage of consumers that would participate in the Initiative, taking into account that the budget had initially been set at 15.000.000 €. As this target was exceeded the actual outcome on this question was 100%.

- **Question 2** concerned the ‘speed’ in which the consumers would participate in the initiative. 50% of the sales were completed within the first 20 days. This gave us an actual outcome of 0.7 months for this question.
We used the Mean Absolute Percentage Error (MAPE) for evaluating the alternative forecasting approaches (Table 1).

Comparing the mean forecast errors of all methods, we can see that for the first question the best forecasts were done with UJ and for the second question with Group SA.

<table>
<thead>
<tr>
<th></th>
<th>MAPE</th>
<th>UJ</th>
<th>SA</th>
<th>Group UJ</th>
<th>Group SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>44.5 %</td>
<td>52.7 %</td>
<td>46.7 %</td>
<td>52.8 %</td>
<td></td>
</tr>
<tr>
<td>Question 2</td>
<td>2.1 months</td>
<td>1.8 months</td>
<td>1.6 months</td>
<td>1.3 months</td>
<td></td>
</tr>
</tbody>
</table>

Conclusions

The students that made forecasts with SA gave on average 2.6 analogies with regard to the individual forecasts. The maximum was four analogies and the minimum was one analogy. With regard to the group forecasts there was a mean of 4.5 analogies per forecasting group. This result is reasonable since in group forecasts the members of subgroups had the possibility of exchanging opinions and ideas and the most individual analogies coincided with the analogies coming from the corresponding groups.

It is important to mention that the semi-experts that gave analogies with good results were also optimistic in the forecasts of the initiative even though they recalled analogies with medium outcomes. We speculate that their judgment was probably influenced by the timing of the initiative, just before summer, coupled with the initiative having been widely advertised to consumers.

The fact that the Government decided to increase the initial budget devoted to the policy, due to the early success, was the main reason that affected negatively the accuracy of the forecasts. This is a problem that forecasters need to deal with, in cases of forecasting Policy Implementation. The use of analogies for such a task provides an attractive prospect as
valuable information can be taken from analogous initiatives (from the past or other circumstances) and applied to the target situation (Lee et al., 2007). Concluding, this study showed that there were no significant differences between the examined forecasting approaches. Moreover, all methods predicted results that were considerably off the mark. Coupled with the impact of changing conditions in the implementation phase of the policy, these results made it difficult to accurately assess the effectiveness of each approach. This points to limitations in the use of judgemental forecasting techniques and suggests that further research is required to ascertain their effectiveness.

References


Appendix A

Example of a complete questionnaire

Funding for purchasing air conditioners.

The Initiative is nick-named ‘Replace your air conditioner’. It refers to funding the replacing and recycling of old domestic Air Conditioners and purchasing energy-efficient inverter type units. This is a new initiative part-financed by the European Regional Development Fund and by the Greek government. The whole budget of this initiative amounts to 15.000.000€.
Each citizen has the possibility of withdrawing up to two (2) appliances. These can be bought from any retail outlet that is participating in this initiative.

The citizens can qualify for a 35 percent discount of up to 500€. The customer pays only his share and the amount of funding will be given to the shops after submitting the essential supporting documents and after a process of verification.

All the withdrawn appliances will be recycled by the company ‘Appliances’ recycling’. The customers can buy new air conditioners from 10th of June 2009. The initiative will last up to 6 months (9 December 2009).

**Forecasts**

You are asked to forecast the success of the new Policy. For that reason, you should answer the questions that follow.

In the table below, please briefly describe

1. Any analogous cases that you can remember from other policies in Greece or abroad;
2. Your sources (e.g. your own experience, media reports, history, literature, etc.);
3. The main similarities and differences between your analogies and this situation.

(B) Rate the analogies out of 10 (0 = no similarity... 5 = similar... 10 = high similarity).

(C) Give the outcome of your analogy (response percent or response rate in weeks).

<table>
<thead>
<tr>
<th>(A)</th>
<th>(i) Description</th>
<th>(ii) Source</th>
<th>(iii) Similarities &amp; differences</th>
<th>(B) Rate</th>
<th>(C) Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Car withdrawal</td>
<td>Media/Personal experience</td>
<td>Similarities: funding Differences: withdrawal of old ones</td>
<td>9</td>
<td>100% success</td>
</tr>
</tbody>
</table>
Forecasting the Success of Governmental "Incentivized" Initiatives: Case Study of a New Policy Promoting the Replacement of Old Household; Air-conditioners

<table>
<thead>
<tr>
<th></th>
<th>Funding for solar heaters</th>
<th>Media</th>
<th>Similarities: Funding Differences: no withdrawal</th>
<th>6</th>
<th>70% success</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.</td>
<td>Funding for laptops to fresher top students</td>
<td>Media/ Personal experience</td>
<td>Similarities: Funding Differences: no withdrawal</td>
<td>6</td>
<td>100% success</td>
</tr>
<tr>
<td>c.</td>
<td>Similar Action in France for withdrawal of old appliances of air conditioning</td>
<td>Media</td>
<td>Similarities: Funding for withdrawal Differences: different country, funding for cars instead of air conditioners</td>
<td>6</td>
<td>The response in the Action was about 80%</td>
</tr>
</tbody>
</table>

[1] What percent of the citizens that already have air conditioner will eventually buy a new one?
Exact percent: [30] % Interval: from [15]% up to [45]%

[2] How soon do you believe that the 50% of eligible citizens will participate in the Action?
Study on Identifying the Need for Personnel within Organizations and the Labor Market Tendencies from the Perspective of Required Qualifications in Centre Region

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Socio-economic changes that followed the 1990 and demographic evolutions have decisively influenced the evolution and structure of labour force in Central Region, as well as the needs for qualification. From this perspective, the present study aimed to capture the opinion of employers in Centre Region with regard to the need for personnel in the following period and the labour market tendencies from the perspective of required qualifications within organisations. The method of the research is direct, the sample being available and composed of 247 subjects. The research is supported by the SOPHRD contract 64/3.3/S/33409 „Establishment of the Permanent Technical Secretariat of the Regional Pact for Employment and Social Inclusion in Centre Region”.

Keywords: labour market, personnel, qualification, education
Introduction

The labour force structure has suffered significant changes, the main direction being the diminution of primary sector (especially the mining industry) and of the secondary one, at the same time with the development of services and constructions. The percentage of the population employed in agriculture remains very high, despite a slow decrease during the last years. Intraregional disparities have widened recently, outlining the labour force concentration process, especially of well-qualified labour force in the large urban centres and adjacent areas – areas with a high economic dynamism and which have managed to attract significant investments in recent years. [1]

The European Union approved an employment objective for men and women of 75% for the age group 20-64 years until 2020: an ambitious undertaking for the sustainability of the European social model, social support systems, economic growth and public finances. [2]

Romania’s EU accession is a major challenge for our country and therefore for the Centre Region regarding the adaptation of Romanian economic and social environment to the European one. Under these circumstances, changes to ensure competitiveness shall determine major transformations in the area of employment and professional. The development of lifelong training system that would meet the labour force requirements and knowledge-based economy require relevant information on the evolution of jobs and professions, labour market evolution tendencies, companies’ needs of abilities and skills, correlation between demand and offer of labour force and identification of gaps, the offer of programmes of professional training suppliers and its suitability to the needs of applicants.

Methodology of research

The present methodology is a combination of the scientific marketing research methodology and the scientific sociological research methodology. Depending on the aimed objectives, the study was conducted
on two dimensions: the qualitative exploratory-type dimension and the quantitative descriptive-type dimension.

The methods used in the qualitative exploratory-type research were the following:

- **Analysis of secondary data**, making use of available data from different sources, aiming to identify some aspects of the skills and qualifications on the labour market.
- **Interviews / meetings with specialists** which aimed to get detailed information on employment and professional training for adults.
- **Round tables, workshops meetings** which allowed discussions on the concept, role, methodology and operationalization of the needs for abilities and skills of the labour force, which aimed: the formulation of some general, specific objectives, hypotheses, making the working instruments (questionnaire), the analysis and interpretation of data, conclusions and recommendations.

The quantitative descriptive-type research aimed to evaluate the coordinates of the needs of labour force skills and qualifications for the employers in Centre Region. The conclusions and recommendations of the specialists involved in the research aim the increase of employment in Centre Region.

The present research is part of the Regional Study on “The evolution of labour force on the labour market in Centre Region”. The purpose of this research is to diagnose the needs of skills and qualifications of the labour market for its adaptation to the labour market requirements in Centre Region.

One of the specific objectives, presented in this article, aims to identify the need for personnel within organisations and the labour market tendencies from the perspective of required qualifications within organisations (Table 1).

The conducted research was based both on primary data sources and on secondary data sources, which allowed establishing the objectives, the sampling scheme, and the validation of the obtained sample. The sources of information were:

- Annual statistical publications and periodicals of the National Institute of Statistics;
• Data bases of the Employment County Agencies;
• Websites, through the search engines yahoo.com, google.com, national and international data bases, which enabled us to gain access to a series of articles from international publications, courses or researches.

<table>
<thead>
<tr>
<th>Specific objectives</th>
<th>Hypotheses</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying the need for personnel within organisations and the labour market tendencies from the perspective of required qualifications within organisations</td>
<td>$H_1$ – The need for personnel with secondary and higher education within organisations is low</td>
<td>• The need for personnel with higher education studies;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The need for personnel with secondary education studies.</td>
</tr>
<tr>
<td></td>
<td>$H_2$ – There are qualifications that are not listed in the Classification of Jobs in Romania</td>
<td>• Qualifications that are not listed in COR</td>
</tr>
<tr>
<td></td>
<td>$H_3$ – The qualification that is easily found on the labour market in that of an economist, and the qualification that is found with difficulty is that of a welder</td>
<td>• Qualifications easily found on the labour market</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Qualifications found with difficulty on the labour market</td>
</tr>
</tbody>
</table>

For the collection of information, both *direct methods of research* (the application of a questionnaire directly to the respondents and its electronic transmission) and the *investigation of secondary sources* were used – which enabled a good selection of the respondents, as well as reducing the time required for the distribution of questionnaires and of the costs involved. The survey was undisguised, its purpose being known by respondents from the very beginning.
The target population for the study is composed of employers (commercial companies, government business enterprises, public institutions, NGOs) in the counties of Alba, Brasov, Covasna, Harghita, Mures and Sibiu.

In order to establish a proper basis for the survey, data from the County Employment Agencies in the counties of Alba, Brasov, Covasna, Hargita, Mures and Sibiu and from the National Institute of Statistics in Romania were used. Therefore, we obtained information on the names of the entities in Centre Region, address, phone number, e-mail address, full name of the legal representatives, allowing quick and easy access to the target group.

The sampling method consists of combining the multistage sampling method with the disproportional random sampling method.

To calculate the size of the sample, the below formula was used [3]:

\[ n = \frac{t^2 \times p \times q}{e^2} \]

Where:

- \( n \) = the size of the sample;
- \( t \) = the coefficient corresponding to the probability that guarantees the results of the research (it can be found in the statistical tables of the Student distribution); therefore, it takes different values, depending on the level of trust set by the researcher: for a level of trust of 94%, the value of \( t \) will be 1,88, and for a level of trust of 99%, the value of \( t \) will be 2,58;
- \( p \) = the proportion of the components in the sample which have the studied characteristic (because, usually, the value of \( p \) is not known, it is considered equal to 0,5, in order to make the dispersion have the maximum value possible);
- \( q \) = non percentage proportion of the sample’s components which are not characterised by a particular feature, is determined by the 1-p relation;
In the conducted selective research, for a 94% level of trust and a margin of error of 6%, the sample will be:

\[ n = \frac{1,88^2 \times 0,5 \times (1 - 0,5)}{0,06^2} = 246 \]

Thus, the minimum number of questionnaires duly completed which should be collected and processed is 246. Keeping the 94% level of trust and considering that a number of 247 questionnaires have been collected and validated, we have determined the maximum margin of error (\( \Delta_{\omega_{\text{max}}} \)):

\[ \Delta_{\omega_{\text{max}}} = t \sqrt{\frac{p \times (1 - p)}{n}} = 1,88 \sqrt{\frac{0,50(1-0,50)}{246}} = 5,99\% \]

We considered setting a sample that would include the relevant employers from the six counties of the Centre Region.

The collection of information was made online, using the computer application provided by the Kestionare.ro platform and also by going to the employer. We tried to minimize errors owed to non-responses, inconclusive samples, incorrect answers of respondents, and the influence of the operator. For the processing and analysis of the data, SPSS 19 programme – Statistics Base for Windows and Microsoft Office 2010 were used.

We believe that the most important limit of the research is due to the size of the sample (247 respondents) and to the quite high margin of error (6%) for a 94% level of trust. Certainly, a larger sample, with a lower margin of error might have been considered more relevant. We mention however that when the size of the sample was established, the objectives of the selective scientific research were considered, although the chosen sample is small.

Another limitation of the research derives from the choice made in filling in the size of the sample, i.e. our choice for the disproportional option. Therefore, we would like to state that, even if by using the disproportional option the subjects of the sample do not correspond to the statistical reality in terms of their percentage within the entire number of employers from the counties of Centre Region, we started from the assumption that certain...
groups, namely that of the large, medium and small employers are more important for the purpose and context of the selective scientific research, each of them having its own beliefs and perceptions. As a consequence, a greater importance was given to these groups, materialised in a bigger number of selected components, without however eliminating the microenterprises.

**Data analysis and interpretation**

The most important entry data focused on the organisations’ main field of activity, the number of employees, the type of ownership and capital, the type of organisation and the number of years of activity.

With regard to the field of activity, the highest percentage is found in the field of other service activities (18.50%), a percentage of 14.50% of the organisations operate in the manufacturing industry, the public administration is represented in a percentage of 12.80 and the education sector holds a percentage of 12.30 from the total of respondents. For the wholesale and retail trade, the calculated percentage was 8.50% and the constructions field is represented by 6% of the respondents. Lower percentages have been identified for the field of real estate transactions (0.40%) and the production and supply of electricity, heat, gas, hot water and air conditioning (0.90%).

Regarding the type of the company according to the number of employees, it could be noticed that the highest percentage of respondents belongs to the organisations that have 10-49 employees (37%), and those with 50-249 employees (27%).

Small and medium-sized enterprises are classified, according to the average annual number of employees, into the following categories [4]:

- a. up to 9 employees – microenterprises;
- b. between 10 and 49 employees – small enterprises;
- c. between 50 and 249 employees – medium-sized enterprises.

Given these provisions, the respondents are classified as it follows: micro enterprises – 21%; small enterprises – 37%; medium-sized enterprises – 27%; big enterprises – 15%. Depending on the type of ownership, 59% of the organisations are privately owned, 35% are state owned, 2% fall into the
category of organisations with mixed capital and 4% mentioned the category of non-governmental organisations.

Most respondent employers have Romanian capital (82%). Depending on the type of the organisation, 45% are organised as limited liability companies (LLC), 33% are public institutions, and 15% are joint-stock companies (S.A.), 6% non-profit organisations and 1% government business enterprises.

A final criterion of identifying the organisations was the number of years of activity. From the analysis of the information, it can be noticed that the highest percentage of respondents (42%) have more than 15 years activity in the business, followed by those which fall in the category of 3-6 years (18%) and 6-9 years (14%).

The difficulties of the entire economy have a direct impact on the human resources in terms of job supply. Usually, one of the job requirements is the level of education. Either internal or external recruitment sources are used, education has to be mentioned for the vacancy.

Under these circumstances, one of the objectives of the research was to identify the need of personnel on the labour market, the following questions being introduced in the questionnaire: “To what extent does your company need in the following period employees with higher education studies in the following departments?” and “To what extent does your company need in the following period employees with secondary education studies in the following departments?”.

With regard to the identification of the need for personnel with higher education, on the types of compartments, the collected data are shown in table 2.

The analysis of information leads us to the conclusion that, generally, employers believe that they need employees with higher education either in a very small, or in a small measure, regardless of the compartment. Thus, for the production compartment, 44% of the employers consider that the existence of a demand of personnel is very low, and 10% of them consider that they will need in small measure employees with higher education. With regard to the management compartment, 57% of the respondents consider that they need employees with higher education in a
very small or small measure, for the administrative compartment, the percentage of those stating this is of 58% and reaches 60% for the human resources compartment.

Table 2: Identifying the need for personnel with higher education

<table>
<thead>
<tr>
<th>Compartment</th>
<th>Very large (%)</th>
<th>Large (%)</th>
<th>Neither / Nor (%)</th>
<th>Small (%)</th>
<th>Very small (%)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research-development</td>
<td>10</td>
<td>9</td>
<td>19</td>
<td>10</td>
<td>52</td>
<td>2.15</td>
</tr>
<tr>
<td>Production</td>
<td>11</td>
<td>12</td>
<td>23</td>
<td>10</td>
<td>44</td>
<td>2.34</td>
</tr>
<tr>
<td>Supply, acquisition, logistics</td>
<td>7</td>
<td>14</td>
<td>18</td>
<td>17</td>
<td>44</td>
<td>2.21</td>
</tr>
<tr>
<td>Sales</td>
<td>6</td>
<td>14</td>
<td>19</td>
<td>11</td>
<td>50</td>
<td>2.15</td>
</tr>
<tr>
<td>Marketing</td>
<td>10</td>
<td>16</td>
<td>18</td>
<td>11</td>
<td>45</td>
<td>2.35</td>
</tr>
<tr>
<td>Financial-accounting</td>
<td>9</td>
<td>19</td>
<td>15</td>
<td>14</td>
<td>43</td>
<td>2.39</td>
</tr>
<tr>
<td>Human resources</td>
<td>10</td>
<td>12</td>
<td>18</td>
<td>12</td>
<td>48</td>
<td>2.25</td>
</tr>
<tr>
<td>Legal</td>
<td>9</td>
<td>17</td>
<td>21</td>
<td>8</td>
<td>45</td>
<td>2.36</td>
</tr>
<tr>
<td>Administrative</td>
<td>13</td>
<td>10</td>
<td>19</td>
<td>13</td>
<td>45</td>
<td>2.35</td>
</tr>
<tr>
<td>Management</td>
<td>13</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>47</td>
<td>2.38</td>
</tr>
<tr>
<td>Overall score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.29</td>
</tr>
</tbody>
</table>

The conducted analysis, based on the calculated scores (from 1 – In a very small measure to 5 – In a very large measure) shows that the score for each compartment is situated approximately at the same level, starting from 2.15 for the compartments of Research-development and Sales, up to 2.39 for the Financial-accounting compartment. These values demonstrate the
employer’s low requirements for personnel on jobs that require higher education, regardless of the compartment, with the specification that for the Financial-accounting compartment the highest requirements are estimated. The overall score for this question is 2.29 (from 1 – In a very small measure, to 5 – In a very large measure), and in conclusion, the need for personnel with higher education is low, the score being close to the value 2.

With regard to the identification of the need for personnel with secondary education, on the types of compartments, the collected data are shown in table 3.

**Table 3: Identifying the need for personnel with secondary education**

<table>
<thead>
<tr>
<th>Compartment</th>
<th>Very large (%)</th>
<th>Large (%)</th>
<th>Neither / Nor (%)</th>
<th>Small (%)</th>
<th>Very small (%)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research-development</td>
<td>0</td>
<td>1</td>
<td>18</td>
<td>9</td>
<td>72</td>
<td>1.49</td>
</tr>
<tr>
<td>Production</td>
<td>3</td>
<td>15</td>
<td>17</td>
<td>14</td>
<td>51</td>
<td>2.05</td>
</tr>
<tr>
<td>Supply, acquisition, logistics</td>
<td>0</td>
<td>8</td>
<td>18</td>
<td>12</td>
<td>62</td>
<td>1.71</td>
</tr>
<tr>
<td>Sales</td>
<td>4</td>
<td>5</td>
<td>16</td>
<td>17</td>
<td>58</td>
<td>1.78</td>
</tr>
<tr>
<td>Marketing</td>
<td>2</td>
<td>8</td>
<td>13</td>
<td>21</td>
<td>56</td>
<td>1.80</td>
</tr>
<tr>
<td>Financial-accounting</td>
<td>1</td>
<td>8</td>
<td>19</td>
<td>17</td>
<td>55</td>
<td>1.83</td>
</tr>
<tr>
<td>Human resources</td>
<td>1</td>
<td>3</td>
<td>16</td>
<td>17</td>
<td>63</td>
<td>1.62</td>
</tr>
<tr>
<td>Administrative</td>
<td>1</td>
<td>2</td>
<td>22</td>
<td>16</td>
<td>59</td>
<td>1.71</td>
</tr>
<tr>
<td>Overall score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.75</td>
</tr>
</tbody>
</table>
From the analysis of the information, we can conclude that the requirements of personnel with secondary education in the following period are low. Therefore, for the Research-development, Supply, acquisition and logistics compartments, none of the respondents has mentioned that they need personnel in a very large measure and only 1% and 8% stated this need as very high. Moreover, the Research-Development compartment is considered the one in which the lowest level of future employments for jobs which require secondary education is estimated. We believe that this situation is not surprising considering there are few organisations developing new products and technologies and which have such a compartment.

The analysis shows that the need for employees with secondary education is situated approximately at the same level for all compartments. Therefore, the highest score was calculated for the Production compartment (score 2.05), and the lowest value of the score was for the Research-development compartment. This situation shows that organisations intend in a small measure to hire in the following period personnel with secondary education.

The overall score for this question is 1.75 (from 1 – In a very small measure, to 5 – In a very large measure) which reflects the fact that the need for personnel with secondary education is low. Given the overall scores calculated for the two questions, we may conclude that the hypothesis launched before the research (I1- The need for personnel with secondary and higher education within organisations is low) is confirmed.

To identify the tendencies on the labour market in terms of required qualifications within organisations, the following questions were introduced in the questionnaire “Which are the qualifications that are not listed in the Classification of Jobs in Romania (COR) and which you consider necessary for your organisation?”, “Specify which are the necessary qualifications for your organisation that can be easily found on the labour market?” and “Specify which are the qualifications required by your organisation that are hard to be found on the labour market?”, open questions which enabled respondents to express their own opinions.

For starters, we have tried to identify the qualifications that are not listed in the Classification of Jobs in Romania (COR) and which employers
consider necessary for their organisations. The processing of the collected data showed that, according to the respondents, the following qualifications are not listed in the (COR) Classification of Jobs in Romania:

- restoration architect;
- design engineer;
- construction equipment engineer;
- social educator;
- potter.

After analysing the Classification of Jobs in Romania, we have found the following qualifications (jobs) similar to the ones mentioned by the respondents or identical to them:

- restoration architect, cod 214104;
- design engineer (for various fields of activity): within minor groups 214 „Architects, engineers and related professionals (exclusively engineers in the textile, leather, wood and construction materials industry)”, 215 „Engineers in the textile, leather and food industry”, 216 „Engineers in the wood and construction materials industry”, 221 „Specialists in biology and agronomy”;
- construction equipment engineer, cod 214203; there was not identified a code for the name of „construction equipment engineer”;
- social educator, cod 346002; there was not identified a code for social educator;
- ceramic modeller: cod 732106, processing worker of ceramics by extrusion, code 813917, processing worker of ceramic objects by injection, code 813919; the qualification of potter has not been identified as such in the Classification of Jobs in Romania.

Given the above mentioned, we can conclude that employers have identified jobs that they consider necessary within organisations and which cannot be found, under the name mentioned, in COR. Thus, the hypothesis mentioned before the research (I_2 – There are qualifications that are not listed in the Classification of Jobs in Romania - COR) is confirmed.

The data collected for the identification of qualifications required by organisations and which can be easily found on the labour market are presented in table 4.
Table 4: Qualifications found easily on the labour market

<table>
<thead>
<tr>
<th>Current no.</th>
<th>Qualifications</th>
<th>Percentage of mentions (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Economist</td>
<td>20,00</td>
</tr>
<tr>
<td>2.</td>
<td>Accountant</td>
<td>15,30</td>
</tr>
<tr>
<td>3.</td>
<td>Commercial agent</td>
<td>12,30</td>
</tr>
<tr>
<td>4.</td>
<td>Engineer</td>
<td>7,90</td>
</tr>
<tr>
<td>5.</td>
<td>Jurist</td>
<td>14,10</td>
</tr>
</tbody>
</table>

The main qualifications (jobs) which, in the respondents’ opinion, can be easily found on the labour market are the following:

- economist, qualification mentioned by 20.00% of the respondents;
- jurist, in the opinion of 14.10% of the employers;
- accountant, for 15.30% of the respondents;
- commercial agent, qualification mentioned by 12.30% of the employers;
- engineer, in the opinion of 7.90% of the respondents.

Also, with a lower frequency, the following qualifications were mentioned:

- driver;
- commercial worker;
- mechanic;
- secretary;
- locksmith.

Given the frequency of the respondents’ mentions, we can conclude that the main qualification which, in the employers’ opinion, is the easiest to be found on the labour market is that of economist.

The data collected for the identification of qualifications required by organisations and which are difficult to be found on the labour market are presented in table 5.
Table 5: Qualifications found with difficulty on the labour market

<table>
<thead>
<tr>
<th>Current no.</th>
<th>Qualifications</th>
<th>Percentage of mentions (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Welder</td>
<td>20.40</td>
</tr>
<tr>
<td>2.</td>
<td>Doctor</td>
<td>17.40</td>
</tr>
<tr>
<td>3.</td>
<td>Medical assistant</td>
<td>14.30</td>
</tr>
<tr>
<td>4.</td>
<td>Stoker</td>
<td>12.30</td>
</tr>
<tr>
<td>5.</td>
<td>Saw worker</td>
<td>8.50</td>
</tr>
<tr>
<td>6.</td>
<td>Kinetotherapist</td>
<td>3.70</td>
</tr>
</tbody>
</table>

The main qualifications (jobs) which, according to the respondents, are difficult to be found on the labour market are the following:
- welder – mentioned by 20.40% of the respondents;
- doctor – mentioned by 17.40% of the respondents;
- medical assistant – for 14.30% of the respondents;
- stoker – according to 12.30% of the respondents;
- saw worker – for 8.50% of the respondents;
- kinetotherapist – mentioned by 3.70% of the respondents.

Also, with a lower frequency, the following qualifications were also mentioned:
- quality manager;
- internal auditor;
- project manager;
- enamel worker.

Given the frequency of the respondents’ mentions, we can conclude that the main qualification which is difficult to be found on the labour market is that of a welder. Consequently, the advanced hypothesis \( H_3 \) – The qualification that is easily found on the labour market in that of an economist and the qualification that is found with difficulty is that of a welder) is confirmed.
Conclusions

In general, employers consider that they need employees with higher education in a small measure (overall score 2,29), with the specification that for the Financial-accounting compartment, the highest requirements are estimated (score 2,39). This tendency is manifested in the following period for the need of employees with secondary education, too (overall score 1,75), better employment opportunities being found in the Production compartment (score 2,05).

Employers have identified a series of qualifications which, in their opinion, are not listed in the Classification of Jobs in Romania and which they consider necessary. After studying the COR, the following qualifications / jobs were not found under the name mentioned by employers: “construction equipment engineer”, “social educator”, “potter”. Employers from Centre Region believe that the main qualification that is the easiest to be found on the labour market is that of an economist. We believe, however, that the percentage of the organisations that have mentioned this qualification (20%) is not high, especially if we consider that, according to the new education system changed by the implementation of the Bologna Declaration, the qualification of an economist is general, a variety of specific jobs deriving from it. Among the qualifications easily found on the labour market, the following have also been mentioned: jurist, accountant, commercial agent, engineer etc.

The main difficulty that is found with difficulty on the labour market in Centre Region is considered to be that of a welder. We must also take into consideration the fact that for certain types of welding, an ISCIR authorization is required and the fact that there are various types of welding, which we believe raises problems for the employers in finding this qualification on the labour market. Among the qualifications that are easily found on the labour market, there were also mentioned: doctor, stoker, saw worker, kinetotherapist.

In order to adapt the labour force to the requirements of the labour market, in the context of the current financial constraints, employers and the County Employment Agencies in Centre Region and not only have at their disposal the EU financial instruments. We are first referring to the Social
European Fund, through the Sectorial Operational Programme Human Resources Development (SOP HRD), but also the European Regional Development Fund (ERDF), the Fund for Rural Development (EAFRD), Lifelong learning and Progress Programme.

In order to update and improve the consistency of competencies, the SOPHRD can invest in:

- forecasting and development of qualifications and skills;
- supporting the reform of education and training systems, for the consolidation of their relevance to the labour market;
- the change of experience and the creation of networks between the higher education, research and business institutions to meet the new requirements of competencies;
- promoting entrepreneurship, the opening of enterprises and independent activities.

ERDF supports investments in educational infrastructure. ESF and other structural funds could act in synergy with other instruments, such as The European Integration Fund of third country nationals to increase migrants’ participation on the labour market and to fight discrimination and the Lifelong learning programme. The joint action to support microfinance institutions in Europe (JASMINE) financed by ERDF and the recently created European Microfinance Progress Instrument can help people escape unemployment and social exclusion through the establishment of enterprises or by exercising an individual activity.

We consider that this part of the study, through the conclusions drawn, may help in the development of future projects within SOPHRD carried out by the members of the Territorial Pact and the County Partnerships in Centre Region and by other interested organisations.

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Development and Progress through Intellectual Property Protection and Leverage

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Worldwide, every year, cultural, scientific and technical dimensions increases its value as a result of spiritual and creative members of society. Since surplus value and prosperity is a consequence of the act of creation, protection of creators and their creations to be one of the main factors that we must take into consideration and those involved in national security system structures.

Basically, protection creators respectively Patent, design and trademark licenses, the designs, is made by a legal institution of intellectual property, which is the State Office for Inventions and Trademarks (OSIM) - government organ specialty, with unique authority in Romania, acting in accordance with law and the provisions of international conventions to which the Romanian State is party.

Keywords: research, development, innovation, intellectual property, patent progress

Introduction

Worldwide, every year, cultural, scientific and technical dimensions increases its value as a result of spiritual and creative members of society. Since surplus value and prosperity is a consequence of the act of creation, protection of creators and their creations to be one of the main factors that
we must take into consideration and those involved in national security system structures.

Basically, protection creators respectively Patent, design and trademark licenses, the designs, is made by a legal institution of intellectual property, which is the State Office for Inventions and Trademarks (OSIM) - government organ specialty, with unique authority in Romania, acting in accordance with law and the provisions of international conventions to which the Romanian State is party.

Scientific research and technological development, generating new creations (inventions, innovations, industrial designs, distinctive signs and industrial enterprises and regional areas, brands, trademarks, names of origin) has a major role in industrialization, restructuring and modernization of all branches of national economy.

Therefore, it must develop a coherent and responsible for safeguarding and promoting intellectual property rights.

Protection of creators, other than industrial property, is made by the Romanian Office for Copyright Protection (ORDA).

Mainly with the protection of creators is legal institution of intellectual property. Intellectual property refers to creations of the mind: inventions, literary and artistic works and symbols, names and images used in commerce. In Romania the following items are protected intellectual property, as follows:

a) The industrial property, which in turn includes: inventions, trademarks, industrial designs, new plant varieties, geographical indications, topographies of integrated circuits;

b) Copyright and related rights. Copyright refers to literary works and scientific, musical and artistic works and architectural design. Are recognized and protected as holders of related rights: performers for his own performance, producers of sound recordings for their own recordings and broadcasting organizations for their programs.

Innovative and creative ideas are the “engine” successful businesses. Ideas themselves are not yet a commercial value if they are developed and implemented in new products and services that enable your company to obtain benefits as a result of innovative spirit. Intellectual property, particularly patents, may play a role for transforming innovative ideas and inventions into competitive products, enabling a significant increase in profit margin.

Also, patents can be used to obtain their income from licensing to other companies that have adequate capacity to market them. This not only saves the company money, but also produces a secure and stable income as
a result of employee inventions, without any marketing expenditure. **Intellectual property rights** are property rights as all other - they allow the creator or owner of a patent, a mark or a copyright-protected works to benefit from his labor or investment. These rights are outlined in Article 27 of the Universal Declaration of Human Rights which states that everyone should enjoy the protection of moral and material rights deriving from any scientific, literary or artistic production of which is the author.

Importance of intellectual property was first recognized by the Paris Convention for the Protection of Industrial Property of 1883 and the Berne Convention for the Protection of Literary and Art in 1886. Both treaties are administered by the World Intellectual Property Organization (WIPO). Industrial property began to take legislative support since 1879 when he appeared first Romanian Law on Trademarks (7th in the world at that time). In 1906 initiated the first Romanian Law on inventions, the Patent and Industry Department is established within the Ministry of Industry and Trade.

During the interwar period functioned Industrial Property Office, and from 1975-1990 served as the institution of the state body coordinating the National Council for Science and Technology (CNST). Since 1990, the operation was based OSIM GD 374/1990, 62/1991 GD filled with art. 3 of GD 506/1992 etc.

Under a government decision, OSIM reviewed all legislation in the field, in order to harmonize it with the relevant EU law issues and the Agreement on Trade-Related Intellectual Property (TRIPS). OSIM is registered competence, examination and granting of patents and plant variety patents, certificates of registration of trademarks and geographical indications, industrial designs and integrated circuit topography and to administer those rights protection up in their forfeiture.

Patents are granted only to inventions - are new - is based on an inventive step - have industrial application. In the legal sense, are not considered inventions: ideas, discoveries, scientific theories, mathematical methods, computer programs itself, solutions of economic or organizational charts, teaching methods, game rules, plans and systematic methods, phenomena physical self, recipes, the aesthetic achievements. In Romania, surgical or therapeutic procedures in humans or animals and the appropriate methods of diagnosis can be considered applicable to industrial inventions.

Duration of patent protection and therefore is 20 years from the date of regular national filing. To maintain the patent in force shall be paid an annual fee, calculated from the date of registration.
The patent gives the holder the right to prohibit third parties to perform without approval, for products, manufacturing, marketing, offering for sale, use, import or storage for sale, offer for sale or use, for processes or methods, use.

According to the principle of territoriality, patent law and its effects are limited to Romania, the effect of the patent granted to the stretching area is given by the contents of claims, description and drawings are of interest in their writing.

There are currently 14 regional centers in the country for promotion of industrial property, coordinated by OSIM, which operates in addition to chambers of commerce and industry of the counties of Bacau, Bihor, Bistrita-Nasaud, Braila, Constanta, Suceava and Timis, in addition to technical universities Brasov, Craiova and Iasi, in addition to foundations for the development of SMEs in the counties of Covasna, Galati and Maramures, the Centre for implementing the invention in Targu Mures.

Ensuring legal protection of designs and industrial designs, an important role is to identify works of industrial design, made of OSIM service resort collections deposited in the office, recorded between 1993-1999, the Commitment deposits under the Hague as in collections in France, Australia, Finland, Norway, Sweden, United States, Japan and Hungary. OSIM also operates to prevent counterfeiting investigations in Romania. Documentary research for both brands are made in the national database and in the international Romania as a country that is designated for protection.

However, Romania has a sad record for the counterfeit goods because there is a functional harmony between the laws governing industrial property in our country. Lack of coordination of approaches made functional structures skill and / or interested in government or private spectrum to prevent counterfeiting, and delay the development of special rules absolutely necessary for the completion of a coherent system of effective protection of property rights industry are the main causes of the gap that separates us from the European community, leading a field of modern creativity.

Direct effect of these weaknesses is the insecurity of the holders of industrial property rights legally acquired in Romania. Structures of state and legal skills in control - customs, police, prosecution, courts, authority to protect consumers, etc.. - Customs authorities have made progress only in recent years, especially after the adoption of Law 203/2000 on certain measures for ensuring intellectual property rights within customs operations. It is considered that the only way policy makers will be able to
enforce these rights is their joint action and supported on a common strategy. Setting up an interministerial body, invested with legislative, industrial property protection only, the effect of reducing serious cases of infringement of intellectual property, and the volume of counterfeits of all kinds, need protection advice in the business industry investments and applying their brands authorized for testing. The presence of these advisors in all phases of approval and establishment series prototypes prevent counterfeiting, increasing the market value of that mark and thereby strengthening his reputation nationally and internationally. There are several reasons that make intellectual property protection is imperative. First, progress and prosperity of humanity depends on its creativity in technical and cultural fields, secondly, the legal protection of new creations encourage investment and lead to other innovations, thirdly, the promotion and protection of intellectual property stimulates growth lead to the creation of new jobs and new industries and improving the quality of life.

An efficient and equitable intellectual property can help all countries in exploiting the potential of intellectual property is a powerful tool for economic development and social progress and cultural. This system helps to establish a balance between the interests of the innovator and the public interest, ensuring an environment of creativity and invention, the benefit of all. Advantages that can benefit each of us relates to:

**Intellectual property** rights that rewards creativity and human effort is the engine of progress and humanity. Here are some examples:

- film industry, audio and video recording industry, publishing and software industry billions of dollars for the amusement of millions of people from all over the world would not exist without copyright protection;
- Consumers could not purchase goods or services with confidence without an effective international protection of the mark in a position to deter counterfeiting and piracy;
- Without the benefits they provide patent system, researchers and inventors would have little incentive to continue to seek to improve their products to the quality and efficiency in the interest of consumers worldwide.

**Industrial property** in Romania is integrated into the international treaties it is a party. **Industrial property** is represented by **patents**. **Patent** confers exclusive rights over an invention, which may be a product or process that provides a new way of doing something or making a new technical solution for solving a problem.
Ensure protection of invention patent holder. This protection is granted for a limited period, which may be generally 20 years.

Patent protection means that the invention can be made, used, distributed or sold without the patent owner’s consent. Rights under a patent can normally be protected by bringing an action before a court which, in most systems, has the authority to terminate any infringement arising from the patent. Meanwhile, the court may declare void and challenged by a third party patents. Patents have a stimulatory function because they provide both individuals recognize their creativity and material reward for inventions that can be marketed. They encourages innovation through people’s quality of life is improving steadily.

Figure 1: Components of intellectual property
Patented inventions actually invaded all aspects of daily life, from electric lighting (patents held by Edison and Swan) and plastic (Keland Bae’s patent) to pens (Biro’s patent) and microprocessors (Intel patents, for example).

All the patent holders in exchange for patent protection are required to disclose information about their inventions, in order to enrich the fund of technical knowledge around the world, this encouraging creativity and innovation. Thus, not only gives protection patent holder invention, but provides valuable information and is an inspiration to future generations of researchers and inventors.

The first step is to obtain a patent application for a patent. This invention generally contain the title and a description of a technical field to which it belongs, the request must also contain a written description of the invention clearly and sufficiently detailed so that a person with average knowledge in the field could use or reproduce the invention. Description is usually accompanied by illustrations - drawings, diagrams, or graphics - enabling a better understanding of the invention. The application contains more “claims” i.e. information from which it can determine the extent of protection afforded by patent.

To qualify for patent protection, an invention must meet, in general, the following conditions: you must have practical utility, to present a novelty, a new feature that is not part of existing knowledge in the technical background. This background of existing knowledge is called “prior art”. The invention must involve an inventive step that is not obvious to a person with average knowledge level in the technical field concerned, ultimately, its purpose must be “patentable” under law. In many countries, scientific theories, mathematical methods, plant or animal species, discoveries of natural substances, business methods or methods of treatment (as opposed to medical products) are excluded from patent protection.

Patents are granted by national patent offices or regional offices serving more countries such as the European Patent Office (EPO) and the African Intellectual Property Organization (AIPO). Within these regional systems require protection for an applicant to the invention one or more countries and each country decides or not to grant such protection in its territory. Patent Cooperation Treaty (PCT) administered by WIPO, provides for a single international application that has the same effect as national applications filed in the designated countries. Submitting an application, an applicant may request protection in all signatory States wishes. After 1990, a package specifically for industrial property, Romania has an innovative
protection in this area and the means necessary to protect industrial property rights. Objectives of industrial property are protected under Romanian law: inventions, industrial designs, trademarks, trade and service.

Inventions in the field came into force:
- Law 64/91 patent;
- Regulation enforcement 64/91;
- Law 120/92 on fees for patent applications and patents.

In the field of industrial designs entered into force the law 129/1992 on the protection of industrial designs with an appendix on “The amount and timing of payment of fees for industrial designs and foreign currency”.

- For protection of trademarks and geographical indications is Law 84/1998.
- The fundamental principle of law is that inventions, “entitled to patent belongs to the inventor or his successor rights” (Article 3). The law includes provisions for cases concerning employee inventor.

The law is generous in terms of subject protection, safeguarding unrestricted products, processes, methods, and also new varieties of plants, hybrids or new animal breeds, are excluded from patentability only evidence contrary to public order or morality.

A strengthening of industrial property rights is made by art. 35 of the Act, which ensures “the protection of provisional patent applications published”, giving virtually the same protection rights as the patent issued.

Protection of computer programs includes any expression of a program, application programs and operating systems, expressed in any language, either source code or object code, preparatory design material, and “books”, provides protection by copyright.

Patent protections - limited (European system) expected, “computer programs themselves are not considered inventions”. “But are patentable inventions in the field of software inventions that extending the use of a computer, a computer network or other programmable apparatus, and (...) made in whole or in part, using one or more computer programs”.

Even if used for the programs considered to be inventions, “inventions in software”, the program itself, viewed separately, would be protected by all copyright, not patent.

Seek protection by copyright is automatic, without further formalities.

The National Register of Computer Programs required registering: natural or legal persons, who produce for sale, reproduce, distribute, sell or
rent computer programs in Romania. Registration is optional for a producer of computer software, copyright holders of these programs, if they themselves produce, distribute, sell, reproduce or rent computer programs where they hold the copyright.

**Works in the National Register, the** registration is done in order establishment of on trial, it is optional and counter-charge.

Obtaining patent protection by (valid only for “software related inventions”) involves attending a mandatory administrative procedure for obtaining a patent.

Signs in which it is produced and marketed a computer program can be registered as trademarks (eg, Windows is a trademark of Microsoft Corporation). Appearance can be protected by DMI - cover package under which the software market, graphical user interfaces.

The copyright owner of computer programs can be: legal - if the program is a collective work - **moral rights and economic**; natural (program author) - when the computer program is not a collective work - **moral rights** and in principle and **economic**; employer, person or entity, **the author's economic** rights of the copyright holder if: the program was created in the performance of service or after the employer's instructions or if there is no contractual provision to the contrary. The moral rights relates to disclosure, paternity, name, integrity, and no withdrawal. **Property rights** means to authorize or prohibit: **reproduction** in whole or in part, directly or indirectly, temporarily or permanently, by any means and in any form, including a program where reproduction is determined by the installation, storage, running or execution display or transmission network; translation, adaptation, arrangement and other **alterations** made to a computer program and reproduce the result of these operations, without prejudice to the rights of the person who alters the program; **distributing** the original or copies a computer program in any shape; **imports** for domestic sale, lease; **loan**.

The material does not apply to programs of general limitations of copyright. For example, not reproduce without author’s consent, for personal use or for the normal circle of a family (so-called private copying).

As for the right to copy the file or safety: “authorized user of a computer program may, without authorization from the copyright owner, an archival copy or safety, to the extent that it is necessary to ensure the use of program”.

Infringement of copyright in computer programs draw, as appropriate: liability (compensation paid to copyright holders) - natural and legal person: the criminal liability (crime of piracy, unauthorized
reproduction of software, unauthorized operations with the original software) - individual and, in June 2005, and the legal person, liability minor (both copyright and other laws) - natural and legal person.

The law protects and technical measures to protect computer programs, and rights management information.

Association concept of “globalization” with the phrase “information technology and communications” entered the consciousness of our time as a binomial indestructible: abbreviation “ICT” demonstrates the interconnection and interdependence of a compact, which constitutes the driving force of global economy. Analysts have raised a paradox of globalization: the economy becomes universal, the actors they become smaller and more powerful. The paradox is found in reducing the size of companies (outsourcing, off shoring strategies are included in major national and international companies), and the increasing number and importance of SMEs, especially micro-enterprises. The entrepreneur has become the core of economic growth and human resources constitute the most valuable intangible asset for the enterprise. In this planetary motion from large to small companies through strategic alliances and cooperation, thus increasing dimensional. New technologies and telecommunications in particular emphasizes this process. Thus, the Internet is not connected states, but individuals, and their number is growing, the exact number of connections is not known with precision. Cooperation in virtual, took the form of interconnected computer networks, providing global coverage, providing local users, individual exchange of information by electronic mail discussion groups and forums, not only economic. Developing communication takes place parallel to miniaturization and cheaper equipment. Developments in the last decade, economic, social, political and technological developments have had a powerful impact on how intellectual property is created, protected and marketed. Internet has introduced new forms of intellectual property. Customizing the Internet users and the allocation of unique addresses, easy to remember, were made by the domain name. Unlike trade and service marks that are protected territorial domain names have comprehensive protection, but does provide a distinction between goods and services. Because global visibility of a site on the Internet and its role in commercial advertising, domain name is used in certain situations, as an instrument of unfair competition, either by acquiring well-known brands (non-proprietary) or by using name well-known brands use similar methods or computer user to take him to a particular site. Lack of clear regulations in early domain name registration, the principle of “first come, first served” system generated numerous
territorial conflicts between trademarks and domain name system overall. World Intellectual Property Organization and ICANN have developed, in 1999, a procedure well-known mark protection to reserve your domain name, but which is applied nationally.

Indeed, information society and new technologies have greatly expanded the area of intellectual creation, and thus required the legal approach to registration and protection of intellectual property rights in areas such as product information (database) software, Web -sites, airspace, the human genome. Internet has opened was self-determining a framework of organization and functioning democratic system based on agreed rules, making transparent character and nature of this process being monitored. The Internet allows and encourages the cooperation of the planet. Information Society has created its own legal framework, structured by international bodies. Thus, the framework for digital signature law was drafted by UNCITRAL and adopted by the UN. Within the European Union, information society issues were dealt with by Directive and transposed into national legislation.

By appropriating the acquis communautaire obligations, Romania adopted the package of laws for the information society: digital signature law, electronic commerce law, data protection law of private law and public service of providing information electronically, payment instruments with remote access, access to law universal service, law timestamp. This mark is defined as a set of techniques that allow anyone to find when it signed an electronic document.

Copyright legislation, dating from 1886, when he signed the Berne Convention for the Protection of Artistic and Literary Creation, has been upgraded and expanded our years, the regulations for the protection of software, the satellite transmission and retransmission by cable, database protection as a result of the emergence of new areas of intellectual creation. Legal framework in Romania was developed by transposing EU Directives (for example the Directive on Copyright in the Information Society) and by adding detailed rules and measures to combat piracy in audio, video and software to ensure property rights IP clearance operations. Also were introduced in November registers: National Register of phonograms, computer programs and register Register Videos (holographic stamps), administered by the Romanian Office for Copyright.

One of the most effective is traceability and animal products. Inserting a microchip in an animal body allows its permanent location, the program started in Romania. A similar procedure can be applied to locate products, default to track their movements in supply and distribution.
chains. The system known as EPC code (Electronic Product Code) and is based on using radio waves: a small transmitter containing unique identification number is entered in the product, unique identification information is received by a scanner, without human intervention electronic product code, successor of bar code evolved, becomes a valuable tool for identifying counterfeit products.

New forms of piracy in the Internet age is the result of free access to comprehensive information, facilitated by electronic technology. New areas of intellectual creation occurs, but also new opportunities for theft and plagiarism of digital products (software, electronic games, information, music, etc.). Microsoft software, most used, and provided the main tools of piracy on the Internet by the two commands used in combination: copy and paste. Copying music and software from the Internet, their reproduction and distribution have evolved dangerous. The report BSA (Business Software Alliance), the annual rate of software piracy in Romania reached the end of 2003, the level of 73 percent and exceeded the value of illegal software use 49 million dollars. High levels of piracy were registered in all countries of Central and Eastern Europe, the European Union, the pirate 37 percent of software used, the cost of over eight billion.

New technology foundations for essential changes in IP management with beneficial effects on macroeconomic and microeconomic level. Internet and software enabling easy access to public information. Databases, patents, trademarks and other intellectual property is a rich source of information capable of facilitating economic development through technology transfer and investment. Update the procedures for registration of forms of intellectual property through online technology has positive effects on the duration and cost of operation. Existing legislative framework (digital signature, mark time), communications infrastructure, electronic payments are predisposing factors for making online registration procedure, already applicable in the domain name registration to the RNC. Business managers are becoming increasingly worried about the accumulation of patents and trademarks, which to use in development strategies through mergers or acquisitions or business transactions. Because of its value, intellectual property management is a major large companies, which have the necessary resources and create business opportunities for increasing employment and training of human resources.

If we refer only to music, the Internet makes available, worldwide, huge legacy of composers and performers of universal artistic heritage: sound art lovers have the option unlimited, to enjoy your favorite tracks at affordable prices, under the conditions of themselves.
Meanwhile, the Internet offers a “weapon” new for pirates to “kill” copyright and related rights: the unauthorized use of music. This type of intellectual property theft has grown in recent years in geometric progression. Composers, singers and performers, the music industry as a whole are the biggest victims. Sites with unauthorized musical archives on the Internet, using multiple formats, such as was-files or MP3 files, providing illegal phonogram, “online” any holder of a personal computer connected to Internet. The music on these sites can be copied (Downloaded) and / or heard, endlessly, without authorization and without compensation for composers, performers or producers of phonograms, who have creative or financial investment to achieve those outputs. Given the nature of the theft, loss calculated is difficult but not impossible.

Legal doctrine entitles the buyer to sell (dispose of in any way) that copying a legally purchased, but does not confer the right to distribute copies of that music by putting it to the public on a website, to be discharged and no right to send digital files to friends. In other words: if someone bought a CD may decide to sell or to offer a friend, but can provide a virtually unlimited number of copies of that CD on a site, while he retains a copy bought for him.

It is an offense to copy the entire CD, without the owners.

MP3 is a way of presenting a large number of songs in a very small space, using special compression technology, applied since 1992. Its use had a positive impact on the music industry, allowing it to increase consumer interest in music, “on-line”. However, the music industry has at least a concern because this technology can just as easily be used for distributing pirated copies, not only for promoting legal.

Using the Internet and optical media, digital copying undermines becoming more copyright protection. Widespread digital copying is easy and cheap, perfect copies are unlimited, but difficult to detect (invisibility, technical equipment difficult to infiltrate). Arrests do not close the distribution network. In these circumstances, organized crime is involved in the production and distribution of pirated songs. Only criminal investigations and prosecutions can dismantle criminal networks. World countries have specific legislation to strengthen this type of crime. Legislation in Hong Kong for instance, provides plants with confiscation of criminal-type activities. Law no. 285/2004 laying down technical measures of copyright protection and related. Ie, using any technology that would prevent or hinder acts that are not authorized by the holders of the rights recognized by law. A crime and is punishable by imprisonment of three to five years to achieve, for commercial purposes by any means and in any way,
pirated or pirate access control devices, and import, transit or any other way of introduction their domestic market. Also renting pirated or pirate access control devices, and offer for sale or to rent them, by public notices or by electronic means of communication, a crime and is punishable by imprisonment from six months to three years or a fine of 50 million to three hundred million lei.

By “parallel imports” means imports of products bearing the intellectual property rights, made without the right holder, if imported products were previously marketed by the holder or even clearly expressed his agreement. In commercial terms, the concept envisages only trade in the original, and not related to counterfeit. Commonly, parallel imports up, “gray” market (or gray), and trade in counterfeit goods covered “black market”.

In the context of market globalization and standardization of goods and services supply, multinational companies are increasingly focusing their attention on the distribution of goods and services, seeking the creation of a more strictly control the distribution chain. For manufacturing industries, there was an acute problem: the lack of rigorous control of transnational movement of goods, after putting on the market by the proprietor concerned. Interest in the phenomenon, parallel imports is huge worldwide. In Romania, this interest is stronger than elsewhere, being potentiated by specific movements in the training market. Is the period when, in November, are the foundations of stable supply relationships for major brands known, enter the Romanian market ever more great players in world trade. Training and development of new markets requires promotion and support of the trade mark cannot be achieved only in an organized distribution and largely controlled by producers. On the other hand, is left in our country and company ability to adapt to free market needs, their flexibility in finding new sources of supply to domestic market, is always looking for exporters able to offer quality products at best price. These traders continued pressure to eliminate any restrictions to parallel imports.

This trade is absolutely fair if the importer tax obligations related to trade and trade original products. The main factor directly affected, “parallel imports” is authorized importer, integrated distribution channels approved by the owner. He is committed to the holder, through a series of obligations relating to brand awareness and conducting trade investment to support its image at a level consistent with that of the brand they represent. Competition law to impose such limitations and standards accepted as favorable factors promoting growth and protect brand quality products and services. But merchants, “parallel imports” have no obligation, thus
achieving a competitive advantage by being able to offer the same products at lower prices.

Proprietor is made of, “parallel imports” unable to control distribution of its products to the final consumer, it will not be able to control the quality of distribution and trade, threatening the image and prestige of being affected by the quality mark their bad.

Recent theoretical developments and case defined the concept of brand, associating it not only with products and services under its image, but also with trade and services through which they reach the final consumer. Only then, will help achieve brand success its essential function, to indicate the commercial origin of products and services.

Identity mark is achieved not only in terms of products or services is applied, but also in the unit and specifically how they are marketed. To give one example: we cannot expect Mc Donald `s products are successfully resold at a street kiosk.

By purchasing products, “parallel imports”, consumers are misled by the commercial origin of goods, with a gap between branded products and services normally associated with them. The damages are often deprived of security and service quality, materials use weaknesses in Romanian, or even their absence, inconsistency of quality products with local rules on consumer protection, product failures or inadequate sources of energy parameters providers communications.

It can be argued that the ban under the trademark law would be an excessive expansion of the monopoly conferred by it, an undue restriction of free competition, barriers to free movement of goods and services. Legislative permissiveness towards parallel imports would create competitive climate necessary to prevent the artificial increase in prices, thus resulting in direct benefit to consumers can purchase quality products at lower prices.

Positive and negative aspects of parallel imports are the foundation on which national laws have adopted a policy to encourage or restrict such trade, the solutions adopted are different from one era to another, from one state to another. Legal methods by which to promote a policy or another to parallel imports is achieved through different concept of exhaustion of trademark rights. Depending on how the meaning or the Community legislature to regulate the concept of exhaustion of rights, we distinguish between permissive systems to parallel imports (international exhaustion) and prohibitive systems (national or regional exhaustion).

Romanian legislature did not intend that, by Law 84/1998 on trademarks and geographical indications, to adopt an explicit and clear-cut
solution. Article 37 stipulates that “a trademark holder cannot ask others to prohibit the possession, offering for sale or marketing of products bearing the mark, for products that have not been released commercially by the holder himself or with his consent”.

The provision has sparked debate concept, “in trade”, which supports both interpretations: both in the sense of national exhaustion, if by “in trade” is considered the national market and for the purposes of international exhaustion if the international market has. As an argument for national exhaustion: the right cannot be deployed to mark its territorial nature, and thus cannot be considered exhausted trade mark only those acts which took place in territory protection. The argument for international exhaustion: Romania wanted many others, to encourage free movement of goods in a period in which economic development is much needed. We believe that the Romanian legislature intended to adopt the system of international exhaustion of trademark rights, allowing parallel imports.

Principle of law: where the law makes no distinction, or those who apply are not entitled to do so.

Dimensions of Internet information (over ten million pages) are difficult to monitor the illicit use of copyright, especially since search engines compile only a part of these pages. Monitoring the use of copyright require significant resources, which not all companies have. It is even more difficult for individual creators. The solution lies in creating specialized bodies: the collective management society to watch over copyright.

The answer to this question is given the level of intellectual property culture of entrepreneurs, who need to know about key issues: intellectual property forms, the protection offered by intellectual property registration form, time and territorial area that provides protection; institutions empowered to register. With market liberalization, Romanian exporters have to register intellectual property rights in markets where it operates: the request by the patent protection in countries to be exported goods or technology by the application of an invention, registration of trademarks internationally in under treaties to which Romania joined, drawings and designs protection through registration under the national legislation of the country where registration is sought, the protection of geographical indications and designations of origin.

Ministry of Economy has initiated a funding program for recording the actions of Romanian companies on other markets. International Chamber of Commerce in Paris has included among its concerns the issue of intellectual property.
References


Impact of Active Labor Market Programs on Employment: Albania’s Case

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High variation of unemployment level in Albania for more than a decade shows that unemployment still remains a problem to solve. Given the conditions, the focus of employment policies is on increasing employment opportunities, in order to make unemployed people active in the labor market. This is the reason of applying many employment programs and making expenses for their funding. Most evaluation studies of active labor market policies (ALMPs) focus on micro-econometric evaluation. Only a few studies of ALMPs focus on macro-econometric evaluation. Also, most of the facts of evaluation belong to developing countries. During the last years, data on the analysis of the progress of these policies in transitional countries, Albania included, are made available.

Our study focuses on the theoretical and empirical analysis of different types of active policies. Data used for the empirical analysis are those on employment policies in Albania during 1999 – 2010. Our study evaluates the impact of active labor-market programmers in Albania on the whole economy. The evaluation focuses on vocational training and on subsidized employment programmers in order to compare them. In analyzing the data, we drew the conclusion that a professional training program is a program with a positive impact on the level of employment (reducing
unemployment), followed by a program of promoting employment through work education.

**Keywords:** unemployment, employment policies, active programs, employment

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**Introduction**

A high employment level in the Albanian labor market during the socialist regime was due to full employment policies and the economic structure that was entirely based on agricultural products, food and heavy industry, thus providing employment for several population segments.

Transition to market economy led to expansion of the labor market leakages in terms of level and composition. The labor market fitted the new economic condition, thus decreasing employment and increasing the unemployment rate at a tremendous pace never seen in Albania before.

The high level of unemployment, as in many countries of Eastern Europe, was the result of a massive privatization of non-productive public enterprises administered by the government as part of macro-economic reforms and restructuring. The analysis of unemployment indicators shows that the unemployment rate as at end-1992 was 26%, which means tripled as compared to the previous year.[INSTAT,1993].

This high unemployment rate continued until 1995, when it began to slump. This happened because of the fact that a great number of registered unemployed people, mainly in rural areas, during 1993-1994, came out of this scheme after acquiring their land pursuant to the law on land and privatization. As at end-1995, the unemployment rate was estimated at 13% and it continued to decline to 12.4% in 1996. In 1997, because of the turbulence in the labor market, the unemployment rate picked up again, to 14.9%. Its upward tendency continued until end-1999, reaching 18.4%. Over the coming period (1999-2008), unemployment rates decreased, however, still remaining relatively high. According to statistics, the unemployment rate was 13.83% in 2010, evidencing a total number of 142.068 unemployed people (See chart no. 1 of the Appendix).
Faced with an ongoing high unemployment rate for more than a decade, Albania’s interest was shown in the longer-term policy as a means against unemployment. Employment policies are currently focused on increasing employment opportunities, in order to make the unemployed people active in labor market.

The aim of our study is to show the impact of the active labor market programs on the employment rate.

This paper proceeds as follows. Section 2 gives an overview of the active labor market policies in Albania. Section 3 describes the theoretical background. Section 4 presents theoretical issues on the evaluation of ALMP. Section 5 describes the methodology and presents the data that we use in our empirical study. Section 6 presents empirical results and main findings are summarized in the conclusion.

Active Labor Market Policies in Albania

Besides the general economic development framework, government efforts to reduce unemployment have been focused on active policies, aiming to remove people from unemployment addiction (passive policy) and help them adapt in a competitive market and independent work. First, the ALMP in Albania had to be one of the following types:

- Intermediation for work and profession;
- Work counseling;
- Professional education (labor market training)
- Programs of employment promotion (subsidized employment)

Out of active policies, employment promotions programs (subsidized employment) are among the major ones in terms of expenditure. These programs include wage subsidy to an employer for recruiting less competitive persons. The level of wage subsidy is 100% of the minimum wage during the first 6 months and 50% of the minimum wage during the next 6 months of his/her employment period.

In Albania, 7 employment promotions programs (subsidized employment programs) have been designed and implemented since 1999 onwards:

1. Employment promotion program for the unemployed job seekers. Year 1999
2. Employment promotion program through working education. Year 1999
3. Employment promotion program through institutional education. Year 1999
5. Employment promotion program for unemployed job seekers who have completed higher education. Year 2008.

Also, active labor market training policies are important both in terms of expenditures and participants. Employment training may take the form of:

1) vocational training;
2) more general training, aimed at providing information on the labor market situation and psychological preparation for competing in the labor market. Training is organized by the local labor offices.

According to analyses, public expenses on active labor market policies absorb a considerable percentage of national resources. Naturally, a question arises: How much should the Active Labor Market Policies (ALMP) weight against Passive Labor Market Policies (PLMP) or other regulating mechanisms in the labor market? The analysis of these policies in our country reveals that the ALMP/PLMP proportion has been upward, while the passive policies continue to account for a great share of GDP, as compared to active policies (see chart no.(2) of the Appendix).

Albania's labor market situation shows that the number of active programs has been upward. However, multiplying programs caused most of them to duplicate or exclude one another, making them costly to administer. They were also confusing for the Employment Offices to serve to unemployed people. What is working in the labor market does not come out clearly because of this program diversification. Evaluation is an important instrument in rationalizing these issues.

The 1994 OECD Jobs study recommends governments to "strengthen the emphasis on active labor market policies and reinforce their
effectiveness” [OECD, 1994]. In the focus of our study is the empirical analyses of different types of active programs. Lack of evidence on the measurement of effectiveness of different active programs brought about the need for considering this issue. This paper has practical importance as it is in line with our previous study and is a serious effort to scientifically argue what needs to be done, in order to improve the actual labor market situation, thus identifying the active policies that have positively impacted our country and that need further elaboration. Using the macroeconomic evaluation, through a multiple regression method, we have studied the correlation between expenditures for different active programs and unemployment rate. Macroeconomic evaluations of ALMP are few.

Bone and Van Ours [2004, 7] used the multiple regression method to determine the relation between the unemployment and adjusted ALMP-expenditures, adding inflation as an independent variable. Also, R. Hujer, M. Caliendo and Ch. Zeiss [2004, 196] evaluates the impact of active labor-market programmers in Germany on the whole economy using the multiple regression method. The evaluation focuses on vocational training and additionally on subsidized employment programmers in order to compare them to vocational training. In this study we analyzed such a relation using the methodology applied by Boon and Van Ours.

**Theoretical background**

Boon and Van Ours [2004, 7] used the macro studies on ALMP to explain the cross-country variation in unemployment and ALMP expenditures.

The conceptual regression model is presented from equation (1):

\[ U_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 \Delta \pi_{it} + \mu_{it} \]  

where: \( U_{it} \) is the unemployment rate in country \( i \) and calendar year (time period) \( t \), \( Y \) refer to ALMP expenditures and \( \Delta \pi \) is the change in inflation rate.

One of the problems associated with the evaluation of equation (1) is that if unemployment increases, costs of active policies are also likely to increase. To account for this, annual ALMP-expenditures are normalized as a percentage of spending ALMP / for unemployed workers to GDP/per capita according to the formula (1).
Theoretical issues on the evaluation of ALMP

The majority of evaluating evidences of ALMP are mainly on microeconomic level using the experimental and non-experimental methods of evaluation. Sweden is the country estimated with the largest number of evaluating evidences.

In the first half of 1990, in order to counter the unemployment crisis, Sweden invested 2% of its GDP on labor market active policies. During this period, 5.5% of the working force took part in several training programs and employment by subsidy. The largest program of all was “the initiative on adult education” which was aimed to build the capacity level of low education of unemployed people. Calmfors, Forslund and Hemstrom [2002, 675(4)] conclude that the evidence on the effectiveness of Swedish APMPs is rather disappointing. Evaluation of these programs identified the following:

1) Activities on employment public services intermediation had negative effects.
2) The focus of active labor market policies should be put on long-term training and employment programs in active masses designed to improve the employment process by subsidy.
3) Active more cost-effective programs included: intensified counseling, more contacts among employment offices and
unemployed persons, a higher demand for job seeking activities, specified requirements for job acceptance, and more sanctions to beneficiaries when job is not accepted.

Different scholars in their research have attempted to explain the impact of active programs on the labor market. Heckman et. al. [1999, vol. 3] concluded that training and employment programs imposed by the government have different impacts on different demographic groups and affect mostly disabled people. Kluve and Schmidt [2002, 409-448] summarizing the European evaluation studies, supported the above conclusion holding the view that private sector subsidy programs are better than public sector subsidy programs and training programs can help improve labor market perspectives for the unemployed. Sustainable results remain the positive effects of assistance programs on looking for a job as they are less costly measures. Also, classroom and on-the-job training programs appear to be particularly likely to yield more favorable medium-term than short-term impact estimates [Card, Kluve, Weber, 2009, 25-26]

Boone and Van Ours, [2004, 7] in their macro-economic assessments reached the conclusion, that there exists a relation between expenditures on ALMPs and unemployment. They find that labor market training is the most effective program to bring down unemployment. Public employment services have the same impact, while subsided job are not effective at all. In their results R. Hujer, M. Caliendo and Ch. Zeiss [2004, 196] show, different pictures from East and West Germany. Whereas in West Germany they find a positive result for vocational training, the results in East Germany do not look favorable. Comparing vocational training programmers in West Germany with job creation schemes, they find that vocational training is the most efficient measure in reducing unemployment.

From a summary of studies on labor market reforms in transitional countries, Boeri [1997, 126-140] showed that the employment subsidy schemes and public affairs programs have not been very successful. The results of the study of ALMPs in Romania [Roman, Sandru, 2007, 14-18] emphasize that in both years the active measures in terms of Completion of employees’ income and Vocational training were more efficient. Also, the conclusions of the study of Boceon [Boceon, 2007, 10-20] are that the most
effectives ALMPs are direct employers’ subsidization to job creation and temporary employment public works in community service. From the analysis of the active programs’ groups in Bulgaria made by the MLSP in 2006 [WYG International, 2006] the net impact figures for the disabled group are positive and significant. Furthermore, in most cases the effects are higher for men than for women. Analysis of Evaluation of Active Labor Market Programs in Estonia, [Leetmaa and Võrk, 2003, 16-20] also shows that the effect of labor market programs is relatively homogenous within different socio-demographic groups and geographical regions.

**Methodology and Data issue**

The next step in our process was to define the types of active labor market programs and the type of evaluation method that we would consider for our study.

In carrying out this study, secondary data were used. The selection of statistical data on employment programs used in the study cover the period from 1999 to 2010. In carrying out the study, we analyzed the active employment programs that support training financially and professional education of unemployed people. The active programs that were chosen had a longer time in the labor market.

More specifically, we will study the impact of these programs:

a) Program of promoting employment through work education. (ALMP 1)

b) Program of promoting employment through institutional education (ALMP2)

c) Professional Training program of unemployed job seekers.

When we want to evaluate the implementation of active programs and their impact on labor market and economy in general, we should always be aware that the evaluation method must be comprehensive. In analyzing the effectiveness of expenditures on different active programs on employment level, a multiple regression model was designed. In designing this model, researches from literature were considered, adapting them with the domestic market opportunities. In selecting the model variables, we relied on macroeconomic evaluation of active programs.
As independent variables we chose the annual expenses incurred for implementing different active programs ALMP 1, ALMP 2, professional training expenses and inflation. Hence, the dependent variable of the model is the rate of unemployment each year. Firstly, the annual ALMP-expenditures are normalized as a percentage of spending ALMP / for unemployed workers to GDP/per capita according to the formula (1). Before we build the model a variable analysis is necessary. Table 1 presents the respective variables and representatives.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Variable representatives</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment</td>
<td>Unemployment rate during the year (%) = Y</td>
<td>SHKP, INSTAT</td>
</tr>
<tr>
<td>Expenditure</td>
<td>Expenditure adapted to the unemployment level and GDP/capita (%) = X_i</td>
<td>SHKP, INSTAT</td>
</tr>
<tr>
<td>Inflation</td>
<td>Change of consumer prices (%) = π</td>
<td>Bank of Albania, INSTAT</td>
</tr>
</tbody>
</table>

For determining the expected sign of indicators, we will examine how changing determining variables affects the level of unemployment. Hence, with regard to:

- Adjusted expenses for each program are considered that the greater the indicator, the lower the unemployment level from the relevant program. Thus, the expected sign of this indicator is likely to be negative.
Inflation the greater is the indicator (the increase of prices, wages) the lower the unemployment level in the country, so the expected sign of this indicator negative. All the variables have already been described. As hinted earlier, the parameter $\beta_1$, $\beta_2$, $\beta_3$, $\beta_4$ are expected to be negative. Table 2 presents the model of determinants of dependent variable.

### Table 2: Variables Description

<table>
<thead>
<tr>
<th>Variables</th>
<th>Priori hypothesis</th>
<th>Definition</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALMP 1</td>
<td>Negative sign</td>
<td>Expenditures on employment program through work education</td>
<td>%</td>
</tr>
<tr>
<td>ALMP 2</td>
<td>Negative sign</td>
<td>Expenditure on employment program through institutional education</td>
<td>%</td>
</tr>
<tr>
<td>Professional Training</td>
<td>Negative sign</td>
<td>Expenditures on professional training of unemployed job seekers.</td>
<td>%</td>
</tr>
<tr>
<td>Inflation</td>
<td>Negative sign</td>
<td>Change of consumer prices</td>
<td>%</td>
</tr>
</tbody>
</table>

Unemployment = $f$ (ALMP 1, ALMP 2, Professional Training, Inflation). Conceptual regression model is given from Equation (2).

$$Y = \beta_0 + \beta_1 \text{ALMP 1} + \beta_2 \text{ALMP 2} + \beta_3 \text{Training} + \beta_4 \pi + \mu_i \quad (2)$$

$H_0: \beta_1 = 0, \beta_2 = 0, \beta_3 = 0, \beta_4 = 0$    $H_a: \text{at least one out of } \beta \neq 0 \quad \alpha = 0.05$
Empirical Results

The statistical analysis was carried out using the regression procedure. The results of the evaluation revealed that all the variables entered were statistically significant at the 95% level.

The R-square value obtained is 94.9% (Table 3) showing thus a good linear relation between the variables selected in the sample.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.974&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.949</td>
<td>.915</td>
<td>.485777</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ALMP 1, ALMP 2, Training, Inflation

The results of the analysis are shown in the Table 4 and Table 5

By the analysis of variance in the testing table F as sig. = 0.000 < 0.05 the independent variables in the model explain better the dependent variable (as indicated by the adjusted $R^2$ and the results of the F-test).

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>26.284</td>
<td>4</td>
<td>6.571</td>
<td>27.846</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1.416</td>
<td>6</td>
<td>.236</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>27.700</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ALMP 1, ALMP 2, Training, Inflation  
b. Dependent Variable: unemployment rate

Some variables have the expected sign. Among all the variables, the ones with negative signs of coefficient were ALMP 2, Training and Inflation.
### Table 5: Coefficients$^a$

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>17.465</td>
<td>1.012</td>
<td>-17.263</td>
<td>.000</td>
</tr>
<tr>
<td>ALMP 1</td>
<td>-3.687</td>
<td>1.068</td>
<td>-0.434</td>
<td>3.452</td>
</tr>
<tr>
<td>ALMP 2</td>
<td>-1.393</td>
<td>5.234</td>
<td>-0.034</td>
<td>-0.266</td>
</tr>
<tr>
<td>Training</td>
<td>-16.203</td>
<td>3.530</td>
<td>-0.570</td>
<td>-4.590</td>
</tr>
<tr>
<td>Inflation</td>
<td>-0.226</td>
<td>0.147</td>
<td>-0.188</td>
<td>-1.541</td>
</tr>
</tbody>
</table>

$^a$ Dependent Variable: Unemployment rate

The ALMP 2 variable has the expected sign, but this coefficient is not statistically significant anyway. From the coefficient analysis β (beta) it results that some of the coefficients are highly significant. The active programs ALMP 1 and training are the most effective programs on the employment level. As we see, the inflation variable has the expected sign, but this coefficient is not statistically significant.

### Conclusions

This paper proposes a methodology for measuring empirically the impact of ALMP-s on employment. The labor market training and subsidized employment programmers were considered. The study shows positive and statistically significant impact of the active labor market programs on employment probability. Professional training program is
a program with a greater positive impact on the level of employment (reducing unemployment), followed by the program of promoting employment through work education. “In particular, as compared to training taking place only at school premises, the trainings that interwove the work done at school with the on-job training increase the probability of positive work effects by about 30%, while when combined with other employment services, the probability of the positive effect is increased by about 53”

In spite of modest achievements, the study had a series of constraints. Concerning the secondary data served as a basis for the analysis, there were some problems related with their missing and accuracy. Information provided from different institutions in the country was incomplete and non-standardized, showing that still problems will persist in Albania related with the statistical and information accuracy. The relatively short period of applying the Active Policies and the lack of detailed information for the post-application period are other problems. We have studied this issue for about 12 years, and it is a relatively small period compared to the years of study of other authors. Another constraint is relates to the inability of estimating the effectiveness of employment policies on microeconomic level. This happens because of the high cost and the lack of a database containing the complete and detailed data on unemployed job seekers in the Employment Offices. This estimation is the basis on which the work begins.

It should be stressed that this paper is a starting part in estimating the effectiveness of ALMPs. Considering that this study tried to analyze the effectiveness of only 3 programs, other researchers could extend their evaluation even for other active programs by improving the evaluating practices or affecting variables. Improving the monitoring of ALMPs in our country in the future and extending them in a higher scale, will provide the opportunities of evaluation by using experimental evaluation techniques on microeconomic level, which is the best fit. This means that there is room for

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other detailed studies in the area, which would complete better the framework of evaluation evidences of ALMPs in Albania.

Conclusions arising from these findings are important, if we compare them with the impact of active policies in other countries. In transitional countries, the large informal labor market and scarce capacities in implementing these programs can limit what programs can achieve in establishing the formal employment.

On the other hand, some of these programs applied in developing countries have more positive effects than in industrialized countries. It may be that ALMPs applied to labor markets countries with lower incomes have more efficient because the supply of workers with sufficient skills in these countries is low. Despite the unclear picture of ALMPs evaluation, the governments which face economic and social problems associated with the large number of unemployed people and the resulting poverty, it is necessary the use of active programs as an instrument for solving the complicated problems of long term unemployment and structural discrepancies. However, these governments should be realistic about what the active policies of labor market can achieve and determine the sources based on cost effectiveness. Active policies of the labor market should be policies with economic value and for these reason it is important for the government to show attention in determining the intervention programs based on what is the best for their countries.

Considering the conclusions of the study and the research based on literature, in order to increase the effectiveness of active employment programs we recommend:

- Programs should be supported increasingly in a detailed counseling, and assistance programs in looking for a job;
- Training public programs should be designed for the specific needs of job seekers and employers;
- Training of employed persons should be revised in the context of learning through life for all the citizens [Tuijnman, Schoman, 2002, 465-467];
- Use subside forms in business establishment for a small number of unemployed persons who evidence entrepreneurship abilities and motivation for survival in a competitive setting. [Martin, J, 2000, 22];
References


[22] (WYG International 2006) “Technical assistance for conducting a national survey on labor market needs, promotional campaign of the grant scheme and provision of training and seminars in the area of occupational safety and health at work”

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[24] WWW.ilo.org

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[26] WWW.instat.gov.al
Appendix

Figure 1: Unemployment rate in Albania (1995-2010)

Source: Albanian Statistic Institute

Figure 2: Expenditures on active and passive policies in the labor market in Albania as GDP %

Source: National Employment Service
The Impact of FDIs on Exports, and Export Competitiveness in Central and Eastern European Countries

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After 1990, the Central and Eastern European (CEE) countries lowered the barriers to FDIs. Of course, many other developments were taking place at the same time: increasing openness to trade, privatization of previously government-owned production, and many other changes as these countries moved in various degrees from socialist to market economies and democratic governments. They privatized many state-owned enterprises, signed foreign trade agreements with other countries in the region, and have generally achieved a significant level of macroeconomic stability with improved growth rates. They also experienced a significant increase in FDI. As a consequence, the ratio of inward FDI to the CEE countries studied here in total world FDI inflows increased more than three-fold. Over the same period, these countries also achieved a substantial increase in their exports, especially towards Western Europe. We present in this paper the relation between the FDIs and exports in the CEE countries during 1990-2010 using statistic data analysis and literature review and underline the factors that determined an increase of exports in these countries. Despite other CEE countries that succeeded to attract many export-oriented FDIs, Romanian case is different because of many local specific factors such as an insufficient local production and a tight fiscal policy.
The Impact of FDIs on Exports, and Export Competitiveness in Central and Eastern European Countries

Keywords: FDIs, Central and Eastern European countries, investment policy, export competitiveness

JEL Classification: F13, F21, F23, F36, O24, O33

Introduction

After 1990, the CEE countries lowered the barriers to FDI. Of course, many other developments were taking place at the same time: increasing openness to trade, privatization of previously government-owned production, and many other changes as these countries moved in various degrees from socialist to market economies and democratic governments.

Some of these countries became full European Union (EU) members in 2004 and in 2007. They also experienced a significant increase in FDI. As a consequence, the ratio of inward FDI to the CEE countries studied here in total world FDI inflows increased more than three-fold. Over the same period, these countries also achieved a substantial increase in their exports, especially towards Western Europe.

FDI affects the economic welfare, growth and development of host countries in a number of ways. First of all, in any host country, FDI manifests itself in the form of transnational companies (TNCs) establishing local operations, usually through one or more affiliates each. These foreign affiliates interact with the local economy by building production facilities and hiring workers, many of whom will require training. Second, since the affiliates are constituent elements of the TNCs involved, they are parts of the TNCs’ respective value chains, both within the host country and internationally. Third, the affiliates might have a variety of indirect, spillover effects on local firms, for example through the impact of competition that might spur local firms to improve their performance; or, conversely, they might induce failures because of affiliates’ greater efficiency. The extent and nature of these effects and the net outcome for a host economy depend, among other factors, on the scale of the initial FDI, the technology used, the number of people employed and the training and wages offered, the market orientation of foreign affiliates in the economy, the degree to which the
affiliates procure goods and service inputs locally, and the proportion of profits reinvested, as well as the conditions prevailing in the host economy.

The question that this paper tries to answer is whether the foreign direct investment in Central and Eastern Europe (CEE), over the period between 1990 and 2010, has improved the export performance of the host economies. A special case is represented by Romania among CEE countries.

The aim of the present paper is to investigate the relationship between FDI and exports in CEE countries. There is a dual link between trade flows and FDI in the theory. On the one hand, it is assumed that investment by multinationals in other countries would substitute for their exports, and therefore, reduce employment and economic growth in the home country in the long-term. On the other hand, trade and FDI are appointed in order to be complements to each other in turn boosting and having a positive relationship on each other.

Foreign capital investments are the most efficient and safe way to integrate into the world economy and to re-specialize the economy. Indeed, accumulated experience shows that FDI had substantially enhanced the national economies re-specialization processes all over the world. The authors share the opinion of those specialists who affirm that FDI play a determinant role in re-specializing transition economies and increasing the export potential. That happens, because, first, in the FDI drawing process, economies perfection takes place on the way of introducing and fast developing of new fields and by renovating traditional ones. Second, currently, FDI is the main and real source for economy restructuring and production modernization; third, FDI growth leads to the increase of manufactured production quantity.

Foreign investors had played an important role in economic development, contributing to the substantial growth of permanent capital and, collaterally, making the modernization of the capital assets of the companies bought, though the flux of FDI in these countries economy had been different from year to year.

The important volume of direct foreign investments contributed to the exclusion or the reduction of interior macroeconomic disproportions, and also to the improvement of the balance of payments, because FDI were auxiliary sources of foreign currency and budgetary incomings.
FDI had become the main way of modernization of the communication systems, and foreign bank capital contributed to the technical modernization of the bank field. The analysis made by foreign economists showed that the new companies, with mix capital (foreign – autochthonous), had ensured the main part of increasing the export of the region's countries and had essentially enhanced the export orientation of their economies.

In the countries that had drawn the highest FDI volumes, the companies, with foreign capital sharing, produce the largest part of the exported goods. But, step by step, was increased the share of the goods that require high capital investments and high qualified work force. This change of exports structure under the influence of direct foreign investments was also noticed in countries in transition within the Central and Eastern Europe.

Generally, E.U. expansion led to an increasing of trade within the union without affecting commercial exchanges with extra E.U. countries. The export growth rhythm extra E.U. shall overtake the one of the export to E.U. countries due to the conquest of new outlets but also due to the consolidation of exports in which Romania already activates, as a result of increasing the competitiveness of the products offer. At the same time, it is estimated the growth of imports from the E.U. over the average on country, imports represented by manufactured goods, of average and high technology. In exchange, the imports from other areas shall increase in an inferior rhythm, as a result of reducing the energetic and material degree of the national economies.

Multinational enterprises (MNEs) can use their already formed connections to import and export products from and in Romania, enhancing in this way the weight of the Romanian economy in world economy.

Section 2 presents the literature findings on the impact of FDIs on exports in the world and especially in the developing countries. In section 3, we examine the effects of sectorial distribution of FDI on the trade balance via exports and imports in CEE countries during the last two decades. In conclusions, we attempt to make policy recommendations for the host country from the viewpoint of external stability as well as competitiveness.
Literature review

The impact of FDI on host country exports is not only direct, through the exports of the foreign affiliates, but there may be important side-effects, which may influence the export performance of domestic producers indirectly.

There is a wide theoretical base which sustains the existence of a positive relation between FDI, export and economic growth. There are relevant for their theoretical role the benign model of FDI (Moran, 2005), but especially the models of endogenous economic growth that belong to Barro in 1997, Borensztein, De Gregorio & Lee, 1998, Graham (2001), or Aitken and Harrison (1999). Between the empirical studies that confirm this hypothesis we present those of Krkoska (2001), Borensztein, De Gregorio & Lee (1998).

One specific channel through which domestic firms may increase their productivity and export competitiveness in tradable goods and services industries is simply by copying the operations of the foreign producer. This may be facilitated by the mobility of workers previously trained in the MNE’s affiliate. Some of the other potential channels of MNE’s influence on domestic companies have been analyzed theoretically, but not in the specific context of exporting domestic companies. One of the potentially important indirect MNE’s effects on domestic producers is the competition effect. The entry of an MNE in one sector of the host economy increases the intensity of competition in this sector, which may force some domestic companies to leave the market (Markusen and Venables 1999; Barrios et al. 2005). Such an effect is less pronounced with export-oriented MNEs and domestic producers, but, in the case of exporting domestic companies, this may lead to negative effects of inward FDI if the loss of exports by domestic companies is not compensated for by new exports of the MNE’s local affiliate. However, MNE entry may also have positive indirect effects on the export performance of domestic companies. For example, an additional channel through which productivity of local firms may be increased is the so-called forward linkages, which occur when foreign affiliates sell goods or services to domestic firms. Improved products and services (and/or lower prices) in the downstream sector of a domestic firm may improve the domestic firm’s own productivity and competitiveness as well.
This implies that FDI inflows into a non-exporting sector may improve performance of domestic exporters. Another type of linkage between foreign and domestic producers consists of backward linkages to the suppliers. If the presence of foreign producer creates additional demand for local inputs, then the supply industries may be strengthened. Markusen and Venables (1999) show that strengthening the supply industries may benefit the domestic producers in the MNE’s industry, through the mechanism of forward linkages, and that this positive side-effect can be stronger than the competition effect in the MNE’s sector.

The theory of internalization suggests that FDI substitute for exports are supported and there are sufficient costs for external transactions such as exporting and licensing. Furthermore, Brainard (1997) states that the “proximity-concentration trade off”, which was determined by the firm’s fixed costs, transportation costs, and trade barriers, is the explanation for the substitutive link between FDI and trade.

Helpman et al. (2003) show that whether the relationship is complementary or subsidiary that it is an issue that depends on the type of FDI. The FDI could be of two different types: horizontal (MNEs have a subsidiary in every country of interest because of transport costs or just to be closer to the final customer) or vertical (MNEs locate each stage of the production process in different countries according to cost advantages.

Moreover, Markusen and Venables (1999) predict a substitution relationship between horizontal FDI and exports, whereas horizontal FDI arises as a product of the interaction of plant-level activities and firm-specific activities (R&D, marketing, managerial services, etc.). Therefore, whether an MNE establishes an affiliate or tends to export depends on the trade costs (tariffs) on the one hand, and the costs of establishing a new firm near the customers on the other hand. Finally, as horizontal FDI tends to take place between countries that are similar in terms of factor endowment, income, and technologies, the model predicts a negative link between skill differences and horizontal FDI.

Classing (2000) investigates the operations of US MNEs in 29 host countries from 1977-1994 and finds a strong positive influence of FDI on exports. This relation becomes even more pronounced when multinational activity and intra-firm trade are considered. In the analysis of FDI and exports, Pfaffermayr (1994) employs the Granger-causality procedure and
obtains a significant positive causation in both directions. Eaton and Tamura (1994) also analyze the relationship. They thereby control for the country determinants such as income per capita, population and the endowment of human capital of the partner country and find a strong complementary relationship. In contrast, Andersen and Hainaut (1998) find a complementary relationship for the USA, Japan, and Germany but not for the United Kingdom.

The empirical studies on the industry level have mixed results. Lipsey (2002) show a positive relationship between US exports and FDI for 40 countries in 1970. Furthermore, Brainard (1997) finds a strong confirmation for the “proximity-concentration trade-off” on the industry level for 27 US markets and identifies that when the income per capita of the partner country catches up to the US level, FDI tends to substitute for exports. Fontagné and Pajot (2002) find complementary effects between FDI flows and trade on the sectoral level. Furthermore, they appoint an even a larger impact of FDI on exports when the spillovers between sectors are taken into account. At the same time, Blonigen (2001) detects a substitution effect between the production of Japanese automobile parts in the US and the Japanese exports of automobile parts to the USA. Further, the relation between the production of Japanese automobiles (final goods) in the USA and Japanese exports of automobile parts turns out to be complementary. Türkan (2006) also identifies a strong complementary relation between US trade and FDI stocks of intermediate goods exports, whereas there is a slight negative relation between FDI and trade in final goods.

The investigation of the relation between FDI and trade that is diversified by destination country or region is an under-researched issue in the empirical literature. Some studies investigating the relationship between FDI and exports from developed to developing countries find them to be complementary. Furthermore, the same relation is found to be substitutive between developed countries. Nevertheless, the net empirical outcome shows, to a large extent, a complementary relation rather than a substitution effect. A small number of studies also analyze the issue of the relationship between FDI and trade considering various destination countries or regions.

For developing countries, strong export orientation can be a powerful engine of economic growth as demonstrated by some East Asian
economies in the second half of the 20th century or Ireland over the last two decades. Medina-Smith (2001) gives an extensive overview of the exports growth. Although he finds evidence in favor of the export led growth hypotheses for this particular case, from the literature review he concludes that empirical evidence on the positive relationship between exports and growth may not always be very robust.

Although the global as well as country specific circumstances are very different for the countries in Central and Eastern Europe, there are at least some positive lessons from the Asian and Irish experiences about what should be done in order to improve export performance (Kokko, 2002). One of them is that foreign direct investment may help in promoting exports. This export-promoting strategy becomes relatively more important due to the narrowed choice of other export promoting instruments as a consequence of international trade agreements, or because some of them have been shown to be ineffective in many cases (UNCTAD 2002). This was especially important for those CEE countries whose goal was to join the EU and which were therefore, or are about to become, subject to even more restrictive regulations. One could say that it might be easier to attract an exporter, than to create one.

Basically, there are two ways in which FDI inflows, the increasing FDI stock, may be export-promoting: either directly, through exports of the multinational’s subsidiaries, or indirectly, by affecting the domestically-owned firms in a number of ways, such as knowledge spillovers or improved access to world markets, and thus increasing the overall international competitiveness of the host economy. But the actual effects of FDI on the host economy and possibly on its exports depend on the type of the investment as well as on the specific host-country initial economic conditions.

Different theoretical approaches give different predictions about the relationship between FDI and exports, or more generally, on the relationship between international factor movements and international trade in goods. It is reasonable to expect that firms can do business in foreign countries only at a higher cost than domestic firms. Without specific advantages capable of compensating for this inferior position, their foreign operations would not be sustainable.
If FDI is market-seeking, it would have positive influence on imports into host economy, and no effect on exports. For resource-seeking FDI, the situation is just the opposite: there is an increase of exports, while imports are unaffected. For strategic asset-seeking FDI, there are no unambiguous predictions. In order to predict the macroeconomic effect of FDI on exports, one needs to know the type of the majority of foreign investment projects, whether they are market- or resource-seeking. But even if one knew that most of the FDI in some host economy were market-seeking, there still might be some positive effects of FDI on exports through different channels of indirect influence.

There is a same bi-directional argument in the case of FDI and the export. Then there are other concerns regarding market seeking (substitute) FDI or efficiency seeking (complement) FDI. Furthermore, Vernon (1979) explores whether FDI is at the early product life cycle stage (substitute) or at the mature stage (complement) and asserts that exports increase FDI by paving the way for FDI by gathering information of the host country that helps to reduce investors’ transaction costs. Also FDI may reduce exports by serving foreign markets through establishment of production facilities there.

To illustrate the causal relationship, several studies (UNCTAD 2001) suggest that manufacturing firms first service the foreign markets by trading because trade is easier and less risky than FDI. Then gaining knowledge about foreign countries economies, political and social conditions, the home country firms establish subsidiaries in foreign markets and then subsidiary exports. Thus, the FDI-export relation is as complicated as the other bi-variate causal discussion.

Some studies analyze the dynamic relationship between export, FDI and GDP for six emerging countries of Chile, India, Mexico, Malaysia, Pakistan and Thailand. The results suggest that in South Asia, there is evidence of an export led growth hypothesis. However, in the long run, we identify GDP growth as the common factor that drives growth in other variables such as exports in the case of Pakistan and FDI in the case of India.

The Latin American countries of Mexico and Chile show a different relationship in the short run but in the long run, exports affect the growth of FDI and output. In the short run, GDP is more important in the case of Mexico, while FDI is more important in the case of Chile In the case of East Asian countries; we find bi-directional long run relationship among
exports, FDI and GDP in Malaysia, while we find a long run uni-directional relationship from GDP to export for Thailand.

There are differences between the competitive advantages and market conditions of multinationals from different economies, and it is probably not safe to generalize the results from the US. The most comprehensive econometric analyses of the Swedish FDI-trade relationship are presented in Swedenborg (2001), Blomström, Lipsey, and Kulchycky (1988), and Svensson (1996). The studies are all based on a detailed data set on Swedish multinationals collected by the Industrial Research Institute in Stockholm, but there are significant differences regarding the specific time period and the methodology used. Yet, most of these studies conclude that there is no relation, or a small positive relation, between FDI and home exports. The exception is Svensson (1996), who focuses on the developments during the late 1980s and early 1990s. In particular, he argues that it is necessary to account for the foreign affiliates’ exports to third countries, because they are likely to substitute directly for parent exports. Doing this, he finds substitution between Swedish investment abroad and exports from Sweden. However, the quantitative impact is relatively small. Another possible explanation for divergence between Svensson (1996) and earlier authors could be that Swedish MNCs have increasingly relied on mergers and acquisitions rather than Greenfield investments as their mode of foreign market entry. Since acquired affiliates already have local suppliers and subcontractors, they are less likely to need inputs from the home country, at least in the short run. Hence, the complementarity between Swedish exports and FDI may have declined over time.

Moreover, it is important to note that all of the evidence discussed above is drawn from studies focusing on manufacturing. Services have emerged as the leading industry for new FDI, but there are very few studies exploring to what extent outward investment substitutes or complements home country activities. Given the importance of market presence and proximity to customers in most services industries, it can be hypothesized that the substitution effects of FDI are rather small: the initial export potential is often small relative to the volume of operations that can be generated though FDI.

From the discussion above, it should be clear that there are positive as well as negative effects of FDI in the home countries of multinational
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corporations. Moreover, there is some evidence that the effects of FDI vary depending on the type of investment (acquisition or greenfield), industry (manufacturing or services), time perspective (short or long run effects), and various home and host country characteristics. Among the positive effects identified in the empirical literature, the most important one is probably the favorable impact on the investing firm’s size and competitiveness. In the developed country case, it was noted that there is a potential for complementarity both for horizontal and vertical FDI. With horizontal FDI, it is likely that the host country market share grows sufficiently to stimulate home country production of intermediates; in case of vertical FDI, the competitiveness of the MNC may grow sufficiently to take market shares from foreign firms, either in the home country market or in export markets. In either case, total home country production may grow following FDI. In developing countries, it is possible that the production linkages between parents and affiliates are weaker.

The impact of FDI on host country exports is not only direct, through the exports of the foreign affiliates. This upgrading of technical and managerial skills, provided by the multinationals may spillover to domestic producers (for example, through mobility of trained human resources), enhancing their productivity and helping them to improve their competitiveness on the export markets. Locally owned firms might increase their efficiency by copying the operations of the foreign producers or may be forced to do so by the foreign competition (Lipsey 2002).

It must however be noted that the extent of the spillovers and indirect effects of FDI on exports may depend on the initial technological and human capital level of the domestic producers, on the intensity of competition in domestic markets, as well as on the government policies promoting linkages between domestic and foreign firms. Moreover, there are also potential negative effects of MNEs on domestic producers. MNEs can capture domestic firms’ market share and reduce the latters’ profits.

Thanks to the detailed data on bilateral capital and trade flows between the U.S. and host countries in Latin America, they are also able to address the inter-sectorial spillovers in a more explicit way. The results vary across sectors and host countries, reflecting the importance of the specific conditions in individual countries and industries. Still, US investments in
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CEE region were a few, mostly located in Poland, Czech Republic and Hungary.

Many studies on FDI spillovers in transition countries find some evidence of negative spillovers. The evidence of positive horizontal, intra-industry spillovers is even weaker if one considers some methodological drawbacks such as potential bias of the cross-section estimates used in many of the reviewed studies. The evidence on positive FDI productivity spillovers on forwardly and backwardly linked industries is somewhat more convincing than for the horizontal effects. The same is true for the papers dealing with the export spillovers.

Zhang and Song (2000) address the same research question for China at the provincial level. They also find that higher levels of FDI are consistent with higher provincial exports. It is worth noting that the positive effect of FDI on exports in China has mostly been due to the fact that China has largely been used as an export platform by MNEs. Goldberg and Klein (2000), on the other hand, analyze the impact of FDI from the United States in the manufacturing sectors of individual Latin American countries on the net exports of those and other sectors. The results vary across sectors and host countries, reflecting the importance of the specific conditions in individual countries and industries. The fact that the results are mixed makes it impossible for the authors to draw a strong and clear conclusion on the relationship between the FDI flows and trade.

In addition to directly increasing the size of domestic exports, and increasing the probability of domestic firms becoming exporters through spillover effects, FDI can affect the structure and direction of a host country’s exports. As for the studies concerning transition countries, Jensen (2002) investigates the impact of FDI on the structure of Polish exports and finds that inward FDI in Poland positively affected the technology intensity of exports. Djankov and Hoekman (1996) analyze the changes in the structure and destinations of exports of CEE countries. According to their findings, the Czech and Slovak Republics have experienced the greatest redirection of trade as well as the fastest growth of exports. On the other hand, the change of the composition of exports in these two countries has been relatively slow. In general, they find that the FDI inflows were strongly correlated with export performance and intra-industry trade levels.
Barrios et al. 2005 explicitly test the effect of inward FDI on the productivity of exporters in the UK that have been acquired by the foreign companies. This is important since much of the FDI inflow in the transition countries was for the acquisition of existing companies (mostly through privatization). This study shows that FDI affects the productivity of acquired firms; however, the magnitude and significance of this impact depends on the time elapsed since acquisition, nor was it even for companies with different productivity levels prior to acquisition. He finds that, one year after acquisition, FDI has had significant and positive influence on average productivity growth of acquired companies (no significant effect was found in the year of acquisition). The companies with lower initial productivity, on the other hand, benefited more from FDI two years after acquisition. This shows that it takes time for the acquired firms to benefit from FDI, especially for the domestic firms with lower initial productivity. Since NEU countries are, on average, more developed than the Southeast European countries, they are expected to have relatively more productive companies. Also, they have received more FDI, which can additionally explain why such effects are significant only for this group (new-EU) of countries.

**FDIs and exports in CEE countries**

Some countries in Central and Eastern Europe that had large current account deficits prior to the global financial crisis of 2008–09 were also those that received large FDI inflows in the non-tradable sectors. FDI in the non-tradable sectors had boosted current account deficits without contributing to an expansion of export earning capacity. FDI was generally the largest component of capital inflows in the region. Within the region, Bulgaria and Romania (EU Balkans) recorded the largest inflows of FDI relative to GDP lately. The Baltic States (Estonia, Latvia, and Lithuania) also picked up the momentum upon their EU accession in 2004. Albania, Bosnia & Herzegovina, Croatia, Macedonia, and Serbia (Non-EU Balkans) experienced an increasing trend since 2005 mainly due to large-scale privatization. In contrast, the CEE countries (the Czech Republic, the Slovak Republic, Hungary, Poland, and Slovenia) saw a more moderate increase in FDI after 2003, when privatization came to an end. The sectorial composition of FDI inflows has been very different among the CEE
countries. In South-Eastern countries, FDI in the non-tradable sectors dominated with the exceptions of Macedonia and Romania. A similar pattern is seen in two of the Baltic States (Estonia and Latvia) in Figure 2 in Appendix. These two groups of countries received sizable FDI in the financial sector by Western European banks. On the other hand, the CEE countries have more balanced distribution between the tradable and non-tradable sectors (Figure 3, Appendix). Determinants of FDIs in the tradable sectors are: market size, infrastructure, distance, trade openness, wage and education.

Further, we shall examine some structural changes, which had been made, under the influence of FDI, in the CEE economies, drawing attention also upon the changes in the export potential of that country. In the beginning of transition, these countries were specialized in traditional industries with a low degree of transformation (textiles, clothing, furniture, footwear), in intensive resource branches (metallurgy of iron, metal working, base chemistry, wood and paper industry) and in agriculture. This specialization had been formed since the socialist time and reflected “work social international division” from the Mutual Economic Help Council (C.A.E.R.). In 1994 – 1995, after the countries within this region got European Union associated countries statute, a large flux of FDI, mainly, from Western Europe, step by step changed the type of international specialization of this country category.

In the beginning of the 1990s, in this category of countries, FDI were drawn especially in processing industry. Comparing to other branches, here, the buy-out was made earlier, and the efficiency of investments was high. In the second half of the ’90s, the highest rhythms of FDI flux growth had already been registered in the services field. The cause of this change was the shift of the buy-out center. In this way, in 2000, in the services field, had been concentrated ca. half of the foreign investments. In some countries, like Czech Republic, foreign companies had started to control the telecommunications, financial and transportation systems. There had also been made considerable investments in real estate and trade. In the first years of the 3rd millennium, the most attractive investment domain for foreign investors was, again, the processing industry. In processing industry, it is noticed a FDI structure change process. Regarding the rise of work force
cost in CEE countries, foreign companies had started to move the activities that require a large work volume in other world regions.

In such conditions, moving the industries that require a large work volume in countries with lower incomes, foreign investors, in the case of the new European countries (Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Slovakia and Slovenia), had started to already invest in more advanced technologies fields, that require a more qualified work force and in which labor productivity was higher. In this way, important investment resources had been oriented to automobile production industry. So, according to UNCTAD, Czech Republic was first worldwide, and Hungary and Poland on the 3rd place. In this way, with the help of FDI, the international specialization of these countries began to change.

It is easy to notice that the amount of FDI stock has almost constantly increased in all countries, over the period considered. At the same time, exports have mostly been stagnating in all countries except for the five Central European economies. Also, there has been an upward trend in Romanian exports for the second half of the observed period.

It is plausible that the sectorial composition of FDI matters for the trade deficit. FDI in the tradable sector is likely to increase exports over time, while no such effect exists for FDI in the non-tradable sector. FDI in the non-tradable sector may fuel domestic demand booms and boost imports, while FDI in the tradable sector only boosts imports in the short run. This suggests that countries where FDI predominantly flows to the non-tradable sector will have a higher trade deficit than countries where it flows to the tradable sector.

The countries where FDI in the non-tradable sectors dominated also had the largest current account deficits. FDI in the tradable sector is associated with higher exports. There is a positive correlation between the stock of FDI in the tradable sector (measured as a percent of GDP) and the export to GDP ratio (Figure 4, Appendix). The export to GDP ratio is the highest in the Slovak Republic, the Czech Republic, and Hungary—countries that also record a high stock of tradable FDI.

FDI in the non-tradable sector is associated with higher imports. The stock of FDI in the non-tradable sector and the import to GDP ratio are also positively correlated (Figure 4, Appendix). Bulgaria and Estonia have the highest stock of non-tradable FDI and they also have a high import to
GDP ratio. One reason for the strong link between FDI in the non-tradable sector and high imports may be that FDI in the non-tradable sector fueled credit booms. The link between non-tradable FDI and credit growth is indeed positive as a large share of non-tradable FDI is often financial intermediaries.

The negative correlation between share of tradable FDI and trade account balance is seen for the three New Member States (Baltics, Bulgaria, and Romania) in Figure 4 in Appendix. In Bulgaria, Romania and Latvia, we observe a sharp increase in trade deficits that coincide with a declining share of tradable FDI. Three of the CEE countries—Czech Republic, Hungary, and Slovak Republic—have a high share of tradable FDI and improving trade balance (Figure 4, Appendix). In two of the CEE countries—Poland and Slovenia—the trade balance is worsening as FDI is increasingly going toward the non-tradable sectors (Figure 4, Appendix).

The time-series evidence shows that more FDI in the tradable sectors seems to improve the trade balance in the medium-run. Thus, the sectorial composition of FDI seems to matter a great deal to the evolution of external balance via export and import performance.

There is a widely shared view that FDI promotes a host country’s export performance by augmenting domestic capital, helping transfer of technology and new products, and providing training for the local workforce and upgrading technical and managerial skills. This potential linkage between inward FDI and export performance is one of the reasons why developing countries compete to attract more FDI.

There are notable examples among developing countries in which FDI contributed significantly to rapid economic growth through enhancing export performance. China is considered to be one of the most successful examples of export-led economic growth, aided by substantial FDI inflows. The role of FDI in China’s export performance was studied in numerous studies in the past. However, there are few studies that report the contribution of FDI in the tradable sector. For example, the study by Zhang and Song (2000) reports that one dollar of FDI stock raises exports by about 70 cents, using the disaggregate industry level data.

For the CEE countries, the estimate for the link between tradable FDI and exports is substantially higher than those found in the Chinese studies, although it is not directly comparable due to a different unit of
aggregation. A cross-country correlation coefficient shows that one dollar of FDI in the tradable sector leads to an increase in exports by about 3.5 in the CEE region. A one percentage point of GDP increase in tradable FDI leads to about three times as much increases in exports. This is in part due to the self-reinforcing effect that countries with a profitable exporting sector are more likely to attract more FDI in the tradable sector. When we use aggregate FDI including non-tradable FDI, the positive relation between FDI and exports still exists but to a lesser extent (1.8 dollar as opposed to 3.5).

This is because the role of FDI in the non-tradable sector in supporting export activities is rather limited. There is a positive link between export performance and FDI in the tradable sector after controlling for real exchange rates and market size. Between 2000 and 2008, there was generally an increase in export propensity in the region.

However, there is a large variation across countries in the export-to-GDP ratio. The top three exporters in 2007 are the CEE countries that embarked on transition process early. Exports of CEE countries (except Poland) account for about 70 percent of GDP. FDI stock in the tradable sector is also high in these countries, accounting for over 15 percent of GDP. Countries that saw little or no increase in the export-to-GDP ratio are Albania, Croatia, Latvia, Lithuania, Romania, and Serbia, in which FDI stock in the tradable sectors is lower than in other countries. Notably, the two countries—Macedonia and Bosnia & Herzegovina—saw a significant improvement in export performance and also a high share of tradable FDI.

From the table 1 and 2 we can stress that Poland, Czech Republic and Hungary are in the top list of CEE countries as exports volume is concerned. These are the CEE countries that are in the top for attracting FDIs in the last two decades. Slovakia and Romania follows them, but we have to consider the size of the Romanian economy that places on the second position in the CEE region. So, its performance is not as notable as exports are concerned. Bulgaria represents a special issue in the CEE region because it managed to attract many FDI inflows after 2005, but its exports couldn’t follow such a significant rising trend. Both Romania and Bulgaria based on low labor-cost unit and had a low capacity to absorb FDIs in the high-skilled labor sectors with high added value. These markets faced a low purchasing power of the population and the domestic suppliers couldn’t
fulfill the internal demand, so they didn’t represent an export platform such as Asian emerging countries. In those two countries, the economic restructuring and privatization process were postponed for some time.

There seems to be a relatively clear division between investment policies of the CEE countries and of the Western European Countries of EU.

**Table 1:** Exports evolution in CEE countries during 1990-1999 (mil. USD)

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*Source:* UNCTAD, Statistics on Trade-exports and imports of merchandise and services, annual, 1990-2010
Table 2: Exports evolution in CEE countries during 2003-2010 (mil. USD)

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Source: UNCTAD, Statistics on Trade-exports and imports of merchandise and services, annual, 1990-2010

While the former may gain most by focusing on infrastructure and R&D policies, in the latter group policies to reduce the share of low-skilled workers, for example by encouraging firms to restructure production and increase capital intensity and through a reduction of labor costs via a decrease in non-wage-labor costs, would attract most FDI. Slovenia has the lowest penetration of FDI among the observed countries. Here the privatization policy was more cautious towards foreign owners. But only in Slovenia and Czech Republic we can see that in 2010 the FDI decreasing trend reversed.
In CEE countries there was implemented a lax fiscal policy at the beginning of the last decade that widened the external imbalances in the region. The fiscal policy tightened after 2005, once the consumption tax increased in the region and generated a rise of prices. Romanian income policy was lax for a long time and there was granted fiscal facilities for imports to fulfill the internal demand. Moreover, the national currency significantly appreciated at the end of the ‘90s and in the last decade, before the crisis period and that discouraged the Romanian exports. At the beginning of the last decade, the CEE countries’ exports increased significantly due to a rise of external demand of Western Europe and they were less sensitive to the exchange rates fluctuations. Exports were stimulated by the decrease of the raw materials and oil prices. CEE countries with a traditional export structure (low manufacturing level of products) faced high growth ratios. In Poland, Hungary and Czech Republic, the export was supported by the FDIs of the TNCs from EU and US in car, equipment and transport means sectors. Poland and Slovakia attracted large FDI inflows due to the important privatization programs, just like Czech Republic and Hungary did in the ‘90s. Poland, Hungary and Czech Republic (that account more than half of the total FDIs in the CEE region) and even Slovakia benefited more of the TNCs support and of their better capacity to absorb external shocks due to their complex export structure.

Romania and Bulgaria suffered from their export structure and their weak presence on the international markets and on Community of Independent States’ market (CIS). Moreover, Bulgaria was affected by the situation in the former Yugoslavia and by the Turkish crisis during that period. In 2001-2004, CEE countries exports increased more than the world exports due to the appreciation of the euro against US dollar and to the low labor-unit cost. Hungary supported FDIs in new sectors and mergers and acquisitions. The sustained economic growth worldwide and the increase of the external demand supported the exports increase in the CEE region before crisis erupted in 2007-2008. Moreover, in the first half of the last decade, the CEE countries’ exports oriented to developing countries outside the EU area. Starting with 2003, Romania and Bulgaria managed an internalization of some TNCs’ activities from EU.

Bulgaria, Romania and Slovenia depend on imports of raw materials (for exports) and of capital goods and that situation determined an increase
of their external imbalances supported also by their national currencies’ appreciation in the first half of the last decade. After 2003, FDIs decreased in Czech Republic, Poland, Slovakia and Slovenia because of the privatization process that came to an end and in Hungary because of its foreign investments abroad. Bulgaria and Romania continued to attract FDIs as a result of the postponed privatization process. With the first wave of EU accession in 2004, the new EU member states benefits of the total trade liberalization and of the EU commercial relations with different world countries. The industrial sectors of the new EU member states integrated in the TNCs’ production networks.

The exports of the new EU member states were supported by the demand of intermediary goods of the Western Europe (Germany, mainly) and by the intra-company trade in Czech Republic and Hungary. The exports of capital goods outside EU increased in Czech Republic, Hungary, Slovakia and even in Slovenia. Poland, Czech Republic, Hungary and Slovakia started to invest abroad, but only Hungary made significant investments abroad. FDIs attracted in the CEE region came mostly from EU and after EU accession the reinvested earnings began to play an important role in this region. In the Baltic States, Hungary and Slovakia, the investments and the low interest rates supported domestic demand. The exports represented a real engine for the economic growth in the Baltic States, Poland, Hungary and Czech Republic.

The external imbalances widened after 2005, as a result of economic gaps between the new EU member states and the former member states and as a result of reinvested earnings from FDIs (especially in Poland, Hungary, Czech Republic and Slovakia). After 2007-2008, once crisis erupted worldwide, the external imbalances decreased in the CEE region as a result of the contraction of the domestic demand (except the advanced CEE countries such as Poland, Hungary, Czech Republic and Slovakia due to the reinvested earnings). In the entire CEE region, FDIs decreased, except Romania. In 2009-2010, Latvia, Hungary and Romania adopted restrictive fiscal measures for financial stabilization, Bulgaria, Estonia and Lithuania adopted fiscal consolidation measures, while Poland and Czech Republic afford not to intervene. The external debt increased significantly in Hungary (over 60 percent of GDP). In 2009, the Baltic States and Hungary reached a positive external balance due to the domestic demand contraction and the
decrease of capital inflows. Romania and Bulgaria also reduced their external imbalances. FDIs and portfolio flows decreased in the CEE region. Net inflows turned up negative in Czech Republic, Bulgaria, Latvia and Lithuania and they decreased significantly in Estonia, Hungary, Poland and Romania. Romania, Latvia and Hungary claimed international support for financial assistance (Table 3 and 4).

The crisis effects were felt in 2009 and even later. FDI reacted later and to less extent. The decrease of FDI has been mainly felt in certain branches such as the automotive industries, which suffered from the structural crisis. In the CEE countries automotive industry is important as a consequence of the significant export platforms created by foreign capital in the last twenty years. The declining demand hit this industry in Hungary, Slovakia and Czech Republic. In Hungary inward FDI decreased significantly in 2009. In the Czech Republic the inflow of EU funds helped to maintain the external balance and the banking sector behave relatively well. The fiscal deficit increased but the adequate policy measures helped to stimulate the economy. Slovakia was in the recent years eminent in the CEE region, with growth rates of 10 per cent in 2007 and 7 per cent even in 2008, and introducing the euro in 2009. However, Slovakia’s reliance on the car industry (which accounts for 20 per cent of GDP) means that exports suffered a lot in 2009 and FDI decreased drastically.

Polish inward FDI did not decrease significantly in 2009. Poland’s strength is the size of its domestic market, which makes it a lot less dependent on exports than the smaller countries. Also, its industrial base is more diversified and less dependent on a single (like car) industry. Perhaps more than other new member-states, Poland could benefit from the return of highly skilled workers and from infrastructure investments co-financed by structural funds.

Bulgaria was severely hit by the crisis, GDP decreased by 5% in 2009. Inward foreign direct investment also decreased to around half of the sum in the previous year. Exports, imports and manufacturing production also declined.

In Romania besides the crisis, general economic background worsened. Despite other advanced CEE countries, Romania has only one big foreign investor in car industry, Renault that bought Dacia. Car industry and textile help Romanian exports to recover during the crisis. Foreign investors
were attracted so far by relatively low unit labor cost, proximity to the euro area, sound macroeconomic fundamentals (successful disinflation, high growth) and by domestic market potential. However, the boom of privatization-led FDI, which represented about half of the FDI inflows in the past years, is now largely over. Furthermore, Romania's low-cost advantage is gradually eroding in certain sectors. Only at the beginning of 2011, when we achieved economic growth again, the Romanian economy has again become attractive for the foreign investors.

The export/import activity of FDI enterprises exerted a positive impact on Romania's foreign trade. Contribution of foreign enterprises to exports was around 70%-73% in the last three years, a larger contribution against the imports that represent around 60-62% of the total Romanian imports. The largest contribution of the foreign investors to exports comes from industry, namely manufacturing: transport means, computer and electrical equipment, oil processing, textiles and trade.

Greenfield enterprises are important for exports in manufacturing, trade and real estate sector. For imports, trade is the main contributor followed by transport means, oil processing, machinery and equipment and textiles. But, if we consider the export structure, we can see that there are differences between sectors where FDIs are largely involved and the sectors that are the main contributors to Romanian exports.

**Table 3:** FDI in percentage of GDP during 1992-2000 (%)

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**Source:** UNCTAD, FDI database, annual data, 1990-2010

**Table 4:** FDI in percentage of GDP during 2003-2010 (%)
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So, the manufacturing sectors represent almost 92% of the total exports, but the main contributors are the car and equipment sector, the metallurgic sector and the textile sector (that is dominated by the low production), chemical and mineral sectors, rubber and plastic sector and agriculture and food sector. And more important, the intermediary goods represent half of the total Romanian exports. The consumption and capital goods represent almost 20% of the total exports. In 2010, the Romanian export recovered a little bit, as a result of a rise of the external demand, but the structure didn’t change significantly (Figure 1).

As developing countries expand beyond their traditional involvement in international production as recipients of FDI to that of rising sources of FDI, the impact of their outward FDI on the home countries as well as on host countries, especially host developing countries, assumes increasing significance. For the home countries, questions arise as to whether the exports of capital, technology and other resources by their TNCs bring benefits to the firms undertaking them.

The trade effects of outward FDI on host economies depend considerably on the motivations and type of investments abroad, and this applies to developing-country FDI as well. To the extent that market-seeking motivations drive the greater part of FDI from developing countries, and such FDI has been found to be generally complementary to host-

**Figure 1:** FDI stock by main economic activity

**Source:** National Bank of Romania, FDIs, 2010
country exports (excepting where host countries pursue import-substitution policies), a positive impact on host-country exports may be expected. Results of our study suggest a positive relationship that confirms complementary between outward FDI and host-country exports.

From quantitative analysis realized in a previous paper by Rădulescu and Pelinescu in 2010, we can conclude that for Romania, exports growth depends largely and positively on the real exchange rate the depreciation and the monthly imports because our economy depends deeply on imports (raw materials and energetic products). The other factor that influences export is FDI that need more time (three period lag) to induce exports growth, but its influence is still very small. The real monetary base and the inflation determine the decrease of exports because of the rise of the domestic prices that affect the exports competitiveness in the external market.

A great focus is on improving the export competitiveness for the policy decedents when they promote growth. Competitiveness starts with a rising international control of the market, but it implies more than that. It implies a diversification of the export basket, long-run sustainable path of exports growth, renewing the technologies in the export activities and a rise of the domestic firms capable to compete internationally for a lasting and sustainable competitiveness with rising incomes.

Competing exports allows the countries to import products, services and technologies for a rising productivity and the living standards. An increased competitiveness allows the countries to move forward away from the exports of some primary merchandise and improve their technologies, which represents an essential element for rising the domestic added value and wages. Exports is based on the capacities that underline competitiveness: they determine enterprises to adopt higher standards, insure opportunities for an easier access to information, put some pressure for a higher competitiveness and encourage the domestic firms to acquire new capabilities.

TNCs can help the developing and transition countries to improve their competitiveness, but raising their potential isn’t easy. TNCs have a high share in the exports of large added-value products in the developing countries. Firms of the developed countries invest in countries with low unit labor costs to export starting on new basis and they have substantial scale
economies as labor force is concerned. In these countries there is also important the promoted policy for attracting investors: they created free trade zones or they offered many fiscal incentives and not only. TNCs aren’t focus only on selling their products to the consumers outside their system, but they also insure the products circulation between their branches, especially as intermediary goods are concerned, and these flows turn into imports and exports. Of course, these phenomena don’t affect all the sectors in the same way. They are more obvious in electronic parts sector, car sector, namely in the sectors where the world trade rises the most quickly.

Attracting TNCs export oriented is an activity intense competitive and proves to be difficult to be sustained when the wages increase and the market conditions change. Coherent and consistent support from the policies implemented is essential in attracting the TNCs export oriented and it is essential that this support to be included in a national developing strategy. Export competitiveness is important and challenging, but it is important to be used as a mean that targets a final scope – development.

That raises questions about the resulted benefits of the TNCs’ transactions, starting with improving the commercial balance situation and ending with the modernization and sustainability of the export operations. Although the FDIs support the rising of exports, foreign investors also import products. In some cases, the net benefits generated by the foreign exchange rates can be small and the exports value can coexist with low levels of added value. In each case, the problem is represented by the way that the host countries can benefit the most by the TNCs’ assts. All depends on the implemented strategies of the TNCs, on one hand, and on the other hand on the capabilities and policies of the host countries.

The success of the national industrialization strategies of some countries (especially the Asian ones) that combined the efforts to attract TNCs export oriented with the development of the national capabilities could be a model to follow. There are many channels through the TNCs can support the export competitiveness of one country. But the challenge is to activate the TNCs for this objective. For attracting FDIs export oriented and for achieving certain gains as development is concerned, the countries have to find the most efficient ways to exploit their geographical positions that could support their exports. Even the countries that traditionally received significant FDIs, export oriented, must modernize to sustain wages increase
and to keep their competitiveness as an export basis. Indeed, some of the most successful countries as export competitiveness is concerned and in attracting FDIs export oriented had promoted alternative strategies based on the development of the domestic capabilities, but targeting foreign assets and resources, in the same time.

Conclusions

Studies estimated the impact of FDI inflows on export performance in transition economies, including new member states of the European Union. Foreign direct investment can contribute to higher exports by increasing supply capacity and/or through FDI-specific effects as multinational enterprises may have better knowledge about foreign markets, superior technology, lower production costs, and better ties to the supply chain of the parent firm than do local firms.

We find that, FDI inflows contributed to higher supply capacity in all those countries, leading to more exports. On the other hand, evidence for FDI-specific effects is mixed. The results suggest that this effect has been present mainly for the new EU member states, reflecting, among other things, the higher amount of FDI inflows received by these countries relative to Southeast European countries, as well as the potentially higher initial productivity of domestic companies acquired by MNEs.

Our results have important implications for policymakers and other transition economies. First, our results support the notion that the MNE has important advantage over local firms that it brings to the host economy. Hence, policymakers need to support FDI inflows by designing appropriate polices and reforms. However, it seems that the amount of FDI stock accumulated over time matters for the positive FDI-effects on exports. In the new EU countries, we showed that they received the larger amount of FDI relative to other transition economies and hence have been able to better take advantage of the FDI-specific effects than the rest of the countries, leading to more exports.

This paper argues that the composition of FDI matters: too much FDI in the non-tradable sector can exacerbate external imbalances. From 2003 onwards, FDI flows in many countries largely went to the non-tradable sectors rather than the tradable sectors and fueled domestic demand rather
than supply. This led to a surge in imports and large current account deficits. These large current account imbalances turned out to be dangerous. The countries with large external imbalances were hit hardest during the global financial crisis. In this paper, we relate the sectorial composition of the FDI stock to export performance. The cross-country evidence shows that FDI in the tradable sector is positively related to exports. The effect of FDI in the tradable sector on imports is not clear-cut perhaps because part of imports is also used as intermediate input for exportable. Thus, we conclude that FDI in the tradable sector affects external balance mainly by the export channel.

Large domestic size, good infrastructure, educated labor force, and deeper trade integration are conducive to attracting FDI in the tradable sector. The initial conditions and fiscal policy generally do not affect the composition of FDI, though the countries physically close to Western Europe have an advantage of having a lower transportation cost to attract export-platform FDI. In the countries that received much FDI in the non-tradable sector before the crisis, a shift towards the tradable sector is helpful for more sustainable path of external balance. In the short run, this entails a further progress toward greater trade integration. In the medium to long term, a country also needs to address bottlenecks in infrastructure and upgrade human capital to tilt a level-playing field towards the tradable sector.

Literature review indicates that FDI had a positive and significant impact on the exports of these countries, new EU member states. It is found that the positive impact of FDI on exports was strong, possibly reflecting the fact that these countries have managed to attract more export-oriented FDI. Other highly significant determinants were real effective exchange rates and the development on export markets. These results were confirmed after controlling for the effects of domestic investment (except for the export markets variable for the second subsample) as well as for the trade liberalization. The findings on these last two variables are mixed for different samples and specifications.

Attracting FDI can have powerful export-promoting effects. It is becoming relatively more important as the choice of other export-promoting instruments narrows down, as a consequence of international trade agreements, or because some of them, such as direct export subsidies
to specific industries, turned out to be ineffective in many cases. This is especially important for those CEE countries, whose goal was to join the EU, and were subject to even more restrictive regulations.

Government agencies can still target the potential exporters, but without being able to actually condition their incentives. It can therefore be expected that the policy measures will be shifting more and more toward exploiting potential indirect effects targeting “better” FDI and/or promoting linkages between foreign and domestic firms. It is also possible to target export oriented FDI indirectly by means other than incentives, by providing specific services, infrastructure or human resources that are possibly required by the export oriented firms. Such policy would simultaneously lower the costs for the domestic firms to become exporters.

One could argue that measures of this kind should be enough, i.e. that a country can create an exporter-friendly environment by itself, and thus, increase the export competitiveness of domestic firms without (i) attracting FDI at all, or (2) without investing additional efforts and resources (in form of incentives) in order to attract export oriented foreign investors. While it is likely that a country can succeed in promoting its exports without attracting FDI, the latter can obviously help speeding up the process and magnifying the impact and should be considered at least as a supplementary measure. This is probably more important in less developed host countries, lacking the resources, institutions and possibly also knowledge in providing important services for potential domestic exporters. In addition, only to create an exporter-friendly environment is in most cases not enough to attract a foreign investor. This may at best be supported by the empirical fact that even the rich industrialized countries offer special conditions for some foreign investors (UNCTAD 2002). It should be mentioned in the context of EU accession that, as shown by Breuss et al (2003), the redistribution of structural and cohesion funds due to enlargement determined the re-distribution of FDI within the enlarged European Union. Since more funds were redirected to new member states, they were able to use those in order to reduce the fixed costs of investment and to affect the location decisions of foreign investors.

Policy makers attach very high value to export promotion, regardless of the mixed evidence in the literature (UNCTAD 2002). So potentially, FDI might have been promoting the growth of the CEE
countries by promoting exports. But, Mencinger (2003) states that this has not been the case and that FDI did not lower current account restrictions for these economies. He argues that MNEs contributed more to imports than to exports, and that, therefore, there was no positive indirect impact of FDI on growth via exports. This, however, is a superficial argument at least.

If MNEs’ imports contained a significant portion of the capital goods and machinery used for later production, and/or enabled faster enterprise restructuring (in the case of acquired domestic firms) allowing the firms to take advantage of the market access to EU, than this may have enhanced growth. Exactly the latter is found to be the case for some CEE countries in the study by Repkine and Walsh (1998), meaning that outward FDI and trade tend to be complements rather than substitutes. We also find a significant one directional causality from exports to outward FDI for the CEE countries. In contrast, there is no significant relationship between exports and FDI for the destination region Asia and Latin America.

Future work should explore whether the relationship remains robust when further determinants such as GDP and country size are included. Another interesting issue is whether the relation remains the same when we compare R&D-intensive industries and non-R&D-intensive industries. And it should be studied the impact of FDIs on imports.

Acknowledgement

This paper is elaborated in the frame of the project POSDRU/89/1.5/S/62988 of 2010, as result of a professional research visit made at the University Carlos III of Madrid. I appreciate the help of the academic staff there, which helped me with my research project called “Empiric methods for FDIs analysis through the stimulating macroeconomic policies and rethinking of their role for achieving economic growth in Romania”.

References


The Impact of FDIs on Exports, and Export Competitiveness in Central and Eastern European Countries

on Employment, Trade, and Technology", Routledge, London and New York;


The Impact of FDIs on Exports, and Export Competitiveness in Central and Eastern European Countries

Appendix
**Figure 4:** Share of tradable FDI and trade account balance 2000-2007
(Percent of GDP, percent of total FDI)

Columns show the share of tradable FDI of total FDI (right axis) and lines show the share of trade account balance to GDP (left axis)
Is the Production of Religious Knowledge Efficient? Managing Faith Related Postsecondary Institutions

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The focus of this paper is on the efficiency of producing and managing religion based knowledge in postsecondary institutions. Panel data is used to estimate a stochastic cost frontier and associated inefficiencies for a panel of 222 U.S. bible colleges, theological seminaries, and other faith based higher education institutions over the 2005-09 academic years. Results indicate that institutions offering undergraduate only education are on average less inefficient than graduate only or combined undergraduate-graduate education institutions. Government provided student loans and private philanthropy are efficiency improving, while institutional debt acts to increase inefficiency. Time varying inefficiencies show efficiency gains over the last two of the four academic years. However, additional observations will be required to determine whether that is a managerial reaction to the global financial crisis and if it is sustainable in future academic years.

Keywords: Cost inefficiency, Stochastic cost frontier, Religion, Postsecondary

Introduction

In this paper, the question of whether religion is efficient is empirically explored in the context of knowledge production and the managerial operating cost efficiencies within faith related postsecondary
institutions. That includes bible colleges, theological seminaries, and other faith based accredited postsecondary institutions using the United States as the sample base. From four years of panel data, cost inefficiencies are estimated using stochastic frontier analysis. The results reveal the extent to which operating inefficiencies depend upon different educational offerings and other faith related institutional characteristics. After an exhaustive literature search, this appears to be the first research to provide stochastic efficiency estimates for religious based higher education institutions.

In what is believed to be a fairly comprehensive literature review, these institutions have escaped much of the empirical scrutiny embedded in investigations of higher education institutions as multi-product entities. The lone exception appears to be the Koshal, et al. (2001) empirical estimates of scale and scope economies for what they label as bible colleges, but includes seminaries and other faith based institutions. Their findings indicate that these institutions exhibit both scale and scope economies. The results are generally supportive of other scale and scope studies of (e.g., Cohn, 1989, Sav, 2004, and Lenton, 2008). However, scale and scope estimates fall short of providing an overall measure of institutional cost efficiency. In contrast, stochastic frontier analysis provides a parametric methodology for estimating cost efficiencies or inefficiencies for industries, sectors, and individual institutions. The analysis is used to compare cost performance to a potential minimum cost. The deviation can be attributed to cost inefficiency due to institutional characteristics, environmental factors, or managerial decision-making.

In this paper, stochastic cost analysis is used to estimate operating inefficiencies for a panel of 222 U.S. faiths based postsecondary institutions. The panel covers the 2005-09 academic years. The cost structure is specified as Cobb-Douglas with an inefficiency component defined by institutional specific characteristics. Operating cost inefficiencies are reported for three institutional groups defined by those institutions engaged in undergraduate only education, graduate only education, and both undergraduate and graduate education. In addition, the dynamics of the time variant inefficiencies are investigated and institutional efficiency gains or losses are examined by academic year.

The managerial efficiency of these institutions should be of importance from several perspectives. First, faith based postsecondary
enrollments in the U.S. have been on the upswing for more than a decade. Some have experienced sixty percent enrollment growth (Chronicle, 2005). Second, the proportion of high school seniors and, therefore potential future postsecondary enrollees, who attend weekly religious services and who feel religion is important in their lives has shown a turnaround since its 1980’s decline. Third, religious colleges generally charge lower tuitions relative to other non-profit private institutions and are said to offer a haven from what is perceived to be cultural and moral problems existing at larger secular public universities (Chronicle, 1999). And last, like nearly all of higher education, these institutions did not escape the financial difficulties imposed by the global financial crisis. Like their counterparts, the changed financial landscape dictates that managerial decisions will have to be made to improve the cost efficiency with which these institutions produce knowledge. Understanding the extent of inefficiency and some of the root causes of it are the first steps in moving to that improvement.

The paper proceeds with the next section providing an overview of applied stochastic analysis, followed by a section explaining the empirical specification for the present inquiry and then sections related to data sources, statistical results, and conclusions.

Literature Overview

The foundations of stochastic frontier analysis are due to the seminal works of Aigner, Lovell, and Schmidt (1977) and Meeusen and van den Broeck (1977). Many methodological developments immediately followed and include the econometric interest in panel data brought forth in the contributions of Kumbhakar (1991), Battese and Coelli (1992), and Battese and Coelli (1995). These and other systematically provided refinements have been comprehensively documented in Kumbhakar and Lovell (2003), Coelli, et al. (2005), and Fried, et al. (2008).

The empirical application of frontier analysis to postsecondary education is fairly new. Initially appearing in 2002, there are only five such studies that were uncovered at the outset of this research. Due to the multiproduct nature of higher education institutions, each study employs a cost frontier rather than production frontier. Izadi, et al. (2002) applies a constant elasticity of substitution cost function to a 1994-95 cross section of

Each of these studies uses some measure of academic year or calendar year total university expenditures to represent the total cost. In addition, all employ various measures of undergraduate education, graduate education, and research as university outputs. Full time equivalent enrollment is the most common use for the education outputs. Combined research grants and contracts normally enter as the proxy for institutional research output. Stevens (2005) and McMillan and Chan (2006) also include a form of faculty salary as an input price. Including interaction terms and dummy variables, the number of independent variables devoted to the cost frontier vary from a total of 4 in the Izadi, et al. (2002) study to 36 in Stevens’ (2005) study.

Each of these studies differs in cost and inefficiency modeling structures. However, three of them do use some variation of the inefficiency model introduced by Battese and Coelli (1995). But the method by which university efficiency or inefficiency is determined renders comparisons among the empirical results difficult at best. For example, McMillan and Chan (2006) and Abbott and Doucouliagos (2009) report technical efficiency scores, maximum output from available inputs, varying from approximately 0.6 to 1.0. In contrast, Stevens (2005) estimates cost inefficiencies, costs above the minimum obtainable, and reports scores ranging from 1.007 to 2.011. Although these scores are generated from the same inefficiency model genre, there remains unrecoverable differences in the specific data leading to the results and, consequently, an inability to reformulate the inefficiency scores and place them on an equivalent scale. Across all studies, matters are also complicated by the vast differences in the specification of the cost frontiers, the use of cross sectional time invariant vs. panel data inefficiency structures, and the number of variables and their definitions used in the studies.
Empirical Specification

Among all stochastic frontier studies, the Cobb-Douglas and Translog functions are the most widely used specifications. Although the Translog is the more flexible functional form, in preliminary maximum likelihood tests on the present data, it did not cooperate in producing convergence and, therefore, had to be abandoned in favor of the nested Cobb-Douglas. Here it is applied to panel data under the Battese and Coelli (1995) inefficiency model.

Total cost \( (TC) \) for each institution \((i)\) in each academic year \((t)\) is formulated as follows:

\[
TC_{it} = a_0 + a_U U_{it} + a_G G_{it} + a_w w_{it} + a_k k_{it} + d_G D_{G, it} + d_{UG} D_{UG, it} + (u_{it} + v_{it})
\]

Where:
- \(U=\) undergraduate full time equivalent (FTE) enrollment,
- \(G=\) graduate full time equivalent (FTE) enrollment,
- \(w=\) faculty wage measured by average salary,
- \(k=\) capital value measured by year ending value of buildings,
- \(DG=1\) if only graduate education is produced, \(0\) otherwise,
- \(DUG=1\) if both undergraduate and graduate education are produced, \(0\) otherwise, and all non-dummy variables are in natural logs.

The specification includes the usual two educational outputs but is absent of a research output typical of cost studies pertaining to secular universities. Bible colleges and theological seminaries do not typically produce scholarship in the same vein as found at research and doctoral or comprehensive universities. For inclusion of an input price, the often used average faculty salary is employed as a measure of the faculty wage. In addition, the institution’s year ending value of buildings is used as a proxy for the capital input price. A modified Cobb-Douglas is presented via dummy variables to account for the differences across institutions as a result of the three educational level offerings. Thus, effects are relative to institutions offering only undergraduate programs.

In this specification, the error term is comprised of two components: usual measurement error \(v_{it}\) along with a measure of cost
inefficiency $u_{it}$. The former is noise that is assumed to be independent and identically distributed as a normal distribution with zero mean and variance $\sigma^2_v$. Cost inefficiency is assumed to be independently distributed with a truncated at zero normal distribution, variance $\sigma^2_u$, and is dependent on institutional inefficiency determinants such that

$$u_{it} = \beta_0 + \beta_I I_{it} + \beta_F F_{it} + \beta_B B_{it} + z_{it}$$  \hspace{1cm} (2)

Where: $z$ is the random error and inefficiency determinants in natural logs are

$I$=the percentage of enrolled students receiving government grants,
$F$=the percentage of university revenues received from private giving,
$B$=institution debt measured as liabilities to assets expressed as a percentage.

Basic cost principles suggest that the outputs and input prices are expected to carry positive effects in the cost structure of institutions. Too little is known of these institutions to offer speculation regarding the effects of different educational level offerings.

With regard to the inefficiency effects, matters are somewhat more complicated. Student funding derived from externally provided government grants could lessen student financial complications, increase retention rates and possibly improve institutional efficiency. However, to the extent that such grants impose additional administrative burdens on institutions, they could generate inefficiencies. Similarly, greater proportions of revenue derived from private giving could produce different inefficiency effects.

Private giving rich institutions can be less dependent upon market driven tuition charges and revenue and, in that sense, be better insulated from market forces. As some would argue, while market forces might be efficiency promoting in for-profit industries, they have no place in the non-profit higher education sector. Others can argue that the production of education is inefficient and, e.g., in the publicly owned sector, that inefficiency derives from its insulation from market forces. Yet, greater donor support can also have tie-ins in bringing greater donor control over
internal decision-making. Overall, there is little in the way of strong a priori expectations on the inefficiency effects of either student grants or private giving. On the other hand, it is expected that the institutional debt variable does represent some measure of managerial skills and, therefore, larger debt would produce greater inefficiency.

The model parameters are estimated simultaneous using the method of maximum likelihood. The Battese and Corra (1977) parameterization of $\sigma^2 = \sigma_y^2 + \sigma_u^2$ is used and a resulting estimate of $(= \sigma_u^2 / \sigma^2)$ is produced. The value of provides a route to test the significance of inefficiency in university costs. The measure of cost inefficiency is $\exp(\mu_{it})$ and varies from one to infinity, with the score farther above one being greater institutional and managerial inefficiency.

**Data Source**

Data pertaining to postsecondary education in the U.S. is maintained through a system of surveys conducted annually by the U.S. Department of Education, National Center for Education Statistics. Data are housed in the Integrated Postsecondary Education Data System (IPEDS). Bible colleges, theological seminaries, and other faith related institutions are uniquely identified in IPEDS under a single designated classification.

Using the most recent survey releases, it was possible to assemble a consistent set variables and institutions over the academic years 2005-09. Omitting institutions that failed to report costs or enrollments resulted in a panel of 222 institutions for a total of 888 observations over the four academic years. Table 1 presents a summary of the cost and inefficiency variables along with the means and standard deviations for the complete panel of institutions.

**Estimation Results**

Maximum likelihood estimates are presented in Table 2. Based on the statistical significance of individual coefficients, the model performs extremely well with all of the coefficients being significant at the ten percent and better level. Both education outputs and input prices carry the expected positive cost effects. For the Cobb-Douglas specification, the
estimated coefficients are elasticity. Undergraduate cost elasticity is nearly twice that of the graduate cost elasticity, but the faculty wage elasticity outstrips both. The dummy variables indicate that, compared to undergraduate only institutions, it is relatively more costly to separately produce faith related graduate education. However, the negative $D_{UG}$ coefficient suggests that there is a cost advantage in adding graduate education to the undergraduate program offerings and producing both at same institution.

Table 1: Variables, Means and Standard Deviations

<table>
<thead>
<tr>
<th>Variable</th>
<th>All Institutions</th>
<th>Institutional Means by Level*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Costs, TC ($)</td>
<td>6.96E+06</td>
<td>3.80E+06  8.61E+06  7.81E+06</td>
</tr>
<tr>
<td>Undergraduate Enrollment, U</td>
<td>159</td>
<td>213  0  308</td>
</tr>
<tr>
<td>Graduate Enrollment, G</td>
<td>117</td>
<td>0   179   146</td>
</tr>
<tr>
<td>Faculty Wage, w ($)</td>
<td>43623</td>
<td>35417  54260  37878</td>
</tr>
<tr>
<td>Capital Price (Building), k ($)</td>
<td>1.16E+07</td>
<td>5643153  1.63E+07  1.11E+07</td>
</tr>
<tr>
<td>Percent Student Grants, I (%)</td>
<td>25.70</td>
<td>49.46   1.00   34.73</td>
</tr>
<tr>
<td>Percent Private Gifts, F (%)</td>
<td>45.13</td>
<td>31.54   59.34   39.87</td>
</tr>
<tr>
<td>Percent Debt, B (%)</td>
<td>23.36</td>
<td>32.13   13.79   27.26</td>
</tr>
<tr>
<td>Graduate Only Degree, DG (=1,0)</td>
<td>0.39</td>
<td>-    -     -</td>
</tr>
<tr>
<td>Both Undergrad-Grad Degrees, DUG (=1,0)</td>
<td>0.32</td>
<td>-    -     -</td>
</tr>
</tbody>
</table>

Note: a. U=undergraduate only, G=graduate only, UG=both undergraduate and graduate.
### Table 2: Cost Frontier and Inefficiency Estimates

<table>
<thead>
<tr>
<th>Variable (Coefficient)</th>
<th>Estimate</th>
<th>S.D.</th>
<th>t Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant ($\alpha_0$)</td>
<td>2.762</td>
<td>0.445</td>
<td>*6.21</td>
</tr>
<tr>
<td>Undergraduate Enrollment, U ($\alpha_U$)</td>
<td>0.299</td>
<td>0.020</td>
<td>*15.00</td>
</tr>
<tr>
<td>Graduate Enrollment, G ($\alpha_G$)</td>
<td>0.155</td>
<td>0.014</td>
<td>*10.84</td>
</tr>
<tr>
<td>Faculty Wage, w ($\alpha_w$)</td>
<td>0.490</td>
<td>0.045</td>
<td>*10.85</td>
</tr>
<tr>
<td>Capital Price, k ($\alpha_k$)</td>
<td>0.351</td>
<td>0.015</td>
<td>*23.28</td>
</tr>
<tr>
<td>Graduate Only Degree, DG (dG)</td>
<td>1.013</td>
<td>0.143</td>
<td>*7.11</td>
</tr>
<tr>
<td>Both Undergrad-Grad Degrees, DUG (do)</td>
<td>-0.317</td>
<td>0.066</td>
<td>*-4.79</td>
</tr>
<tr>
<td><strong>Inefficiency</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant ($\beta_0$)</td>
<td>-0.389</td>
<td>0.175</td>
<td>*-2.23</td>
</tr>
<tr>
<td>Percent Student Grants, I ($\gamma_I$)</td>
<td>-0.223</td>
<td>0.111</td>
<td>*-2.01</td>
</tr>
<tr>
<td>Percent Private Gifts, F ($\gamma_F$)</td>
<td>0.653</td>
<td>0.345</td>
<td>*1.89</td>
</tr>
<tr>
<td>Percent Debt, B ($\gamma_B$)</td>
<td>-5.274</td>
<td>2.774</td>
<td>*-1.90</td>
</tr>
<tr>
<td>Sigma Squared ($\sigma_2$)</td>
<td>1.422</td>
<td>0.578</td>
<td>*2.46</td>
</tr>
<tr>
<td>Gamma ($\gamma$)</td>
<td>0.904</td>
<td>0.043</td>
<td>*21.24</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-516.942</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>*22.311</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations (N)</td>
<td>888</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** * denotes statistical significance at 10% and better level.
As for the frontier specification, the statistically significant likelihood ratio indicates that the approach does offer superiority over ordinary least squares. Moreover, inefficiency plays a significant role in the operating costs of faith related postsecondary educational institutions. Based on the estimate of gamma, the share of inefficiency in the comprised error is approximately 0.90. All three individual inefficiency effects are statistically significant. Interestingly, increases in the proportions of students supported by government loans and increases in private giving act to decrease inefficiency, i.e., improve efficiency.

One could either interpret the latter as efficiency improvements resulting from a lessening of pressures from market forces or a possible improvement in institutional decision-making imposed from external donor influence. However, the two efficiency improving effects are countered by the inefficiency increases associated with higher levels of debt. If institutional debt is a measure of internal management, then institutions that are not as managerially skilled, thereby suffering greater debt, are more inefficient according to the present estimates.

Table 3 presents a summary of the calculated inefficiencies and their variation across academic years. Inefficiency scores are shown for the full sample of 888 institutions and a decomposition of institutions by educational program offerings, i.e., institutions offering undergraduate only, graduate only, and both undergraduate and graduate programs.

<table>
<thead>
<tr>
<th></th>
<th>All Institutions</th>
<th>Undergraduate (U)</th>
<th>Graduate (G)</th>
<th>Undergraduate Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.310</td>
<td>1.261</td>
<td>1.317</td>
<td>1.346</td>
</tr>
<tr>
<td>Median</td>
<td>1.238</td>
<td>1.219</td>
<td>1.249</td>
<td>1.236</td>
</tr>
<tr>
<td>Minimum</td>
<td>1.081</td>
<td>1.081</td>
<td>1.088</td>
<td>1.092</td>
</tr>
<tr>
<td>Maximum</td>
<td>6.166</td>
<td>1.856</td>
<td>3.220</td>
<td>6.166</td>
</tr>
<tr>
<td>S.D.</td>
<td>0.298</td>
<td>0.140</td>
<td>0.231</td>
<td>0.441</td>
</tr>
</tbody>
</table>
The mean inefficiency for the full sample in Table 3 is 1.31, indicating that on average the sample of postsecondary institutions of faith are operating around 31% above the minimum frontier cost. But the median indicates that fifty percent of the institutions are below the 1.238 inefficiency levels, hence some substantial positive skeins. When examined across educational levels, the results show that institutions engaged in undergraduate only education are the most efficient on average. That is followed by graduate only institutions and then the most inefficient group of institutions offering both undergraduate and graduate education. However, when viewed from the perspective of both the median inefficiency scores, we would have to be comfortable in concluding that there is no difference in the operating inefficiency across different groups of institutions.

When inefficiencies are examined by academic year, Table 3 reveals that the aggregate of institutions did not encounter any significant inefficiency increases over the four year period. In fact, the 0.43% increase in 2007-08 can be viewed as an inefficiency slowdown or efficiency improvement when compared to the 1.64% increase experienced in the previous 2006-07 academic year. Of course, the inefficiency decrease of -0.01% in 2008-09, although nearly undetectable, is still a notable efficiency improvement when viewed in context of the full four years. An examination across the different institutional levels shows that the undergraduate only and graduate only institutions are the contributors to overall annual efficiency gains. The relatively greater academic year inefficiency increases...
borne by those institutions offering both undergrad-grad programs represent offsets to those efficiency gains.

Conclusions

Results indicate that the cost inefficiency of knowledge producing religions higher educational institutions varies depending upon the degree level offerings and other institutional characteristics. Efficiency improvements occur in the presence of increased government provided student loans and external institutional financial support in the form of private philanthropy. Those improvements tend to be offset by inefficiency increases brought about by increased increases in institutional debt that might be attributed to poorer managerial skills. Findings also indicate that institutions offering only undergraduate education exhibit lower mean inefficiencies relative to graduate only institutions and institutions offering both undergraduate and graduate education. There is evidence that efficiency improvements have occurred over the 2007-08 and 2008-09 academic years.

That could possibly be a positive managerial adjustment undertaken in response to the financial difficulties induced by the global financial crisis, although the sustainability of that will have to wait for confirmation derived from future years of observation related to the management of faith based educational institutions.

References

Brand Positioning - A Marketing Resource and an Effective Tool for Small and Medium Enterprises

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In order to acquire an effective competitive advantage on the market, the product/brand must be understood by the prospects in a certain way. The outcome of positioning is the depiction of a clear image in the prospect’s mind of what the product can offer or mean. A clear position in the prospect’s mind should be one of the most important goals in marketing. The marketing endeavor in any company should be focused on achieving a desired position in a prospect’s mind. A marketer must be able to distinguish between real positioning options and wishful thinking, because the barrier between these two is very thin and could lead to success or failure. A strong brand and an enduring position should be planned and attained together by any Small and Medium Enterprise, because they can differentiate the survivors from the perished, the winners from the losers, and the leaders from the pursuers.

Keywords: marketing, brand positioning, positioning instrument, marketing mix
Introduction

At present, positioning is considered a concept with a broad applicability, being used for offerings, companies, NGOs, places and even people, as individuals differentiate themselves through accomplishments at least partially obtained through continuous learning [1]. From a marketing perspective, the concept of positioning (an offering/brand, a company or a place) refers to the building of a distinct and valued perspective in the mind of the target market relative to the competition [2].

The marketing literature regards positioning considerably in association with marketing communication. Jack Trout and Al Ries argue in “Positioning- The battle for your mind” [3] that there is too much communication and markets are flooded with messages and the purpose of marketing would be to present bluntly the benefits of the product with as little poetry as possible.

Philip Kotler considers positioning as having the same weight as the 4 Ps as resources for the company: product, price, place and promotion and underlines that an offer can be positioned in the prospect’s mind [4] as being better and/or different through the use of points of parity and points of difference. The first group refers to features, characteristics, benefits, convenience etc. which are found in other offers but the respective offer excels at them while the points of difference are features, convenience, price, communication found only in the considered offer.

Keller, Sternthal and Tybout [5] propose 7 possible positioning strategies which could be used by an organization. These strategies are centered on the following aspects:

- attributes of the product, such as: size, taste, weight;
- benefits offered by the organization or product, such as: fast delivery, fast remedy;
- use/application, such as: products/services used on special occasions;
- user, such as products or services used mainly by the teenagers (e.g. cosmetics for pimples);
- competitors: very effective but very difficult to be used due to legal constrains. For example, one company could emphasize its
strengths in comparison to another competitor (e.g. better endurance or better taste);

- product or service category: an organization can position itself in a product category not usually associated with it. For example, a soccer stadium could position itself as a tourist attraction;
- quality/price: usually used when the offers are not very cheap or of a top quality.

Papers’ purpose

The purpose of this paper is twofold, one to provide a broad picture of what positioning is and its significance to the existence of any company and, second, to present a positioning tool which can be effectively implemented by any SME to achieve a well-defined competitive advantage through a desired position in the minds of the prospects.

Are we different? Are we special?

These two questions should be the first ones in any entrepreneur’s mind. Any new product or service must be different, regardless if it is sold under an established brand or not. A product sold on a particular market is successful as long as it is perceived by the customers and prospects as being special.

An offer is purchased if the prospect considers that it will bring more value in comparison to the competitive offers. If this offer is valued better than the other options on this market, it can be said that the offer has a competitive advantage. The competitive advantage gives the edge and pushes the offer ahead of the other options on the market.

In order to acquire an effective competitive advantage on the market, the product/brand must be understood by the prospects in a certain way. The outcome of positioning is the depiction of a clear image in the prospect’s mind of what the product can offer or mean. A clear position in the prospect’s mind should be one of the most important goals in marketing. Actually the marketing endeavor in any company should be focused on achieving a desired position in a prospect’s mind. A marketer must be able to distinguish between real positioning options and wishful thinking, because the barrier between these two is very thin and could lead to success or failure.
Brand positioning

Brand positioning refers to the place the brand occupies in the consumer’s mind. [6]

Any seller would like to be perceived by the target market in a particular way. For this reason the seller will try to demonstrate that the company’s offer is better than the competitors’ ones, trying to be remembered by the potential consumer/user in a specific way.

Positioning does not refer to the way in which the seller wants to be remembered by the target market (in this case we speak about a positioning approach), but what the consumer/user understands about the respective seller or brand.

A brand must have something special in order to be remembered by the target market. This objective can be achieved by offering a particular market benefit or offering better conditions than the competitors. The positioning approach must start from the segmentation criteria used on the respective market (geographic, demographic, psychographic and behavioral criteria). The segmentation process deals with the demand selection criteria, and also with methods for offer compliance to these criteria. The positioning outcome is shaped through the marketing mix elements: product, price, promotion and distribution.

For a successful positioning, the element of differentiation must be: [7]

- unique
- important to the consumer
- communicable
- easily understood and remembered
- sustainable by the company’s approach through all the mix elements

The positioning tool proposed in this paper is designed in such a way as to provide the SMEs a guide for assessing the situation and building a competitive positioning strategy regardless the market in which a company is present.

The tool is comprised of the following sections:

1. Brand situation analysis
2. Competitive advantage configuration
3. Competitive advantage communication
4. Competitive advantage sustainment
5. Implementation of positioning element/s
6. Positioning outcome

The design and implementation of a positioning strategy include the following steps:

1. **Brand situation analysis**
   - **Identification of strong and weak points of the brand and its competitors**
     i. Analysis of comparable elements and identification of unique elements of competitive brands
        1. The common characteristics of the product/service are compared with the competitive offers – analysis to be made on marketing mix components:
           a) Physical features: color, shape, package
           b) Price: level, variation
           c) Distribution: methods, type of channel, number of channels, placing on shelves
           d) Promotion: type of message, advertising, type of media, broadcasting frequency
           e) Marketing services: consumption monitoring services, after sales services, after warranty services
     - **Identification of opportunities and threats**
     - **Conclusion of the brand position on the market**
     - The following tools can be successfully used: Secondary data assessment grid, Focus-Group, SWOT analysis and Porter model analysis

2. **Competitive advantage configuration**
   - **Identification of differentiation element/s:**
     i. It starts from the business idea
     ii. It is based on phase 1 conclusions
     iii. The brand can be differentiated through:
         1. something that others do not have
         2. „we do a certain thing better than the others”
         3. „we sell it cheaper”
         4. „we offer something extra”
iv. We select that „thing” through which we intend to attract customers:
1. it needs to be easily understood by the target market
2. difficult to be imitated
3. ideally, it should be specific to our brand only

• Elaboration of positioning strategy
  i. Usage of brand specific elements:
1. they can be the most effective, as they are specific to our brand
2. they ensure a clear place of the brand in the consumer’s mind, because they cannot be found elsewhere
3. if understood by the target market and difficult to be imitated, they provide at least a medium-term competitive advantage
  
  ii. Usage of comparable elements:
1. must be clearly worded and distributed, because the target market can compare
2. the seller’s disadvantage is that the company is not the only one to offer that „thing” on the market; there is a permanent threat that another company could manufacture or do that „thing” better
3. this is an advantage difficult to be sustained on a medium term and it requires continuous monitoring of competitors
4. it is an effective measure for adaptable companies
5. it is the only way small enterprises could stand out, as they do not have sufficient innovative force
  
  iii. Usage of mixed elements:
1. this is the ideal situation
2. ensures a clear place on the consumer’s mind, due to the specific elements and comparable elements
3. ensures a competitive advantage over a longer period of time, as it provides more anchors on the consumer’s mind
3. **Competitive advantage communication**
   a. *Elaboration of a positioning statement* – what we want to communicate – it will be accomplished by efficiently combining the communication strategy with creativity:
      i. Must be clear
      ii. Must be supported by the differentiation element
      iii. The message must:
         1. clearly establish the product category of our offer (e.g. detergents, chocolate, natural juices)
         2. clearly emphasize our offer – brand and product (e.g. liquid detergent, pot chocolate)
         3. clearly show the differentiation element:
            a) by emphasizing the product features
            b) by approaching the consumer’s emotions

4. **Competitive advantage sustainment**
   a. Positioning is the result of a continuous effort
   b. The differentiation element shall not be modified too often
   c. The differentiation element must last for a long period of time.

5. **Implementation of positioning element/s**
   a. We speak about the offer in general
   b. The difference comes from: product, price, promotion, distribution and marketing services
   c. Product:
      i. Product features
      ii. Degree of novelty
      iii. Variety of types
   d. Price:
      i. Price level
      ii. Price flexibility
      iii. Methods and terms of payment
   e. Promotion:
      i. Communication: methods, channels, etc.
      ii. Frequency of communication
      iii. Message creativity
      iv. Communication time (hour, date)
   f. Distribution:
i. Type of channel
ii. Number of channels
iii. Area: extensive, intensive, exclusive

6. Positioning outcome
a. The brand must be remembered by users/consumers as it delivers a specific benefit and/or has a specific meaning (emotional or social meaning).
b. The users/consumers must perceive the difference between the respective brand and the other brands.
c. A favorable attitude toward the brand must be developed and the purchase motive/benefit must be clearly emphasized.

ATTENTION: The brand shall be repositioned as soon as the differentiation element has become unclear.

Conclusions

The proposed positioning tool is an effective instrument but it must be used in accordance with the business line, vision, mission, values and objectives of the company and in close relation with market segmentation and targeting. Also, this instrument must represent the starting point of all marketing programs, meaning all these programs must have as objective the attainment of the desired positioning in the minds of the consumers.

Branding and positioning are interrelated. A brand cannot be built and/or preserved without a proper position in the minds of the prospects. A position on the other hand cannot be a long-lasting one without a strong brand. A strong brand and an enduring position should be the most important long-term marketing goals of any Small and Medium Enterprise, because these two can differentiate the survivors from the perished, the winners from the losers and the leaders from the pursuers.
References

The culture of the organization can be a strategic tool for the success of organization, because it influences how the organization conduct its business and helps regulate, control and model of the behavior in each subculture of the organization. Often, the subcultures are viewed by management as the representing tolerated deviations that do not disrupt the normative solidarity of the overall corporate culture’s dominant values. However, these deviations may become intolerable when there is significant value misalignment among the various subcultures within the organization. In such conditions, the lack of the subcultures’ alignment in organization is considered critical and important to manage. While diagnosing culture alignment of the “Pro Credit” bank in Albania, the article focuses on problems of alignment and techniques that improve the alignment of subcultures. For this purpose we estimate the extent to which individuals in each gender and generational subcultures agree or disagree with the culture’s dimensions. While, assess of the extent to which organization vision and values are understood and shared by subcultures within the organization, is in core of practical study.

Keywords: Culture of organization, subcultures, subculture’s alignment, vision, values, behavior, artifacts, shared values, the commitment with the values
Introduction

The organizations are usually made up of several subgroups of employees who share a value system that may not conform to the predominant value system that defines an organization’s corporate culture. In other words, these organizational subcultures possess distinctive corporate culture. Wanting to ask and answer questions such as how, might the subcultures within the organization be aligned? Why do they need to be aligned? What benefits might be gained from such alignments? We focused the research in the field of organizational behavior.

Management literature contains both descriptive and perspective studies related to corporate culture. Our primary focus is on macro-topic (cultures of organization viewed at three theoretical perspectives) and then micro-topic of organizational subcultures. In addition to logical deduction, the theoretical research led us to conclude that organizations whose subcultures are in alignment have stronger corporate cultures than those organizations whose subcultures are misaligned.

Wanting to support the subcultures’ alignment in the organization as a critical process and important to manage, the practical study assesses the importance of the development and use of some policies that improve the alignment of subcultures in “Pro Credit” bank in Albania. Our empirical study is focused on these areas (1) test if the subcultures are aligned with the predominant corporate culture (the dimensions of the culture), (2) test if the subcultures’ values are consistent with the predominant value system of the organization, (3) and at the end, the paper proposes some theoretical and practical techniques in support of subcultures’ alignment and strengthen the culture of the organization. The research support and promotes the positive correlation between some specific policies and commitment to the vision and values of the organization. Our focus is to provide a practical advice for managers, business consultants and entrepreneurials in Albania.

Theoretical background

The paper brings together classic and current research with direct applications to the task of aligning organizational subcultures. Management
literature contains both descriptive and prescriptive studies related to corporate culture. Researchers of corporate culture often make different interpretations, which are often contradictory.

The “Integration” perspective of culture focuses on those manifestations of a culture that have mutually consistent interpretations. An integration portrait of a culture sees consensus throughout an organization. From the integration perspective, culture is that which is clear, ambiguity is excluded. So, the culture is like a solid monolith that is seen the same way by most people. Such a view of the organization’s culture is based on the harmony of artifacts, values and assumptions held by members of the organization. Such cultures are the strong cultures. Some of the main authors of this approach are Martin. J (1982); Schein, E (1985), (1996); Barley, S (1983); Kotter and Heskett (1992); Porras & Collins (1996) etc.

Differentiation studies focus on cultural manifestations that have inconsistent interpretations - Brunsson, (1986). From the differentiation perspective, consensus doesn’t exist within an organization - but only at lower levels of analysis, labeled “subcultures”. Subcultures may exist in harmony, independently, or in conflict with each other. In this perspective subcultures are like islands of clarity in a sea of ambiguity. Martin, J (2002). The examples of differentiation perspective cultural studies are Alvesson (1993); Barley (1986); Gregory (1983); Martin (1992), (2002); Rousseau (1990); Mayer (1982) etc. The studies give some different types of relationships with dominant culture in organization.

- A subculture can enrich the dominant culture, supporting the values and norms of organization’s culture.
- A subculture does not agree with the values and norms of the dominant culture, developing alternative methods of achieving organizational goals.
- A subculture can be considered as a counter-culture, which opposes the fundamental goals of the organization, causing conflict with the dominant culture.
- A subculture can support the specific norms and values of the subgroup, regardless of those that are at the core of organizational culture.
The other perspective represents the “fragmentation” approach. The fragmentation perspective conceptualizes the relationship among cultural manifestations as neither clearly consistent nor clearly inconsistent. The interpretations of cultural manifestations are ambiguously related to each other, placing ambiguity, rather than clarity, at the core of culture. Alvesson (1993); Hatch (1999); Hofstede (1998); Golden, K (1992).

Researchers, who have conducted extensive studies of the corporate culture have found that more employees are committed to key organizational values, the stronger is the organization’s culture. These researchers suggest that the employees in organization with strong corporate culture are more committed to their organization’s values than employees in organizations with weak corporate culture. Both, weak and strong corporate cultures have multiple subcultures, however, it exists a key difference. The existence of subcultures within the organization, can result in fragmented and weak corporate culture, when few values are shared organization-wide (subcultures are misaligned). Deal & Kennedy (1982). The weak corporate cultures are associated with inferior organizational performance. Gordon & Tomaso (1992).

The corporate culture can either be a strategic tool, or a strategic constraint, depending on the degree to which subcultures within organizations are in alignment. The alignment generates cultural clarity and consistency among members. So, the strategically aligned culture enhances the organizational performance (e.g., O’Reilly, 1989). Argued by Hopkins & Mallette (2005) the existence of aligned subcultures within the organization can restrict an organization’s capacity to create and sustain a competitive advantage. So, the subcultures must be aligned, if organizations expect to create and improve their long-term position and competitiveness.

The strategic management literature have suggested several useful steps for implementing cultural change, that support the subcultures’s alignment. (i) the understanding of corporate cultures; (ii) determine what type of culture is required for success; (iii) identify the mismatches between strategies and the existing culture; (iv) share the elements of corporate culture; (v) change the cultural elements; (vi) institutionalize the changes.

The ethnography of high technology firms gives us some ways by which the managers control the consistence of subcultures’ values with the predominant corporate culture, (i) developing, articulating and
disseminating the ideology of the organization, (ii) some ideological principles espoused by managers will minimize the use of traditional bureaucratic control. (iii) Practice the rituals, that promote the role of employees to execute;

Analysis of cultures of Wal-Mart and South West Airlines (Sadri, G and Lees, B, 2000) showed that the strength of the culture is connected with the accepted values of employees and lasting influences the organizational environment. (i) This is provided through using the top-down treatment, (ii) reassessing the vision and (iii) the relationship between artifacts, behaviors and values, will ensure the growth of morality and commitment in organizations

Hopkins, W and Hopkins, Sh and Mallete, P (2005) offered a model of subcultures’ alignment, providing practical examples for implementing strategic change. The modified model should include several steps: diagnosing culture of organization; assess strategic vision, confirm corporate values; communicate the vision and values; build the commitment to vision and values.

The methodology and data issues

The methodology used to conduct the theoretical and practical research consisted in these directions. First, the research is supported on a specific model of search. Second, discuss the specific issues, to better understand the relationship between the dominant culture and subcultures in organization.

For our research we used an epistemological model. This model suits the nature of the study and further development of elements in the framework of an existing theoretical base model. The process of search is partly deductive and confirmative, testing a model of relationships, given the predictions of relationships derived from theory. However, the search has elements of the process of induction because in the initial phase of research was realized a series of exploratory interviews with a view to detecting the pattern of commitment of employees with the organization.

The empirical study was focused to “Pro Credit” bank, an attended institution by 14 years in the financial market in Albania. The data used covers during the 2011 year and explains that the selection is not random.
The type of search applies on the companies with more than six years history. Such companies offer real opportunities to realize effectively the process of socialization (transmission and understanding of the culture) to new employees. These organizations have a variety of values and beliefs already consolidated.

It should be mentioned that we tested employees of gender and generational subcultures. The study is focused on gender subcultures, because the men and women evaluate and reinforce the different trends related to the work, communicate and behave in different ways and finally, in Albania is happened a revolution in the workplace. The changes in values and interests of employees are due to the economic, political and cultural changes, in the country. Also, the study is focused on the subcultures of generations, because the conflict between the generations is not new. The conflict stems from the different values, beliefs and interest that these subgroups possess. The new developments, in Albania, after 1990, and the integration issues, brought certainly an open conflict between generations in general, and at workplace in particular. We test two of generational subcultures. At the first group there are the employees under 40 years old (younger) and at the second, the employees over 40 years old (older).

**Empirical analysis and results**

The empirical study assesses the importance of the development and use of some policies that improve the alignment of subcultures in Pro Credit bank in Albania.

- Create a viable vision, articulate, distribute the organization’s ideology to achieve its expectations;
- The variety of techniques for communication of values;
- The demonstration of new artifacts and behaviors, in line with vision and values.

For this reason the empirical study investigates if, \( H_1: \text{The subcultures are aligned with the predominant corporate culture:} \) and if, \( H_2: \text{The subcultures’ values are consistent with the predominant value system of organization} \)

In terms of gathering the type of data that will provide insights into whether organizational subcultures are in alignment, there are several
dimension of culture that are assessed in survey. We list seven dimensions of corporate culture. Individual autonomy, structure, support, identification, performance reward, conflict tolerance, risk tolerance. Robbins. S (1984). The results indicate the extent to which individuals in each subculture agree or disagree, that the organization adheres to these dimensions. The survey provides information, on general dimensions of organization’s culture. Another type of survey was designed to provide information about vision and values. This type of survey assess the extent to which organization vision and values are understood and shared by subcultures within the organization.

Data analysis include the simple statistical procedures such as: the calculation of averages and frequency distributions. The differences, in survey results among organizational subcultures, are examined, using standard statistical tests. The Fisher test is used to determine whether the average survey response of any subcultures differ significantly from that of other subcultures. The Fisher test tests that all subcultures means (averages) are equal. The F-test signifies if at least one subcultures’s mean response on the survey items is statistically different from any other subcultures’s mean response.

The test on the dimensions of culture showed that the subcultures accept without differences in assessment the dimensions of cultural, excluding “the risk tolerance” for gender subcultures. A part of the differences comes from the reason that how men and women are socialized to accept risk and how the women feel supported in risk situations. The Albanian society has been a collectivist society (for several decades). So, have dominated the values of harmony, solidarity and support of the group, and individuals were encouraged to a low level of risk taking (Table 1).

While, for the generational subcultures the differences resulted in the allowed limits. Each subculture accepts that the organization adheres to these dimensions (Table 2). In order to detect the differences we are relied on the analysis of variance. (Appendix, Table 1; Table 2). The findings, of this survey, confirm that the individuals of each subculture agree (no ideally), but in the high extent, that organization adheres to these dimensions. In this context the applied policies and practices can be considered effective.

*The hypothesis H1 is not confirmed.*
Table 1: Differences resulted from the evaluation of the culture’s dimensions. (The gender subcultures)

<table>
<thead>
<tr>
<th>Culture’ dimensions</th>
<th>Actual value</th>
<th>Critical value (F)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>0.09</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>0.03</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>0.15</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Performance reward</td>
<td>0.02</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Conflict tolerance</td>
<td>0.00</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Risk tolerance</td>
<td>9.51</td>
<td>3.96</td>
<td>✓</td>
</tr>
<tr>
<td>Identification</td>
<td>0.10</td>
<td>3.96</td>
<td></td>
</tr>
</tbody>
</table>

The assessment of the extent to which organizational vision and values are understood and shared by subculture within the organization is the determinant of the strength of organization’s culture. This assessment is the basis of research, because every strategic change starts and directed by vision and values. The relationship between organizational culture and values is evident, and can’t be discussed separately from each other. The values have intrinsic value in and of themselves, and they are extremely important to employees. Kollins, J and Poras, J (1999).

Since, the values have a positive impact on the organization they should be accepted intensively by all employees. Note that there is no such thing as a universal setting for all companies. But, it is important that companies identify a set of values and work to instill these values throughout the organizations. The process of determining values must be driven by top leadership and then actively championed by them.

The survey, designed to provide information about vision and values, gave the following results:

First, we don’t find any difference about the degree to which organization’ vizion and values are understood by subcultures of the organization (Table 3; Table 4). Although, subcultures develop and reinforce
of the consistent behaviors or not, due to a variety individual and social forces, the cultural values are fully known. So, the policy of the articulation and distribution of the ideology and values of the organization have a positive impact on the degree of alignment of subcultures in the organization. (The analysis of variance, Appendix, Table 3; Table 4)

Table 2: Differences resulted from the evaluation of the culture's dimensions. (The generational subcultures)

<table>
<thead>
<tr>
<th>Culture’dimensions</th>
<th>Actual value</th>
<th>Critical value (F)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>0.71</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>1.12</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>0.78</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Performance reward</td>
<td>0.00</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Conflict tolerance</td>
<td>1.30</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Risk tolerance</td>
<td>0.45</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Identification</td>
<td>1.70</td>
<td>3.96</td>
<td></td>
</tr>
</tbody>
</table>

Second, the findings indicate that there are differences about the sharing of organization’s values. Values that are differently shared among subcultures are "the trend for change" for generational subcultures and "learning" for the gender subcultures. The other values do not differentiate any of the subcultures. Fisher test indicates that there are differences, this result suggest that the subcultures are not aligned. So, the hypothesis $H_2$ is not confirmed. The subcultures are not aligned (Table 5; Table 6). (The analysis of variance, Appendix, Table 5, Table 6).
Table 3: Differences resulting from the assessment of the extent to which Organization’ vision and values are understood by gender subcultures

<table>
<thead>
<tr>
<th></th>
<th>Actual value</th>
<th>Critical value (F)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>0.14</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>1.29</td>
<td>3.96</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Differences resulting from the assessment of the extent to which Organization’ vision and values are understood by generational subcultures

<table>
<thead>
<tr>
<th></th>
<th>Actual value</th>
<th>Critical value (F)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>0.90</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>0.51</td>
<td>3.96</td>
<td></td>
</tr>
</tbody>
</table>

The research found as a problem the lack of special techniques of communication of values according to subcultures and their specific conditions. At the macro level of perspective, the work-family policies are a benefit that is used to help employees to balance their personal lives with work. At the micro level of analysis there are reservations among employees about how they use policies, what they feel or act towards them. Thus, the exhibited values of work and personal balance are never fully realized. For this reason, it is important that when the organization communicates with individuals that belong to different subcultures, the process of communication and materialization of values must be considered as a challenge by the leaders. A careful assessment of the phenomenon, in the future, will help the leaders to manage effectively and reach a better communication of the values. The effective communication of values and attempt to support them through the artifacts, status symbols, power structures, systems and processes, rewards and recognition will serve the development of commitment to vision and values.
Finally, the analysis of the culture of Pro Credit bank showed that the policies of confirmation of the vision and values have affect positively the alignment of subcultures, but there are problems with the communication, materialization of values and the building of the commitment to values. Since, the test did not find significant differences; we accept that the relationship, between the applied policies and the alignment of subcultures, is important. The strength of the culture is connected with the accepted values of employees in each subculture. This will provide through (i) creating a viable vision, articulating, and distributing the organization’s ideology; (ii) the variety of techniques for communication of values; (iii) the demonstration of new artifacts and behaviors, in line with vision and values.

### Table 5: Difference resulting from the assessment of the extent to which Organization’s values are shared by gender subcultures.

<table>
<thead>
<tr>
<th>Culture’ values</th>
<th>Actual value of criterion</th>
<th>Critical value (F)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer service</td>
<td>1.73</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.04</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Risk taking</td>
<td>1.43</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Tolerance</td>
<td>2.65</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Creativity and innovation</td>
<td>0.03</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>0.52</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>The trend for change</td>
<td>0.02</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td>9.58</td>
<td>3.96</td>
<td>✓</td>
</tr>
</tbody>
</table>
Table 6: Differences resulting from the assessment of the extent to which Organization’ vision and values are shared by generational subcultures.

<table>
<thead>
<tr>
<th>Culture ‘values’</th>
<th>Actual value</th>
<th>Critical value (F)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer service</td>
<td>2.50</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.04</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Risk taking</td>
<td>1.43</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Tolerance</td>
<td>0.00</td>
<td>3.98</td>
<td></td>
</tr>
<tr>
<td>Creativity and innovation</td>
<td>2.68</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>0.44</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>The trend for change</td>
<td>7.22</td>
<td>3.96</td>
<td>✔</td>
</tr>
<tr>
<td>Learning</td>
<td>1.96</td>
<td>3.96</td>
<td></td>
</tr>
</tbody>
</table>

How to create and support the subcultures’ alignment?

In Albania there are businesses with different specifics of establishment, development and the different philosophy of direction. For this reason, we can classify them into two groups:

- A limited number of businesses consider the cultural alignment as an emergency issue. For these organizations, all efforts should be made to revaluation of all components of the existing culture.
- For another group of businesses, usually small and medium enterprises, the creation of a strong culture continues to be a matter that belong perspective.

Regardless, the types of business and their management philosophies, is raised a question: How to create a culture that is accepted by all subcultures? The model may be specific for each enterprise, but in all cases should include the review and the change of existing cultural elements.
a. Strategic component (mission, vision, basic values of the organization);
b. Symbolic component (structures, systems, procedures, activities);
c. Human component (feelings, assumptions, attitudes, values, beliefs).

The application of the model, in the real conditions of businesses, will require a high degree of communication, professional support from consultants, businesses communications experts, academics and successful entrepreneurs.

Conclusions

The paper assesses the importance of the development and use of some policies that improve the alignment of subcultures. The theoretical analyses finds and supports the conclusions that (i) a strong culture support the performance and the implementation of strategy (ii) a strong culture, is one where subcultures are aligned such that an organization’s employees identify with and are committed to the same set of organizational values.

The empirical examination lead us to some policies that support the subculture’ alignment. If the companies have the ability to assess and improve the visioning process, to modify the communication of values to various subcultures and lastly, if the artifacts and behaviors support the vision and values, the companies can create a strong culture (the subcultures’ alignment)

The model of subcultures’ alignment may be specific for each enterprise, but in all cases should include the review and the change of some components:
ap. Strategic component (vision, the basic values of the organization);
b. Symbolic component (structures, systems, procedures, activities);
c. Human component (feelings, assumptions, attitudes, values, beliefs).
References


Appendix

**Table 1:** Analysis of variance, for the gender subcultures

<table>
<thead>
<tr>
<th>Culture’s dimensions</th>
<th>$X_F$</th>
<th>$X_M$</th>
<th>$\bar{X}$</th>
<th>$S^2_F$</th>
<th>$S^2_M$</th>
<th>MSTR</th>
<th>MSE</th>
<th>MSTR/MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>3.49</td>
<td>3.55</td>
<td>3.52</td>
<td>0.81</td>
<td>0.89</td>
<td>0.08</td>
<td>0.85</td>
<td>0.09</td>
</tr>
<tr>
<td>Structure</td>
<td>3.96</td>
<td>3.93</td>
<td>3.95</td>
<td>0.76</td>
<td>0.95</td>
<td>0.02</td>
<td>0.84</td>
<td>0.03</td>
</tr>
<tr>
<td>Support</td>
<td>4.29</td>
<td>4.36</td>
<td>4.32</td>
<td>0.61</td>
<td>0.63</td>
<td>0.09</td>
<td>0.62</td>
<td>0.15</td>
</tr>
<tr>
<td>Performance reward</td>
<td>3.71</td>
<td>3.74</td>
<td>3.72</td>
<td>1.09</td>
<td>0.93</td>
<td>0.02</td>
<td>1.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Conflict tolerance</td>
<td>4.10</td>
<td>4.10</td>
<td>4.10</td>
<td>0.81</td>
<td>0.97</td>
<td>0.00</td>
<td>0.88</td>
<td>0.00</td>
</tr>
<tr>
<td>Risk tolerance</td>
<td>2.29</td>
<td>3.19</td>
<td>2.70</td>
<td>1.73</td>
<td>2.21</td>
<td>18.51</td>
<td>1.95</td>
<td>9.51</td>
</tr>
<tr>
<td>Identification</td>
<td>4.06</td>
<td>4.00</td>
<td>4.03</td>
<td>0.82</td>
<td>0.73</td>
<td>0.08</td>
<td>0.78</td>
<td>0.10</td>
</tr>
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</table>

**Table 2:** Analysis of variance, for generational subcultures

<table>
<thead>
<tr>
<th>Culture’s dimensions</th>
<th>$X_Y$</th>
<th>$X_O$</th>
<th>$\bar{X}$</th>
<th>$S^2_Y$</th>
<th>$S^2_O$</th>
<th>MSTR</th>
<th>MSE</th>
<th>MSTR/MSE</th>
</tr>
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<tbody>
<tr>
<td>Autonomy</td>
<td>3.57</td>
<td>3.29</td>
<td>3.52</td>
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<td>4.81</td>
<td>1.03</td>
<td>1.45</td>
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<td>Structure</td>
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<td>3.95</td>
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<td>1.74</td>
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<td>Conflict tolerance</td>
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<td>2.06</td>
<td>1.59</td>
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<tr>
<td>Risk tolerance</td>
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<td>2.41</td>
<td>2.70</td>
<td>2.00</td>
<td>12.24</td>
<td>1.72</td>
<td>3.80</td>
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<td>4.33</td>
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<td>1.70</td>
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### Table 3: Analysis of variance, for gender subcultures

<table>
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<tr>
<th></th>
<th>$\bar{x}_F$</th>
<th>$\bar{x}_M$</th>
<th>$\bar{x}$</th>
<th>$s^2_F$</th>
<th>$s^2_M$</th>
<th>MSTR</th>
<th>MSE</th>
<th>MSTR/MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>4.56</td>
<td>4.50</td>
<td>4.53</td>
<td>0.38</td>
<td>0.58</td>
<td>0.07</td>
<td>0.49</td>
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<td>Values</td>
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<td>3.76</td>
<td>3.83</td>
<td>0.53</td>
<td>0.30</td>
<td>0.54</td>
<td>0.41</td>
<td>1.29</td>
</tr>
</tbody>
</table>

### Table 4: Analysis of variance, for generational subcultures

<table>
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<tr>
<th></th>
<th>$\bar{x}_Y$</th>
<th>$\bar{x}_O$</th>
<th>$\bar{x}$</th>
<th>$s^2_Y$</th>
<th>$s^2_O$</th>
<th>MSTR</th>
<th>MSE</th>
<th>MSTR/MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>4.56</td>
<td>4.38</td>
<td>4.53</td>
<td>0.45</td>
<td>0.65</td>
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<td>0.48</td>
<td>0.90</td>
</tr>
<tr>
<td>Values</td>
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<td>3.94</td>
<td>3.83</td>
<td>0.36</td>
<td>0.72</td>
<td>0.21</td>
<td>0.42</td>
<td>0.51</td>
</tr>
</tbody>
</table>

### Table 5: Analysis of variance, for gender subcultures

<table>
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<tr>
<th>Culture’s values</th>
<th>$\bar{x}_F$</th>
<th>$\bar{x}_M$</th>
<th>$\bar{x}$</th>
<th>$s^2_F$</th>
<th>$s^2_M$</th>
<th>MSTR</th>
<th>MSE</th>
<th>MSTR/MSE</th>
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<tbody>
<tr>
<td>Customer service</td>
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<td>4.80</td>
<td>4.85</td>
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<td>0.29</td>
<td>0.16</td>
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<td>Trust</td>
<td>3.93</td>
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<td>3.92</td>
<td>0.74</td>
<td>0.54</td>
<td>0.02</td>
<td>0.63</td>
<td>0.04</td>
</tr>
<tr>
<td>Risk taking</td>
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<td>1.74</td>
<td>1.84</td>
<td>0.99</td>
<td>0.56</td>
<td>1.10</td>
<td>0.76</td>
<td>1.43</td>
</tr>
<tr>
<td>Tolerance</td>
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<td>1.34</td>
<td>0.72</td>
<td>2.70</td>
<td>1.01</td>
<td>2.65</td>
</tr>
<tr>
<td>Creativity</td>
<td>4.29</td>
<td>4.32</td>
<td>4.31</td>
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<td>0.67</td>
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</tr>
<tr>
<td>Communication</td>
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<td>0.31</td>
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<tr>
<td>The trend for change</td>
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<td>9.58</td>
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Table 6: Analysis of variance, for generational subcultures

<table>
<thead>
<tr>
<th>Culture values</th>
<th>( \bar{X}_Y )</th>
<th>( \bar{X}_O )</th>
<th>( \bar{X} )</th>
<th>( S^2_Y )</th>
<th>( S^2_O )</th>
<th>MSTR</th>
<th>MSE</th>
<th>MSTR/MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer service</td>
<td>4.82</td>
<td>5.00</td>
<td>4.85</td>
<td>0.19</td>
<td>0.00</td>
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<tr>
<td>Trust</td>
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<td>3.94</td>
<td>3.92</td>
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<td>0.01</td>
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<tr>
<td>Risk taking</td>
<td>1.85</td>
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<td>1.84</td>
<td>0.82</td>
<td>0.56</td>
<td>0.01</td>
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<tr>
<td>Tolerance</td>
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<td>4.19</td>
<td>4.20</td>
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<td>1.76</td>
<td>0.00</td>
<td>1.04</td>
<td>0.00</td>
</tr>
<tr>
<td>Creativity</td>
<td>4.24</td>
<td>4.63</td>
<td>4.31</td>
<td>0.80</td>
<td>0.38</td>
<td>1.96</td>
<td>0.73</td>
<td>2.68</td>
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<tr>
<td>Communication</td>
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<td>4.31</td>
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<td>0.56</td>
<td>0.26</td>
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<td>0.44</td>
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<tr>
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<td>4.59</td>
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<td>0.00</td>
<td>3.24</td>
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<tr>
<td>Learning</td>
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<td>4.28</td>
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<td>0.53</td>
<td>0.89</td>
<td>0.45</td>
<td>1.96</td>
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</table>
Development of Critical Perspectives on Romania's Evolution Public Debt in the Current Economic Crisis

Authors: Vasile Nicolae POPEANGĂ ¹, Constantin Brâncusi University, Faculty of Economics and Business Management, Romania, vasile_popeanga@yahoo.com, Virginia Elena VĂTUIU ², Constantin Brâncusi University, Faculty of Comparative Public Administration and Policy Studies, Romania, vvirginia12@gmail.com, Vasile POPEANGĂ, Constantin Brâncusi University, Faculty of Economics and Business Management, Romania

The economic crisis has wiped out years of economic and social progress and highlighted the structural weaknesses of Europe’s economy. The European Commission and European Council have evaluated the PNR and the implementing national reports and will adopt the final recommendations on fiscal and financial policies, and structural reforms, following that Member States will consider the recommendations and implement them in the fiscal-budgetary policies, and in, those relating to domestic structural reforms.

Keywords: Development of critical perspectives, government debt, public debt dynamics

JEL Classification: H63, L86

¹ Corresponding Author
² Corresponding Author
Introduction

EU national governments presented in late April 2011 the National Reform Programmes, in which they explained how to implement the "Europe 2020" strategy nationwide. A strict coordination between EU supervision of macroeconomic and fiscal policies and policies for structural problems is the central axis of the European semester, the new approach adopted by the EU for the economic policy coordination.


Public debt represents the total burden on government and local government debt, which can be expressed in national currency and foreign currency. State loans can be contracted through the Ministry of Finance, in its own name or guaranteed by it. In order to assess Romania's public debt, liabilities denominated in currencies other than the national currency are calculated using the official exchange rate of the National Bank of Romania. Also, the total public debt of a country can be expressed in absolute values (to know the task that the country's economy is subject to), in relative values as a percentage of GDP (to allow comparison over time and between countries) and the average size per capita debt (to allow comparisons and analysis in time and space).

The total public debt is calculated and managed separately for its two forms, namely the domestic public debt and the external debt. The Ministry of Finance annually prepares and submits to the Government and the Parliament the report on government debt, which contains information on government debt portfolio, debt service, public debt indicators and information about primary and secondary market for state titles, and how to implement medium-term strategy for managing government debt for the previous year.
1. Methodology employed in the research

The technique employed in this research was document analysis, encompassing both quantitative and qualitative data. The choice of this method was mainly guided by the research questions and the objective of the study.

According to Sarantakos (2005) and Bryman (2008) some of the advantages of doing document analysis include: quick and easy access; convenience – since one can do research at any time and for as long as he or she wishes; low cost; less time consuming – since this method requires less time for data collection, one will have more time available for the analysis process. Moreover, the fact that one does not deal directly with people limits the possibility of encountering rejection, non-response or bias.

However, as any other research method, document analysis also employs some disadvantages. Some of the most common ones were identified by Sarantakos (2005) as being: lack of accessibility – one might not be able to access all the documents he or she needs; incomplete data – some documents might not be complete or up to date; reliability – one has to always question whether the documents used are reliable sources.

The documents used in this research as sources include: published books, articles and Ministry of Finance documents. One has also consulted Internet websites but only to a limited degree, due to issues concerning reliability. Since a good research has to be based on high quality materials, one has concentrated mainly on publications of well-known publishers and important academic journals.

In order to answer the research questions one has looked at publications and other studies which have dealt with the subject of conditionality, as well as Ministry of Finance official reports.

2. Romania's public debt between 2000 - 2009

For the period analyzed pooled data on the dynamics and structure of domestic debt are shown in the table below:
Table 1: Dynamics and structure of domestic debt between 2004-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Indicator</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I.1 Domestic government debt (mil. lei)</td>
<td>14.411,4</td>
<td>16.127,9</td>
<td>25.827,3</td>
<td>41.827,5</td>
<td>61.523,1</td>
<td>85.400,8</td>
</tr>
<tr>
<td></td>
<td>I.2 Domestic government debt (mil. €)</td>
<td>3.633,5</td>
<td>4.386,0</td>
<td>7.637,4</td>
<td>11.585,9</td>
<td>15.434,8</td>
<td>20.191,2</td>
</tr>
<tr>
<td></td>
<td>I.3 Foreign government debt (mil. €)</td>
<td>10.270,0</td>
<td>10.947,2</td>
<td>10.066,3</td>
<td>9.507,0</td>
<td>9.792,6</td>
<td>12.343,6</td>
</tr>
<tr>
<td></td>
<td>I.4 Total Government Debt (%PIB)</td>
<td>22,4</td>
<td>19,5</td>
<td>17,4</td>
<td>18,4</td>
<td>19,95</td>
<td>28,01</td>
</tr>
<tr>
<td></td>
<td>II.1 Local domestic Debt (mil. lei)</td>
<td>341,0</td>
<td>671,7</td>
<td>1.542,7</td>
<td>3.296,6</td>
<td>5.673,5</td>
<td>6.370,7</td>
</tr>
<tr>
<td></td>
<td>II.2 Local public external debt</td>
<td>16,1</td>
<td>532,3</td>
<td>570,6</td>
<td>797,2</td>
<td>894,4</td>
<td>983,5</td>
</tr>
<tr>
<td></td>
<td>II.3 Total local govern</td>
<td>0,16</td>
<td>0,91</td>
<td>1,01</td>
<td>1,5</td>
<td>1,8</td>
<td>1,98</td>
</tr>
<tr>
<td></td>
<td>Total debt (mil. lei)</td>
<td>55.550,0</td>
<td>59.010,8</td>
<td>63.340,8</td>
<td>82.324,3</td>
<td>109.795,1</td>
<td>147.329,1</td>
</tr>
<tr>
<td></td>
<td>Total debt (% PIB)</td>
<td>22,5</td>
<td>20,4</td>
<td>18,4</td>
<td>19,9</td>
<td>21,8</td>
<td>29,99</td>
</tr>
</tbody>
</table>

Source: Public Finance Ministry

The data presented allow us multiple tests and comparisons, which we will further develop. Thus, first, we observe the absolute indicator of debt (DP), which represents its value volume in each of the years presented.
Secondly, the dynamic of nominal debt in million, is shown in the chart below:

![Absolute value of public debt dynamics](chart)

**Figure 1:** The dynamic of nominal debt in million

As a first conclusion emerges the continuous trend of increasing indebtedness of our country throughout the period under review. Thus, the absolute dynamic of public debt ($\Delta DP$) in the period under review is as follows:

- $\Delta DP_{2001/2000} = DP_{2001} - DP_{2000} = 33,506.9\text{ million} - 25,235.1\text{ million} = +8,271.8\text{ million}$
- $\Delta DP_{2002/2001} = DP_{2002} - DP_{2001} = 43,706.3\text{ million} - 33,506.9\text{ million} = +10,199.4\text{ million}$
- $\Delta DP_{2003/2002} = DP_{2003} - DP_{2002} = 51,363.7\text{ million} - 43,706.3\text{ million} = +7,657.4\text{ million}$
- $\Delta DP_{2004/2003} = DP_{2004} - DP_{2003} = 55,550\text{ million} - 51,363.7\text{ million} = +4,186.3\text{ million}$
- $\Delta DP_{2005/2004} = DP_{2005} - DP_{2004} = 59,010.8\text{ million} - 55,550\text{ million} = +3,460.8\text{ million}$
- $\Delta DP_{2006/2005} = DP_{2006} - DP_{2005} = 63,340.8\text{ million} - 59,010.8\text{ million} = +4,330\text{ million}$
- $\Delta DP_{2007/2006} = DP_{2007} - DP_{2006} = 82,324.3\text{ million} - 63,340.8\text{ million} = +18,983.5\text{ million}$
- $\Delta DP_{2008/2007} = DP_{2008} - DP_{2007} = (109,795.1 - 82,324.3)\text{ million} = +27,470.8\text{ million}$
- $\Delta DP_{2009/2008} = DP_{2009} - DP_{2008} = 147,329.1\text{ million} - 109,795.1\text{ million} = +37,534\text{ million}$
A detailed analysis based on previously calculated results, shows an increase in Romania’s debt after 2006, from then onwards its dynamics recording a major growth, reaching its pick in 2009, with an increase from the previous year of + 37 534 million so about +9.2 billion euro.

The relative dynamics of Romania’s public debt (% Cr DP) from 2000 to 2009 is determined as follows:

- \( \%\text{CrDP}_{2001/2000} = \frac{\Delta \text{DP}_{2001/2000}}{\text{DP}_{2000}} \times 100 = \frac{8271,8}{25235,1} \times 100 = +32,78\% \)
- \( \%\text{CrDP}_{2002/2001} = \frac{\Delta \text{DP}_{2002/2001}}{\text{DP}_{2001}} \times 100 = \frac{10199,4}{33506,9} \times 100 = +30,44\% \)
- \( \%\text{CrDP}_{2003/2002} = \frac{\Delta \text{DP}_{2003/2002}}{\text{DP}_{2002}} \times 100 = \frac{7657,4}{43706,3} \times 100 = +17,52\% \)
- \( \%\text{CrDP}_{2004/2003} = \frac{\Delta \text{DP}_{2004/2003}}{\text{DP}_{2003}} \times 100 = \frac{4186,3}{51363,7} \times 100 = +8,15\% \)
- \( \%\text{CrDP}_{2005/2004} = \frac{\Delta \text{DP}_{2005/2004}}{\text{DP}_{2004}} \times 100 = \frac{3460,8}{55550} \times 100 = +6,23\% \)
- \( \%\text{CrDP}_{2006/2005} = \frac{\Delta \text{DP}_{2006/2005}}{\text{DP}_{2005}} \times 100 = \frac{4330}{59010,8} \times 100 = +7,34\% \)
- \( \%\text{CrDP}_{2007/2006} = \frac{\Delta \text{DP}_{2007/2006}}{\text{DP}_{2006}} \times 100 = \frac{18983,5}{63340,8} \times 100 = +29,97\% \)
- \( \%\text{CrDP}_{2008/2007} = \frac{\Delta \text{DP}_{2008/2007}}{\text{DP}_{2007}} \times 100 = \frac{27470,8}{82324,3} \times 100 = +33,36\% \)
- \( \%\text{CrDP}_{2009/2008} = \frac{\Delta \text{DP}_{2009/2008}}{\text{DP}_{2008}} \times 100 = \frac{37534}{109795,1} \times 100 = +34,18\% \)

In relative terms, we see that the largest increase in public debt was recorded in 2009 when compared to 2008, the indicator increased by +34.18%. The relative indicator of debt (share in GDP) for our country is also
shown in the table above. We found that the highest value was recorded in 2000, when the debt represented 31.4% of GDP. The lowest is the indicator for the year 2006, namely 18.4%. Thus, the difference between maximum and minimum value of the considered indicator is of 13 percentage points. The dynamics of the public debt relative indicator is presented graphically as follows:

![Figure 2: The dynamics of the public debt relative indicator](image)

According to the indicators which characterize public debt and using the data we have obtained and which we presented in the previous table, we can also determine the medium per capita debt ($\overline{DP}_{loc}$), which was recorded in Romania between 2000 and 2009. Therefore, considering that the population number was constant in this interval (22 millions), the medium indicator per capita is calculated as follows:

- $\overline{DP}_{loc\ 2000} = \frac{DP_{2000}}{\text{no. population}} = \frac{25235.1}{22} = 1147.05$ lei/inhabitant
- $\overline{DP}_{loc\ 2001} = \frac{DP_{2001}}{\text{no. population}} = \frac{33506.9}{22} = 1523.04$ lei/inhabitant
- $\overline{DP}_{loc\ 2002} = \frac{DP_{2002}}{\text{no. population}} = \frac{43706.3}{22} = 1986.65$ lei/inhabitant
- $\overline{DP}_{loc\ 2003} = \frac{DP_{2003}}{\text{no. population}} = \frac{51363.7}{22} = 2334.71$ lei/inhabitant
If we wish to use a graph, the situation would be represented as follows:

\[ \text{DP}_{\text{loc}} = \frac{DP_2004}{\text{no. population}} = \frac{55550}{22} = 2525 \text{ lei/inhabitant} \]
\[ \text{DP}_{\text{loc}} = \frac{DP_2005}{\text{no. population}} = \frac{59010.8}{22} = 2682.3 \text{ lei/inhabitant} \]
\[ \text{DP}_{\text{loc}} = \frac{DP_2006}{\text{no. population}} = \frac{63340.8}{22} = 2879.13 \text{ lei/inhabitant} \]
\[ \text{DP}_{\text{loc}} = \frac{DP_2007}{\text{no. population}} = \frac{82324.3}{22} = 3742 \text{ lei/inhabitant} \]
\[ \text{DP}_{\text{loc}} = \frac{DP_2008}{\text{no. population}} = \frac{109795.1}{22} = 4990.68 \text{ lei/inhabitant} \]
\[ \text{DP}_{\text{loc}} = \frac{DP_2009}{\text{no. population}} = \frac{147329.1}{22} = 6696.77 \text{ lei/inhabitant} \]

There is a continuous annual increase in public debt per capita in nominal expression, with a peak in 2009, when the amount of 6696.77 Euro
/capita was equivalent to about 1633 euro /capita. So, in terms of simplistic, non-academic terms, this is the degree of public indebtedness for each Romanian citizen.

Following our analysis we can address the various categories of the total public debt. Thus, we see from the data in the table that can analyze the government public debt which can be studied on two levels, namely internal and external. Absolute indicators of domestic (DPGI) and external government debt (DPGE), expressed in millions of euro, are presented in the table above. Their dynamics in the period 2000 - 2009 is shown graphically below:

![Figure 4: Their dynamics Absolute indicators of domestic (DPGI) and external government debt (DPGE)](image)

The evolutionary trends are somewhat contrary for the two indicators. Thus, if the internal dynamics of government debt has increased continuously, but at different rates (a slight increase from year to year in the first interval, followed by a sharp increase from 2006 to present), external government debt developed sinuously, with slight increases between 2000 and 2006, followed by a decrease in 2007 and 2009 and a return to a positive even increased rate in 2009. Also, one can observe the strengthening of the Romanian financial market in time, marked by the fact that after 2006 the
main share of total public debt is held by the domestic component, a trend that has grown steadily.

The absolute increase of domestic public debt (ΔDPGI) is determined as follows:

- \( \Delta \text{DPGI}_{2001/2000} = \text{DPGI}_{2001} - \text{DPGI}_{2000} = 3294,5 \text{ million euro} - 3090,1 \text{ million euro} = + 204,4 \text{ million euro} \)
- \( \Delta \text{DPGI}_{2002/2001} = \text{DPGI}_{2002} - \text{DPGI}_{2001} = 3 327,9 \text{ million euro} - 3 294,5 \text{ million euro} = + 33,4 \text{ million euro} \)
- \( \Delta \text{DPGI}_{2003/2002} = \text{DPGI}_{2003} - \text{DPGI}_{2002} = 2 799,3 \text{ million euro} - 3 327,9 \text{ million euro} = - 528,6 \text{ million euro} \)
- \( \Delta \text{DPGI}_{2004/2003} = \text{DPGI}_{2004} - \text{DPGI}_{2003} = 4 386 \text{ million euro} - 3 327,9 \text{ million euro} = + 834,2 \text{ million euro} \)
- \( \Delta \text{DPGI}_{2005/2004} = \text{DPGI}_{2005} - \text{DPGI}_{2004} = 7 637,4 \text{ million euro} - 4 386 \text{ million euro} = + 3 251,4 \text{ million euro} \)
- \( \Delta \text{DPGI}_{2006/2005} = \text{DPGI}_{2006} - \text{DPGI}_{2005} = 11 585,9 \text{ million euro} - 7 637,4 \text{ million euro} = + 3 948,5 \text{ million euro} \)
- \( \Delta \text{DPGI}_{2007/2006} = \text{DPGI}_{2007} - \text{DPGI}_{2006} = 15 434,8 \text{ million euro} - 11 585,9 \text{ million euro} = + 3 848,9 \text{ million euro} \)
- \( \Delta \text{DPGI}_{2008/2007} = \text{DPGI}_{2008} - \text{DPGI}_{2007} = 20 191,2 \text{ million euro} - 15 434,8 \text{ million euro} = + 4 756,4 \text{ million euro} \)

There is therefore a positive trend for the indicator, with one exception, the year 2003, when the domestic government debt decreased from the previous year by about 529 million euro. The rest of the interval recorded only positive values with a maximum point in 2009, when we have an increase of about 4.76 billion euro, compared to 2008.

The relative increase in the domestic government debt (% CrDPGI), in millions is calculated as follows:

- \( \% \text{CrDPGI}_{2001/2000} = \frac{\Delta \text{DPGI}_{2001/2000}}{\text{DP}_{2000}} \times 100 = \frac{204,4}{3090,1} \times 100 = +6,61\% \)
- \( \% \text{CrDPGI}_{2002/2001} = \frac{\Delta \text{DPGI}_{2002/2001}}{\text{DP}_{2001}} \times 100 = \frac{33,4}{3294,5} \times 100 = +1,01\% \)
Development of Critical Perspectives on Romania’s Evolution Public Debt, in the Current Economic Crisis

Calculations allow us to see that the largest increase in the relative domestic government debt is carried out in 2006 compared with 2005, when the indicator increased by 74.13%. The share that the domestic government debt holds from GDP is also presented in the table with data from the Ministry of Finance. Its dynamics between 2000 and 2009 is, however, presented by us in the following chart:
The internal governmental public debt per capita ($\overline{DPGI_{loc}}$), in euro, is determined as follows:

- $\overline{DPGI_{loc}}_{2000} = \frac{DPGI_{2000}}{\text{no.inhabitant}} = \frac{3090,1}{22} = 140,45 \text{ euro/inhabitant}$
- $\overline{DPGI_{loc}}_{2001} = \frac{DPGI_{2001}}{\text{no.inhabitant}} = \frac{3294,5}{22} = 149,75 \text{ euro/inhabitant}$
- $\overline{DPGI_{loc}}_{2002} = \frac{DPGI_{2002}}{\text{no.inhabitant}} = \frac{3327,9}{22} = 151,26 \text{ euro/inhabitant}$
- $\overline{DPGI_{loc}}_{2003} = \frac{DPGI_{2003}}{\text{no.inhabitant}} = \frac{2799,3}{22} = 127,24 \text{ euro/inhabitant}$
- $\overline{DPGI_{loc}}_{2004} = \frac{DPGI_{2004}}{\text{no.inhabitant}} = \frac{3633,5}{22} = 165,16 \text{ euro/inhabitant}$
- $\overline{DPGI_{loc}}_{2005} = \frac{DPGI_{2005}}{\text{no.inhabitant}} = \frac{4386}{22} = 199,36 \text{ euro/inhabitant}$
- $\overline{DPGI_{loc}}_{2006} = \frac{DPGI_{2006}}{\text{no.inhabitant}} = \frac{7637,4}{22} = 347,15 \text{ euro/inhabitant}$
The increase in the external governmental public debt ($\Delta \text{DPGE}$) is determined as follows:

- $\Delta \text{DPGE}_{2001/2000} = \text{DPGE}_{2001} - \text{DPGE}_{2000} = 8\,708,5$ million euro $- 7\,371,7$ million euro $= +1\,336,8$ million euro
- $\Delta \text{DPGE}_{2002/2001} = \text{DPGE}_{2002} - \text{DPGE}_{2001} = 9\,167,5$ million euro $- 8\,708,5$ million euro $= +459$ million euro
One can observe the positive trend of the indicator, with two exceptions, in 2006 and 2007, when external government debt decreased from the previous year by about 881 million euro and 560 million euro. The rest of the interval recorded only positive values with a maximum point in 2009, when we have an increase of about 2.55 billion euro, compared to 2008.

The relative increase in the external governmental public debt (% CrDPGE), in millions is calculated as follows:

\[
\text{%CrDPGE}_{2001/2000} = \left( \frac{\Delta \text{DPGE}_{2001/2000}}{\text{DP}_{2000}} \right) \times 100 = \left( \frac{1336,8}{7371,7} \right) \times 100 = +18,13\%
\]

\[
\text{%CrDPGE}_{2002/2001} = \left( \frac{\Delta \text{DPGE}_{2002/2001}}{\text{DP}_{2001}} \right) \times 100 = \left( \frac{459}{8708,5} \right) \times 100 = +5,27\%
\]

\[
\text{%CrDPGE}_{2003/2002} = \left( \frac{\Delta \text{DPGE}_{2003/2002}}{\text{DP}_{2002}} \right) \times 100 = \left( \frac{470,1}{9167,5} \right) \times 100 = +5,12\%
\]

\[
\text{%CrDPGE}_{2004/2003} = \left( \frac{\Delta \text{DPGE}_{2004/2003}}{\text{DP}_{2003}} \right) \times 100 = \left( \frac{632,4}{9637,6} \right) \times 100 = +6,56\%
\]

\[
\text{%CrDPGE}_{2005/2004} = \left( \frac{\Delta \text{DPGE}_{2005/2004}}{\text{DP}_{2004}} \right) \times 100 = \left( \frac{677,2}{10270} \right) \times 100 = +6,59\%
\]
Calculations allow us to see that the largest increase in the relative external governmental debt is carried out in 2009 when, compared to 2008, the indicator increased by 26.05%. The share that the external public debt holds in the gross domestic product is also presented in the table with data from the Ministry of Finance. Its dynamics, between 2000 and 2009 is, however, represented by us in the following chart:

Figure 7: External public debt dynamics share in GDP

We observe a tendency of a sinuous evolution for the indicator, combining periods of growth and decline. At the end of the analysed
interval (the year 2009) the share of external public governmental debt from the GDP represents less than a half compared to the beginning of the interval. The medium external public governmental debt per capita (\( \text{DPGE}_{\text{loc}} \)), in euro, is determined as follows:

- \[ \text{DPGE}_{\text{loc}}^{2000} = \frac{\text{DPGE}_{2000}}{\text{no.inhabitant}} = \frac{7371.7}{22} = 335.07 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2001} = \frac{\text{DPGE}_{2001}}{\text{no.inhabitant}} = \frac{8708.5}{22} = 395.84 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2002} = \frac{\text{DPGE}_{2002}}{\text{no.inhabitant}} = \frac{9167.5}{22} = 430.34 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2003} = \frac{\text{DPGE}_{2003}}{\text{no.inhabitant}} = \frac{9637.6}{22} = 438.07 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2004} = \frac{\text{DPGE}_{2004}}{\text{no.inhabitant}} = \frac{10270}{22} = 466.82 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2005} = \frac{\text{DPGE}_{2005}}{\text{no.inhabitant}} = \frac{10947.2}{22} = 497.6 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2006} = \frac{\text{DPGE}_{2006}}{\text{no.inhabitant}} = \frac{10066.3}{22} = 457.56 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2007} = \frac{\text{DPGE}_{2007}}{\text{no.inhabitant}} = \frac{9507}{22} = 432.13 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2008} = \frac{\text{DPGE}_{2008}}{\text{no.inhabitant}} = \frac{9792.6}{22} = 445.12 \text{ euro/inhabitant} \]
- \[ \text{DPGE}_{\text{loc}}^{2009} = \frac{\text{DPGE}_{2009}}{\text{no.inhabitant}} = \frac{12343.6}{22} = 561.07 \text{ euro/inhabitant} \]
Represented graphically, the dynamic is the following:

![Graph showing the dynamic of external public debt](image)

**Figure 8:** External public debt dynamics capita

3. **The comparative analysis of Romania’s public debt between 2009 and 2010**

On 31st of December, 2010 our country’s public debt can be characterised by the data presented in the table below:

At a first analysis one can observe the increasing tendency of the public debt, both in absolute and relative values. Thus, compared to 31st of Dec. 2009, on 31st of Dec. 2010, the absolute value for public debt is with + 46565,3 millions lei bigger, which amounts to approximately 11,5 billions of euro. In relative terms, one can observe an increase of + 7,91% from GDP. In connection with the portfolio of currencies in the basket of public debt, we notice a close ratio between national currency and the euro, but a higher share in total foreign currency than in lei.

**Table 2:** The country public debt on 31st of December, 2010

<table>
<thead>
<tr>
<th>Indicator</th>
<th>31.12.2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total public debt* (millions lei)</td>
<td>193 894,4</td>
</tr>
</tbody>
</table>
Among the specialized analysis tools, spreadsheet applications are the most accessible. In addition, techniques and tools for organizing, processing and presentation of basic data, such as strengthening multiple lists, filtering, running sum, pivot tables they offer, largely satisfy the needs of organization and data analysis activities in the field of economics. For this reason we conducted a study in which we highlighted the facilities offered by these software applications for the economic field. (Tarca & all, 2010: 1)

To analyse these data, we can use Excel, creating models for data analysis, while making a presentation of data in several types of professional-looking diagrams (Vătuiu, 2008: 120). Thus, by types of instruments, on 31st December 2010, the structure of public debt is rendered meaningful by using Excel application.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total public debt (% GDP)</td>
<td>37,9</td>
</tr>
<tr>
<td>Public governmental debt (% GDP)</td>
<td>94,03</td>
</tr>
<tr>
<td>Local public debt (% GDP)</td>
<td>5,97</td>
</tr>
<tr>
<td>Direct public debt (% GDP)</td>
<td>91,92</td>
</tr>
<tr>
<td>Guaranteed public debt (% GDP)</td>
<td>8,08</td>
</tr>
<tr>
<td>Negotiable (% GDP)</td>
<td>4133</td>
</tr>
<tr>
<td>Non-Negotiable (% GDP)</td>
<td>58,67</td>
</tr>
<tr>
<td>RON (% GDP)</td>
<td>46,21</td>
</tr>
<tr>
<td>Euro (% GDP)</td>
<td>42,58</td>
</tr>
<tr>
<td>Other currency (% GDP)</td>
<td>11,21</td>
</tr>
</tbody>
</table>

**Note:** Includes the debt guaranteed by the state and local public administration authorities according to OUG 64/2007
Consequently, on types of instruments, on 31st December 2010, the structure of public governmental debt can be represented with the help of the Excel application:

**Figure 9**: Public debt structure of Romania on December 31, 2010, by type of instruments

*Note: Loans from the General Current Account of State Treasury, used for financing the state budgetary deficit*

One can notice the prevalence of state loans which represent 40,39% from total, followed by bonds (18,66%) and treasury bills (17,91%).

If we take as criterion the currency type, at the same date, the structure of Romania’s public governmental debt was the following:

If we take into account the type of holders, the structure of the public governmental debt, in millions of lei, would look as follows:
Figure 10: The structure of Romania’s public governmental debt

Source: Public Finance Ministry

Figure 11: The structure of the public governmental debt, in millions of lei

Source: Public Finance Ministry

The structure of new public loans, made during 1st of January 2010 and 31st of December 2010, in millions of lei, is presented in the table below:
Table 3: The structure of public loans on 2010

<table>
<thead>
<tr>
<th>Issue domestic bonds</th>
<th>51 912,4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Management Tools</td>
<td></td>
</tr>
<tr>
<td>State loans, of which:</td>
<td></td>
</tr>
<tr>
<td>- contracted directly</td>
<td>3 050</td>
</tr>
<tr>
<td>- guaranteed by the state</td>
<td>11 347</td>
</tr>
<tr>
<td>Total</td>
<td>5 977,3</td>
</tr>
<tr>
<td></td>
<td>5 369,8</td>
</tr>
<tr>
<td></td>
<td>66 309,5</td>
</tr>
</tbody>
</table>

Source: Public Finance Ministry

State securities issued during 1st of January and 31st of December 2010 are presented below:

Figure 12: State securities issued during 1st of January and 31st of December 2010

Source: Public Finance Ministry

One can notice that Romania has piled up most of its new public debt on a short term (almost 34% in 6 months and almost 40% in one year),

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and this will significantly increase the annual public financial effort caused by this debt in the current budgetary exercise (2011). On the primary market, in the first semester of 2010, the issues of public credit instruments (in millions lei) looked as follows:

Remaining maturity* of state securities, in millions of lei, is presented in the table below:

<table>
<thead>
<tr>
<th></th>
<th>31 dec. 2009</th>
<th>% of total</th>
<th>31 dec. 2010</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The total amount of which:</td>
<td>46 134</td>
<td>100</td>
<td>66 290</td>
<td>100</td>
</tr>
<tr>
<td>Short term</td>
<td>25 350</td>
<td>54,95</td>
<td>35 421</td>
<td>53,43</td>
</tr>
<tr>
<td>Medium term</td>
<td>19 489</td>
<td>42,24</td>
<td>28 142</td>
<td>42,45</td>
</tr>
<tr>
<td>Long term</td>
<td>1 295</td>
<td>2,81</td>
<td>2 727</td>
<td>4,11</td>
</tr>
</tbody>
</table>

*Note: does not include Eurobonds and deposit certificates for the population and includes state emissions denominated in euro nu include

As far as the structure of securities’ holders on the internal market is concerned, on 31\textsuperscript{st} of December 2010, the situation was the following:

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>In own name in the banking system</td>
<td>75,18%</td>
<td>68,31%</td>
</tr>
<tr>
<td>On behalf of clients</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textbf{Figure 13}: the structure of securities’ holders on the internal market
Conclusions

In comparison to the end of 2009, when it was 147.33 billion lei, which represented 30% from GDP, public debt rose by almost 8% of GDP in 2010 (46.6 billion), given that the deficit budget shrank by almost 1% of GDP. This means that public debt has been pressured by loans due in 2010, many of which are rolled in 2011. During 2010, the Romanian government has piled up debt, impoverished under the pressure of a crisis budget and the need to pay pensions and salaries. Public debt over the past two years has been doubled by loans from the IMF, the European Commission and banks on the local market, the government borrowing 1.3 billion per month to cover current expenses.

Thus, from a public debt of 109.1 billion lei, equivalent to 21.6% of GDP at the end of 2008, Romania came to record at the end of 2009, debts of 147.3 billion lei, equivalent to 29.99% of GDP, and on Dec. 31, 2010, the public debt reached 193.89 billion lei (37.9% of GDP). If we compare this to the end of October 2010, when public debt was 182.4 billion lei, accounting for 35.55% of GDP, we conclude that the public debt increased by 2% in just two months, without us entering any tranche of loan from the EU. In late 2010, government debt represented 94% of public debt, respectively 182.3 billion lei, up by nearly one third (45.8 billion) over the previous end of year.

On January 31, 2011, Romania’s total public debt decreased by 1.8% compared to the end of 2010, reaching 190.381 billion lei, which is equivalent to 34.9% of gross domestic product (GDP) estimated at 544.4 billion. On the same date, 41.9% of total public debt was in RON, 40.8% in euro and the rest in other currencies. Compared to the end of 2010, on January 31 the share of government public debt in total debt had decreased with 1.89 percentage points from 95.76% to 93.87%, while local public debt represented 6.11% of the total debt.

In 2011, the Ministry of Finance expects the government debt service to amount to 62.7 billion, of which 8.7 billion lei (€ 2 billion) only interest.
References


Managing the Hotels Service Products and E-Services. Case Study: Researching Tourists’ Satisfaction Regarding the Hotels Services in Romania

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The objective of a hospitality business is to provide guests with a place where they feel welcome and appreciated, and where they can relax and have an enjoyable experience. Service is what an establishment does to and for its guests to achieve this objective. Service is not about smiling and servility. It is a strategy that considers the customer while serving the interests of the hotel. Service excellence gives an organization a competitive edge. Outstanding service makes a lot of money for a hospitality industry because the business of a hotel is people.

The paper tries to define the hotel service as a product that requires objectives, strategies, and measurable management criteria. A quantitative marketing research about tourists’ satisfaction regarding the hotels services in Romania accompanies the paper and highlights the importance of the hotels service products and e-services in the globalization age.

Keywords: services, hotel, management, strategies, satisfaction
Introduction

In the literature review regarding the hotel service management everyone says how important services are (Foley et al, 2000; Asch and Wolfe, 2001; Baum, 2007; Briggs et al, 2007). And yet, in an industry that claims to be totally committed to service, the disappointments of customers with the service they have received, and complaints reflecting their disappointment, are still prevalent.

What seems to be the problem? Are customers expecting too much? Are they being educated to expect service beyond that which can reasonably be supplied?

Some of the problems are caused by the fallibility of human beings, our inability to work consistently to a standard, but we think that the problem is more likely to be due to management not knowing what service is. Management often thinks that service is something that the staff does, and that it simply means being pleasant and helpful to the customers (Holloway, 2002).

Most books on management and marketing fail to give service more than a passing mention, and merely acknowledge its importance (Lumsdon, 2000; Kotler et al, 2005; Makens, 2005; Pender, 2005; Tribe, 2005; Mackintosh, 2006; Marin-Pantelescu, 2009). Only a few books set out to define service as a product that requires objectives, strategies, and measurable management criteria (Beckwith, 2001; Wearne and Baker, 2002; Foster, 2003).

In the course of their stay, customers are part of a series of activities from when they come through the front door until they eventually depart. Each activity in this series is handled by a different department and the customer is passed from one to the other. Many different service products are involved, but in too many places no one is responsible for making sure that the transitions happen smoothly. The duty manager waits for a complaint, but meanwhile assumes that all is functioning as it should.

Some hotels have implemented a fully automated check-in process, stepping back from personal contact and relying on an electronic process to meet the customer's needs. The arriving guest need only swipe his or her credit card and be automatically allocated a room. The guest's card is debited with the accommodation charge. The same process generates a
coded card that allows access to the room. This process, which is part of what is sometimes called ‘e-service’, suits some market segments, notably the overnight traveler, but it should not be relied upon to replace personal service entirely. Similarly, the booking system that preceded the guest’s arrival might not have involved any personal contact, but might have been completed through the Internet, which suits some, but not all customers. The whole service experience for the customer is the sum total of myriad smaller experiences. According to Wearne and Baker (2002) for all the service products to be supplied effectively and concurrently to the guest’s complete satisfaction, several control factors are necessary at the service level, including the e-service level.

• There has to be a strategy that identifies when, where, and how the service product will perform.
• There have to be systems with measurable criteria for each of the working procedures involved in providing the service. If a service is to be managed it must be capable of being measured.
• The people providing the service have to be ‘people-to-people’, those who are interested in others, care for their welfare, and make their comfort and satisfaction the top priority. Understanding the preferences of the customers is crucial to service success. Procedures are only as effective as the people performing them.
• The people providing the service directly to the customer must have the support of everyone else. Management’s primary function must be to monitor and maintain the service standards and to ensure that nothing impedes the delivery of service. The management must help those providing the service. If there are delays or upsets, what or who is causing them? Is it a procedural problem? Is there a weak link in the staff chain? Is extra training needed? Perhaps the person is wrong for the job? Would a new or different item of equipment solve the problem?

The hotels primary servicers’ products usually do its job of satisfying the customers without much comment. It is the extras give the establishment a competitive edge. These are the things that customers go away and talk about. According to Berry (1995) the hotels need to work for the ‘service surprise’, which little extra that exceeds expectations and make the tourists say ‘wow’.
Although the hotel objective is to meet the satisfaction of the tourists, money has to be made. At the end of a service period, the dollars earned by a product have to be checked to ensure that services meet corporate objectives.

In developing a service strategy, certain steps are necessary to provide a sustainable competitive advantage over the competition. These steps are the follows according to Baker and Huyton (2001): establish customer needs and wants using market segmentation, ask the customers for their opinions and advice, review existing products and procedures by research and analysis, set objectives for improvements or changes, identify key strategies for achieve the objectives and realize the required outcomes, establish measurable criteria for the strategy, allocate tasks and responsibilities looking for team leaders, remove demotivating systems and staff, gain commitment to the objective and strategies, make physical changes where necessary, experiment with the changes, measure and manage, ask the customers to evaluate if the service product is satisfactory for them by maintaining a regular research program, modify where necessary, and measure again.

A viable hotel that is committed to a service culture for its customers will change with the tourists, and will not ‘sit’ on past achievements. If the organization does not move with its tourists, the tourists will move elsewhere.

**Material and method(s)**

The paper aimed to undertake a quantitative marketing research about tourists’ satisfaction regarding the hotels services in Romania accompanies the paper

**Research methodology**

**Defining decision-making**

Domestic and international touristic activity intensified lately thus producing considerable income for the hotels. The problem we raised when we started this research was to see the tourists’ satisfaction regarding hotels services in our country. The research is meant to find the position on which hotels are placed among tourists’ satisfactions for buying touristic services products.
The purpose of the research

The general reason of the present research consisted in identifying the satisfaction of the Romanian tourists regarding the hotels services in our country.

Research objective

- Evaluation of the tourists’ satisfaction regarding the hotels services

The research sample

The research took place at the International Exhibition of Tourism at Romexpo, Bucharest, the XXVI edition, between 3 and 6 of November 2011, with a 12 closed questions survey; the sample basis included people from different areas of the country who came to visit the Exhibition. The view and sample units were the same in this case and took into consideration the individual. The building of the research sample was accomplished using a method of random sampling—the normal random sampling, whose implementation lead to the attainment of 384 questionnaires, using the following formulas:

\[ n = \frac{t^*p(1-p)}{\Delta^2} \]

For example, for a coefficient “t” of 1.96 which corresponds to a probability of 95% guaranty of results and a limit error accepted of 5%, the size of the sample is 384 questionnaires.

The profile of the respondents

Regarding the respondents occupation surveyed are most employed, namely 172 people, 122 are students, 13 are unemployed, 33 are chiefs, 24 are pensioners and 20 are self-employed.

According to research conducted, it appears that 186 of the respondents graduated from high school, 157 have graduated college, 33 had postgraduate studies and 8 have graduate elementary school.

Regarding the sex of respondents, 203 of the respondents are female (53% of the total respondents) and 181 are men (47% of the total respondents). Age of respondents ranged from 18-65 years. 36.98% for individuals aged between 18 and 24 years old, 29.17% for segment age range 25-34 years old; 14.06% have between 35 and 44 years old; 11.99% have between 45 and 54 years old; 3.9% have between 55 and 64 years old and only 3.91 have over 65 years old.

The income of respondents varies, but most of them earn less than 1,000 lei/month (31.51% from the total respondents). 20.05% of the
respondents earn more between 1,001 and 1,500 lei/month and 19.27% earn up to 2,000 lei per month. In the category of income between 2,001-3,000 lei/month falls almost 15.89%, and only 13.28% of the respondents earn over 3001 lei/month. Finally, regarding the environment, of the 384 respondents 234 are from urban areas (61%) and 150 people came from the rural areas (39%).

Results and discussions

Following the satisfaction of hotel services research conducted on 384 participants, the question about the satisfaction with the quality of services in Romanian hotels has generated the following responses: 47 respondents are very satisfied (12.24% of the total respondents), 204 are satisfied (53.13%), 63 are neutral (16.41%), 66 are dissatisfied (17.19%) and 4 respondents are very dissatisfied (1.04%).

![Figure 1: How satisfied are tourists about the service quality provided in Romania hotels](image)

Source: authors' research results

Romanian hotels make possible the perception of tourists on the quality of services provided because of the quality management systems implemented. Systems that are based on the following aspects: knowledge
of tourists’ expectations, their satisfaction, teamwork, maintenance and upgrading buildings, providing extensive services and facilities, cooperating with other partners and so on.

**Table 1:** How satisfied are you with the following aspects of the Romanian hotel services?

<table>
<thead>
<tr>
<th></th>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Dissatisfied</th>
<th>Very dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service quality provided</td>
<td>12.24</td>
<td>53.13</td>
<td>16.41</td>
<td>17.19</td>
<td>1.04</td>
</tr>
<tr>
<td>Hotel tariffs</td>
<td>3.39</td>
<td>28.91</td>
<td>14.32</td>
<td>42.19</td>
<td>11.20</td>
</tr>
<tr>
<td>Staff behavior</td>
<td>10.68</td>
<td>42.97</td>
<td>22.40</td>
<td>20.83</td>
<td>3.13</td>
</tr>
<tr>
<td>Cleanliness and ambience of the hotel</td>
<td>15.10</td>
<td>48.18</td>
<td>19.01</td>
<td>15.36</td>
<td>2.34</td>
</tr>
<tr>
<td>Hotel diversity of services</td>
<td>7.29</td>
<td>29.69</td>
<td>25.26</td>
<td>29.95</td>
<td>7.81</td>
</tr>
</tbody>
</table>

*Source: authors’ research results*

Of the 384 respondents, only 3.39% said that they were very satisfied with the rates charged in Romanian hotels, 28.91% were satisfied, 14.32% were neutral, 42.19% were dissatisfied and 11.20% were very dissatisfied.

The largest share, 42.19% of the responses offered by the 384 respondents, is owned by those who said they were dissatisfied with the rates charged in Romanian hotels, followed at a considerable distance from the percentage of those satisfied with them, 28.91%. Dissatisfaction with the tariffs could be attributed to the economic recession, which is in full swing. Thus, tourists have limited income for vacations and hotels cannot reduce tariffs too much due to fiscal policies and lack of government assistance.

Following the satisfaction of hotel services research conducted on 384 participants, the question about the satisfaction with the staff behavior in Romanian hotels, has generated the following responses: 41 respondents
were very satisfied, 161 were satisfied, 86 respondents were neutral, 80 were dissatisfied and 12 respondents were very dissatisfied.

**Figure 2:** How satisfied are Romanian people with the tariffs hotels

*Source: authors’ research results*

**Figure 3:** How satisfied are people of the staff behavior from the Romanian’s hotels

*Source: authors’ research results*
Staff behavior in Romanian hotels is closely related to tariffs. It may be noted that in terms of tariffs, 42.19% of the respondents are dissatisfied and 28.91% are satisfied, and in terms of staff behavior, 42.97% are satisfied and 20.83% unsatisfied.

Hotels that keep high tariffs can afford to promote a fair employee motivation, such behavior is the measure of financial satisfaction. Hotels practicing lower rates cannot afford to pay their staff well deserved, so they feel frustrated, which leads to unjustified conduct, inappropriate to hotel customers, which generate tension and dissatisfaction among them.

Following the satisfaction of hotel services research conducted on 384 participants, the question about satisfaction with the cleanliness and ambience of the Romanian hotels has generated the following responses: 58 respondents were very satisfied, 185 were satisfied, 73 respondents were neutral, 59 were dissatisfied and very dissatisfied were 9 respondents. Relatively high, 48.18% is held by respondents satisfied with the cleanliness and ambience of the hotel, followed by the weight of neutral, 19.01%.

The answers cannot be analyzed carefully, because it should hold more information, such as the number of stars of the hotel where the respondent was accommodated, tariffs, the area where the hotel was located, and others. But we believe that a large proportion of respondents have stayed in respected hotels that respects its customers, perhaps 3-star hotels, which were based on a quality management system that generated the satisfaction of tourists. In general, due to regular inspections of consumer protection, most hotels keep some limits on the cleanliness and ambiance offered to customers.

In the research on the satisfaction of the hotel services, the question on satisfaction with the diversity of offers in the hotels showed the following responses: 28 respondents believed that they were very satisfied with the diversity of offers in the hotel, 114 respondents were satisfied with the diversity of offers in the hotels, 97 respondents had a neutral view on the diversity of offers in the hotel, 115 respondents were dissatisfied with the diversity of offers and 30 respondents were dissatisfied with the diversity of offers in the hotels. Therefore, observing the responses of 384 participants in the research on diversity of offers in the hotel it can be seen that the highest percentage of 29.95% is held by those who are dissatisfied with the diversity.
of offers in the hotels. This can be based on the questionable quality of services offered, weak infrastructure, prices.

Analyzing the customers’ satisfaction regarding the quality of the additional hotel services in Romanian the results are provided in the table 3.2.

Table 2: How satisfied are you with the quality of additional hotel services in Romania?

<table>
<thead>
<tr>
<th></th>
<th>Very satisfied (%)</th>
<th>Satisfied (%)</th>
<th>Neutral (%)</th>
<th>Dissatisfied (%)</th>
<th>Very dissatisfied (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car parking</td>
<td>10.94</td>
<td>32.55</td>
<td>26.56</td>
<td>20.57</td>
<td>9.38</td>
</tr>
<tr>
<td>Tourist information</td>
<td>5.73</td>
<td>39.58</td>
<td>24.48</td>
<td>23.96</td>
<td>6.25</td>
</tr>
<tr>
<td>Room-service</td>
<td>8.85</td>
<td>29.17</td>
<td>42.19</td>
<td>15.89</td>
<td>3.9</td>
</tr>
<tr>
<td>Food &amp; beverage</td>
<td>14.84</td>
<td>52.08</td>
<td>18.75</td>
<td>11.2</td>
<td>3.13</td>
</tr>
<tr>
<td>Laundry washing and ironing</td>
<td>8.07</td>
<td>37.5</td>
<td>39.84</td>
<td>10.94</td>
<td>3.65</td>
</tr>
<tr>
<td>Spa and sports</td>
<td>9.9</td>
<td>27.6</td>
<td>40.36</td>
<td>17.19</td>
<td>4.95</td>
</tr>
</tbody>
</table>

Source: authors’ research results

Evaluating the responses of participants on the degree of satisfaction in terms of the Romanian hotel services in connection with additional car parking, it is noted that most respondents were satisfied with this aspect.

Analyzing the percentage values, it has been identified the following statement of the degree of satisfaction of respondents in terms of the additional hotel services in Romania regarding tourist information: 5.73% of respondents were very satisfied with this, 39.58% of participants were satisfied with this parameter, 24.48% of respondents had a neutral attitude towards this issue, 23.96% of participants were dissatisfied with this measure, and 6.25% of the respondents were very dissatisfied with the level of this parameter.
The survey investigating attitudes in relation to the quality of Romanian hotel services more on restaurants has revealed the following situation: 57 respondents said they were very happy with this indicator, 200 respondents were satisfied with this aspect of quality hotel services, 72 of the participants had a neutral attitude with respect to this parameter, 43 participants were dissatisfied with this measure, and 12 participants said they were very unhappy with this.

Analyzing the responses of participants on the degree of satisfaction in terms of the additional Romanian hotel services (washing and ironing of linen; room-service and spa and sports), it is noted that most respondents are neutral on these issues.

Asking customers if they will recommend the hotels services to relatives and friends over 56% of the total respondents said they will not recommend the Romanians’ hotels services.

A classic example of bad management is the follows: everybody knows that the hotel foreign exchange counter in most countries is a rip-off. No guest, except the inane or the super-rich, really changes much money here with its outrageous exchange rates. Most guest would walk or take a cab to the nearest bank (he's lucky if it’s near or open) or some hole-in-the-wall foreign exchange booth in which he risks getting mugged, short-changed, or being handed fake bills. The hotel forex counter is not really a customer service since it compromises the finances, safety and convenience of its guest. Hotels should not make money in all its operations, or every time a customer makes a move. It should make money in delivering the total service package - thus it must be willing to break-even or even lose in some operations just to provide quality customer service. In Japan, famous for its passion for customer service excellence, it is refreshing to discover that the forex rates in all hotels and airports are the same as the bank rates.

Guests seldom take the time and effort to provide the hotel feedback on its service quality. They simply spread the good or bad word around without the hotel’s knowledge. They and their friend either come back, or never return to that hotel again. To conclude, service quality in the hotel industry is the super sensitivity to, accurate assessment of, and anticipation of customers' or guests' needs and problems.
Conclusions

Following the satisfaction of hotel services research conducted it seemed that customers are in part satisfied with the hotels services provided, but don’t think the same way about the hotels tariffs.

Observing the responses of the customers in the research on diversity of offers in the hotel it can be seen that the highest percentage of 29.95% is held by those who are dissatisfied with the diversity of offers in the hotels. In this way we proposed a diversification of tourists services of the Romanian hotels.

The research also indicated that concepts of service quality often remain producer-driven, rather than customer-driven. Romanian hotels must develop a common service quality standard which secures consensus around definitions and determinants, which has the flexibility to cope with differing levels and determinants, but which also gives equal weighting to tangibles and intangibles.

In the world of the ‘informed customer’ the quality of reliable and meaningful information at the point of purchase is a critical factor in closing this gap. The findings also suggest that most customers are not in fact overly demanding and are satisfied with a personal service which represents value for money and provides accurate information. The main difference between excellent and poor service relates to the absence of the personal touch and how staff deal or do not deal with customer problems.

The study also raises some fundamental implications for service managers. Customers are essentially delighted by certain basic behaviors including, ‘helpful’, ‘friendly’, and ‘caring’. This suggests that the focus of training in ‘behavioral’ approaches to customer satisfaction will give a significant return in high contact encounters. The study also signals a need to focus on the individual customer which can again be linked to the behavioral approach and focused training. Finally, the study suggests the importance of quality and reliable information and its influence on redressing the experience gap in the Romanian hotels services.
References


Innovation and Knowledge Management Practice in Turkish SMEs

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Innovation management has recently received much attention from research, industry and state support. However, much of the research has focused on large enterprises with much available financial wealth and required planning infrastructure, in order to be effective at managing innovation. This paper aims to understand the factors that affect the innovation management process within Turkish SMEs. A number of interviews are conducted with 25 SMEs using three different innovation auditing models to capture and validate best practice techniques. The goals of the analysis are (a) to understand the Turkish SMEs current capabilities and innovation management practices in each organization and (b) to identify a set of recommendations that may facilitate and enhance innovation management in all participated SMEs. Results showed that the majority of the SMEs have apparent lacking of innovation strategic plan, culture, formal process and assessment approach to measure impact of innovation project. These factors impact to the overall success of the organization.

Keywords: Innovation Management, Small and Medium Size Enterprises (SME), Innovation Auditing, Innovation Capability, Innovation Strategy
Introduction

In Turkey Small and Medium Enterprises (SME) have proved to be one of the main sources for employment and economic growth where it represents over 85% of the country GDP and two third of labor market in Turkey.[1] Currently SMEs provide 99.8% of business activities within Europe and account for 68% of employment while business revenue accounts for 63%. The mainstream of these SMEs employ less than 10 employees and small businesses have become a key provider to private-sector employment and output. Together with start-ups SMEs are reported to create between one and two third of all new jobs. There is a large consensus among the research community that SMEs are a major employment and economic boosters in the European economy ([2], [3], [4]).

While various researchers have developed and implemented specialist Innovation management frameworks (IMFs) for large organization, many SMEs organizations still face the challenge of selecting affordable frameworks including strategies, tools, and methods, which fit their objectives and needs as SMEs and then successfully implementing such frameworks [5].

This paper presents the findings of ongoing research into the innovation capability of SMEs in Turkey to innovate in seven dimensions: Innovation Strategy, Innovation Process, Leadership and Culture, Collaboration and Partnering, Business and Technology, Innovative organization, and learning. This research will also present the finding of a number of empirical studies of SMEs in the Turkish context.

Literature Review

Innovation Capability Overview

Gaynor (2002) has defined the innovation capacity as a systematic way of management. This focuses on the organization’s efforts and directions to look for extraordinary potential opportunities, analyses whether they are suitable to utilize for organization’s strategic
management, defines the indicators for success, and determine the value of opportunities in a sustainable way. Gaynor also stated that innovation does not need genius, but it does need a system-wide dedication to have substantial opportunities [6].

Lawson and Samson (2001) suggested that innovation capability refers to the ability to continuously transform knowledge and ideas into new products, processes and systems for the benefit of the firm and its stakeholders. Thus, innovation capability refers to the ability to integrate limited resources to implement manage innovation [7]. Analyzing how firms actually practice innovation may display the effectiveness of their innovation management approach and help translate it from a common concept into actions and competitiveness [8].

A Comparison between SMEs and Large Organizations

The topic of innovation has received much attention from research and industry in the past few years. However, much of the researches have focused on large enterprises with much available financial wealth and required planning infrastructure, in order to be effective at managing innovation [5]. This section aims to provide a brief comparison between SMEs and large organizations. The comparison will primarily focus on management, structure, culture and human resources as follows:

Management: Senior management in larger organizations in contrast have the power to delegate some of their responsibilities to lower management, thus freeing their time to focus on knowledge management strategies [5]. In SMEs, the managers are in most cases the owners, which imply that decision making is centralized, and fewer layers of management. This means that decision-making is shorter than in large organizations [9]. The advantage for the owners in SMEs is that they become the key drivers for knowledge management implementations, assuming of course that they appreciate the importance of knowledge management. Another distinction to be made is that management of SMEs has to look after every aspect of the business which gives them limited time to focus on the strategic issues relating to knowledge management.

Structure: SMEs have an advantage over large enterprises in respect to their structure, in implementing knowledge management. They have a
simple, flatter and less complex structure, which will facilitate a change
initiative across the organization since functional integration both
horizontally and vertically, is easier to achieve and fewer complications will
be encountered [9]. Whereas larger organizations have a bureaucratic
structure; making them slower and less flexible in creating new schemes.

Culture: SMEs tend to have a more organic and fluid culture, than
larger organizations [8]. Smaller number of people usually united under
common beliefs and values, which implies that it easier for smaller
organizations to change and implement knowledge management. It is easier
to create a knowledge sharing culture in smaller organization than in larger
ones [10]. In smaller organizations the cultural values and beliefs of the
employees can be influenced by the owners. This can be a problem if the
owner does not trust his employees or does not encourage the culture of
sharing and transferring knowledge. In this case, the owner can obstruct the
development of knowledge rather than develop it [5].

Human resource: SMEs have a problem in attracting high caliber,
experienced employees. These experienced people, tend to go to larger
organizations, where they will be paid higher salaries and bonuses.
Furthermore it also a problem for SMEs to retain, specialized employees,
because of limited opportunities for career progression, and the constant
appeal of larger organizations, who can provide better prospects. SMEs are
mostly seen by some employee as a stepping-stone to move to larger
organization. The departure of highly knowledgeable employees is a major
threat to SMEs, unless that knowledge is captured, codified, and transferred
throughout the organization [11].

Regardless of the research approach there is an underlying
consensus that SMEs by and large are of great importance to economy. It is
also largely been conceded that SMEs will not evolve or develop unless they
innovate [12]. The key competitive lead of SMEs lies in the human resources.
The research to date has also found that internal planning and
communications occurs on a rather ad hock basis unless designed from the
outset.

Many of the SMEs may not have the technical capacities or
expertise to innovate or work in partnership with manufacturers on
innovation and product development projects [13]. However according to a
FORFAS study (an Irish state body) many SMEs have the information
technology infrastructure required to innovate. Expertise in these SMEs may be deficient in terms of skill and may be low in terms of resources available to innovate [12].

All of the projects and the development effort in the SME should align with an effective strategic development process of the SME. However SME strategy differs greatly from that of the large enterprise [12]. Pearce in his studies on SMEs, between 1983 and 1984, were unable to show that formal planning had any positive impact on superior performance in the SME sector. The strategic advantage of an SME is that they are small and versatile and can change quickly to emerging industrial needs. Secondly the key resource of an SME is the human resources [14]. Thus as a development strategy SMEs should focus on more human resources elements such as training and collaboration as opposed to infrastructure and technology [12].

**SMEs Innovation Success Factors**

Hence it is of great importance to the European economy that the SME sector improves and develops. According to Keizer [3], innovation is among the most important resources through which SMEs can sustain and improve their level of competitiveness in the market. Keizer further indicated the key factors that impact the capability of SMEs to innovate such as innovation subsidies, having links with knowledge centres' and the percentage of revenue invested in R&D [12].

The studies analyzed by Storey [4] identified that technological sophistication, market positioning and new product developments are among the most important factors for SMEs strategic importance.

Many models and frameworks have been put together by various authors in order to try and understand the affects that these environmental factors have on the small firm sector ([15], [16]) Each of these models aims to assess the various impacts of varying environmental factors on the development of SMEs.

There are a number of key factors that affect the innovation process within SMEs such as research and development investments, state funding, links to knowledge centres’, links to customers, collaboration and systems and structures to manage the process [3].
Among the many causes of failure of innovation, there are five that constantly appear in literature: (1) poor goal definition, (2) poor action alignment, (3) poor allocation of teams and resources, (4) poor feedback of results, (5) poor performance monitoring [15]. Mulligan et al. [12] further extends this from the literature review on supplier SMEs to include poor collaboration between customers and suppliers and accurate interpretation of requests from customers.

Research Approach

Our research has drawn on these many different fields of literature, combining the elements to improve the development of SMEs innovation capability and maturity. A review of the significant literature points out that innovation studies can be divided into four research directions or streams: (1) innovation typology, (2) linkage of innovations (3) applying innovation processes and frameworks (4) the assessment of innovation capacity and performance. In this paper, we will focus on the last three streams and finding the inter-relationship among them through the usage of several innovation auditing models.

The approach to this research has been designed around six phases: literature review (background), research hypnosis (induction), research instrument design (survey development), implementation (data collection), data analysis, conclusion and recommendations. A number of interviews were conducted with 25 SMEs using 3 different innovation auditing models to capture and validate best practice techniques. The goal of the analysis was (a) to understand the Turkish SMEs current capabilities and innovation management practices in each organization and (b) to identify a set of recommendation that may facilitate and enhance innovation management in all participated SMEs.

Innovation audits can help managers and decision makers improve their innovation process. They help to assess the degree of best practice in place. The SME respondents must agree or disagree with each of the statements that reflect best practice for innovation management.

In order to audit the innovation capability and maturity level at any company, Braden Kelley developed a 50 question matrix for measuring five innovation dimensions. The statements were categorized around five
dimensions for effective innovation management process as follows: Strategy, Idea generation, Idea evaluation and Idea selection, Idea implementation and Collaboration and Infrastructure. This allows managers to have an overview of their strengths and weaknesses with regard to managing innovation.

The matrix is a simple tool for auditing current status of Innovation management and recommending further procedures to reach the next maturity level. Based on the Kelley’s survey instrument there are 5 maturity levels: L1: chaotic (reactive), L2: organized (structured), L3: standardized (controlled), L4: Predictable (managed), L5: Kaizen (optimized).

The second survey instrument is based on the insights of the IBM Global CEO Study 2006; the tool analyzes the responses to key questions about organization’s innovation practice and compares the results to those of the 765 CEO Study participants. The Innovation Assessment tool is designed to help SMEs better understand and expand their "innovation horizon" by providing insights into how SMEs can drive innovation across organization. The innovation audit tool helps to find out how organization rates along critical four dimensions of innovation with a set of recommendations for how to move company forward. These four dimensions are: (1) Innovation Strategy, (2) Leadership and Culture, (3) Collaboration and Partnering and (4) Business and Technology – the tool identified these four key areas as the strongest indicators for shaping an organization’s innovation profile and helping in identifying opportunities for improvement.

The tool assessment is designed to provide insights into how SMEs can drive innovation within organization and focus on which innovations matter the most to helping SMEs achieve faster growth in achieving their business objectives.

The third survey instrument model is developed by Dolley [15] focuses attention on some of the important areas of innovation management. The Dolley’s innovation audit model can provide the pattern of behaviour which describes how the organization handles the question of innovation in five areas: Strategy, Process, Innovative organization, Linkage and networking, and Learning and Knowledge management.
Results and Recommendations

Results of project and results of strategies were considered to be one of the most important aspects of SME development from the owner managers that were interviewed. Deployment of strategy was found to be the most important approach for applying and managing innovation however this rated as one of the weakest as well as the lack of formal innovation process and internal use of knowledge and the management of it. From the analysis of the results section the SMEs did not appear to have any formal evaluation of impact of project results to the overall success of the organization.

Key findings from the three auditing models are discussed below.

Goals and Strategic Agenda

The Innovation Agenda looks at the "innovation mix" among business model; operations; and products, services and markets innovation. All SME owner managers agree that clear strategic goal formulation and monitoring indicators are important for effective innovation management. However in a number of the interviews awareness of the customer requirements outranked the relevance of strategy formulation. Goal formulation while important ranked as being one of the poorest in terms of capability with little time and resources allocated to the level of detail required for an effective business plan. There is currently little emphasis and capability on measuring performance and thus many of the projects are not measured in terms of their impact on the overall goals of the organization.

SMEs should start the process of defining their innovation agenda and deciding their target position compared with the innovation leaders in their industry. To establish a strong foundation for innovation, SMEs needs to establish an innovation vision and identify gaps between vision and current go-to-market strategy. They should assess their current capabilities, identify target maturity levels and decide where to focus initial efforts to build out a balanced innovation agenda. SMEs are also required to establish and formalize change management practices, assess their business components to understand areas of differentiation and opportunities.
Leadership and Culture

The leadership and culture of the participated SMEs helps create a "climate for creativity." Critical characteristics include the processes for generating ideas, incubation structures and innovation metrics and incentives. Most of SMEs are still in the basic level of building the foundation for a more innovative climate, while some SMEs counteracted a cultural tendency toward the status quo.

To build a strong foundation for an innovative culture SMEs should acknowledge innovation as an executive level priority and consider programs and measure to specifically address: ideation management, processes, metrics/measurement, and incentives. SMEs should understand and leverage practices that have been successfully adopted by leading competitors, partners or organizations in other industries.

Collaboration and Linkage

Our literature review emphasized the importance of collaboration as very important means of competitive advantage for the SMEs. Companies that work effectively across geographic, organizational and functional boundaries, both inside and outside their organizations, are able to take advantage of greater expertise and scale.

The results of the study have shown that it is important for the continual operation of the SMEs however none of the interviews have shown this to be a problem. All companies interviewed acknowledge that collaboration with governmental organizations (external knowledge bases) was important and that there was no apparent problem. However collaboration with universities and customers while ranked extremely important for SMEs was ineffective and not adequate. SMEs still using unstructured forms of collaboration mechanisms. Much of the collaboration that takes place within the SMEs appears to be face to face and on an ad-hoc informal basis that is why much of the gained knowledge may be lost.

To establish a foundation for collaborative innovation SMEs need to educate management and their employees on the value of collaboration and partnering. SMEs should begin to research and experiment with
collaboration tools such as open forums, electronic sharing mechanisms, and group support systems and start looking outside to identify opportunities to collaborate with external sources of innovative ideas.

**Business and Technology**

There is a continual debate among the academic world in relation to the use of information systems and their benefit among the SME organization. SMEs agree there is great value in combining business insight with technology know-how to develop – and enable changing innovation strategies. The study has revealed that many of the SMEs have IT infrastructure and use them during their daily business operations however they probably largely use technology to enable implementation rather than as a shaper of strategy; SMEs are aware of potential benefits of integrating business and technology more comprehensively.

In order to build a foundation for stronger business and technology integration, SMEs need to understand how business and technology are currently aligned. SMEs also odd to identify gaps and opportunities to support current business environment more effectively and formally incorporate technological know-how in their innovation efforts, both as a source of ideas and opportunities, as well as a means to enable innovation.

**Innovation Process**

Within SMEs Innovation could be represented by the concept of the “process of innovation” as stated by Tidd et al [17]. Mole [18] state, “innovation is the process of generating new ideas and using it effectively and profitably through to satisfied customers”. It is a comprehensive process including the whole company and is a crucial part of business strategy and daily practice.

In a manner of above literature, the process of effectively developing and implementing innovation within an organization will be stated as “the using of creative ability within customers, suppliers and the workforce by doing things alternatively or better beyond products, processes or procedures”.
Most of the interviewed SMEs lack of having formal innovation process, so it is highly recommended that they should develop a set of structured processes and policies to guide innovative activity from generating or picking up ideas through to implementation. Importantly they allow for parallel routes through their system so that innovations can come from close market interactions or from deep technology research in their enterprise or from various forms of collaboration, or from serendipitous discovery by their staff. Their staff should be given the opportunity to be trained and equipped with enough technical knowledge and skills so they could be aware of real and or latent market need opportunities supported by a well defined formal innovation process, tools and techniques.

Creating the Innovative Organization

SMEs should deliberately attempt to get away from vertical structures which typified the past and towards flat/knowledge-mixing structures. They should work on establishing the knowledge culture as the new organizing model rather than efficient use of resources as the key structuring principle. Their structure should be shifted from region focus to one which has a strong customer sector focus. Empowerment and autonomy are need through giving people ‘slack’ time to explore new ideas. The existence of idea generation/suggestion processes will be like ‘Impulse’ coupled with recognition and reward for innovation that are based on participating not on the value of final ideas. However, for those ideas that are taken forward, there should be some incentive to playing a major role in the subsequent development, which engages commitment and ‘championship’ of ideas.

SMEs are in need for reinforcement of core values where innovation is respected and allowing for sustaining ‘circulation’ and movement and combination of people from different perspectives to allow for creative combinations. Additionally, patience is needed for ‘stumbling in motion’ as innovative ideas evolve and take shape combined with the acceptance of mistakes and encouragement of risk-taking.
Learning and Knowledge Management

For SMEs it is important to understand the benefits but also the risks of knowledge management. Since knowledge management is instable structures, it is expected that failure rates remain high. SMEs that don't have much experience with technological collaborations should get information before jumping on the bandwagon.

Further, it is important for SMEs that typically these complementary resources are interesting for knowledge management, but this does not only mean technological disciplines. Of course a partner in a different but complementary technological field can be fruitful, but so can partners having more social skills or commercial skills. For example, a high tech start up may benefit from a traditional manufacturing company to further exploit the opportunities of an innovation. These traditional firms are often more specialized in mass production and less in innovation. Combining strengths might result in gaining full benefits from innovation, since successful innovation is more than just product development.

Summary of results

The organizations which participated in this study were SMEs in the Turkish manufacturing industry. The results of the three innovation auditing models are aggregated and plotted in radar diagram figure 1 and figure 2.

The study identified that effective innovation capability depends on seven dimensions: (1) Innovation Strategy, (2) Innovation Process (3) Leadership and Culture, (4) Collaboration and Partnering and (5) Business and Technology, (6) Innovative organization, and (7) learning.
Figure 1: Kellly’s Model Spider Diagram

Figure 2: IBM Model Spider Diagram
According to the Dolley’s and Kelley’s models survey analysis, 63% of the participated SMEs are in Maturity Level-1 and Level-2, 37% of SMEs are in Maturity Level-3, and only 2% in Level-4. Depicted in Figure 1 and Figure 2.

However, there is an apparent lacking in innovation strategic plan, culture, formal process and assessment approach to measure impact of innovation project results to the overall success of the organization. Customer collaboration is met with some inefficiency despite its importance and the harnessing of knowledge within the management process is clearly missing.

Our research survey data analysis (figure 3) shows empirically that there is a high correlation (0.9) between Innovation capability and knowledge management capacity in SMEs and the results support our research hypothesis that a firm with a knowledge management capacity will use resources more efficiently and so will be more innovative and perform better. The sample slightly over-represented smaller firms. Since data were also collected in Turkey. As with most studies, it is important to replicate this study in different contexts.
Innovation Management Capability

**Figure 3**: Knowledge Management Capacity versus Innovation Management Capability

**Conclusions**

In today’s changing world innovation management is becoming one of the key drivers for change and competitive advantage within industry. SMEs need to respond rapidly to these emerging changes so as to fulfill their customer needs more rapidly. It is increasingly clear that in order to achieve the goals of an organization SMEs must establish an innovation strategy and monitor the innovation process. SMEs must also comply with this as well as managing the collaboration with their customers. SMEs can also make substantial improvement by managing the knowledge assets of their organization. This can only be done by putting more effective structures and systems in place to capture the knowledge of the organization rather than adopting the current ad-hoc approach to technology and information transfer. It is interesting to note that three innovation auditing models has identified the need for cultural change and well defined innovation strategic
plan and goals within SMEs in order to support innovation management, an element that is missing from the majority of participated SMEs enterprises.

This paper presents the current Turkish SMEs best practice model that aims to facilitate SME innovation management and knowledge in a dynamic environment. Analysis of the study revealed a number of common traits that inhibit the innovation management capabilities of SMEs. The lack of innovation strategy, well defined and structured innovation process, and performance indicators are very rarely assessed due to lack of structures and systems in place and poor goal definition. Human resources, one of the greatest assets of an SME are not properly managed and utilized in order to execute innovation project plans. Communications with all enterprise stakeholders are also essential throughout SMEs however significant efforts are needed to improve the communications between all stakeholders and SMEs. Harnessing and using knowledge internal in the organization is important for innovation but SMEs are unable to take advantage of their knowledge assets largely due to lack of experience in Knowledge Management and the absence of the required of structures and systems to build up and support the Innovation culture.

Acknowledgement

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